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Word Order and Clause Structure in Spanish and Other Romance Languages

by

Francisco Ordóñez

A dissertation submitted to the Graduate Faculty in
Linguistics in partial fulfillment of the requirements
for the degree of Doctor of philosophy, The City
University of New York.

1997

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This manuscript has been read and accepted for the Graduate Faculty in Linguistics in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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Abstract

**Word Order and Clause Structure in Spanish and
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Francisco Ordóñez

Adviser: Professor Richard S. Kayne

This dissertation explores various aspects of word order and clausal structure in the Romance languages, with special emphasis on Spanish. The different aspects are looked at in light of the highly constrained theory of word order proposed in the antisymmetry approach of Kayne (1994). This theory makes unavailable certain widely-assumed mechanisms of analysis such as right adjunction and multiple adjunction to the same head.

The first part (Chapters 1 and 2) explores new analyses of postverbal subjects in Romance, which had been assumed to be right adjoined. The alternation V S O/V O S shows that there are certain asymmetries between these orders that are inexplicable under a right-adjunction analysis. This same alternation is the same found in verb-final scrambling languages between S O V and O S V. I propose

therefore that V O S is the output of the movement of objects to the left of the subject. Comparison between Spanish and the other Romance languages, such as Catalan, Italian, and French leads to the further elaboration on the analysis proposed. It is argued that the derivation of V O S also involves movement of the whole TP to a position above the subject.

The other aspects of clausal structure examined include interrogatives and the position of preverbal subjects. In Chapter 4, It is shown that the peculiar restrictions on the distribution of subjects in interrogatives cannot be explained by a obligatory overt verb movement to C⁰. This last proposal is also incompatible with the assumptions made in Kayne (1994). The alternative proposed involves complementizer movement instead. This alternative makes an important assumption: pre-verbal subjects have to be left dislocated.

In the final chapter I link the obligatory left-dislocated nature of subjects to the rich inflectional system of the language. If we take person agreement to be a clitic argument that can receive case and be assigned a θ -role, the need for an exclusive position for subjects disappears. Evidence for the clitic nature of person agreement is well motivated in the syntax as well as in the morphology.

Acknowledgments

I would like to start by thanking my dissertation committee: Richard Kayne, Juan Uriagereka and Gita Martohardjono.

One of the best decisions I have made was to come to New York to study with Richard Kayne. I thank him for my formation as a syntactician, for communicating his love of the intricacies of language, for showing me how details are very important to get to a more rich analysis, and for teaching me that the most difficult problems lead to the most interesting solutions. I hope my dissertation can communicate this way of working in syntax. Richard Kayne has also been supportive and caring on a personal level during all these years of learning. I thank him very much.

Juan Uriagereka has always been encouraging and enthusiastic. He would go for the daring analysis and inspire me to pursue them. He has also supported me on many levels, in more ways than I could pay him back. Gita was a late addition to my committee, and I thank her for the help and interest she put into this enterprise.

To my professors at CUNY, I would like to thank Charles Cairns, Bob Fiengo, and Janet Fodor for all I have learned with them. Carme Picallo was visiting CUNY for a year. I thank her for written comments on various parts of this dissertation and for being a good friend.

Many colleagues have directly or indirectly contributed to this thesis. I thank Elena Herburger for her friendship and for letting me ask about her German and also about her Caracas dialect, Antxon Olarrea for interchange of papers and good communication over the internet. In CUNY I would like to thank my friends Sheila Meltzer, Sharon Utakis, and Ivy Sichel for sharing with me good and not so good moments during all these years. I deeply thank Marivi Blasco and José Antonio Méndez for their friendship and for being available whenever I urged for an intuition in Spanish. Judy Bernstein was a good friend here in New York and in Boston and Arhonto Terzi shared with me my Mediterranean views about so many aspects of life. I also thank Nino Gulli for his judgements and Italian as well as letting me practice the language, Daniel Chapuis for last minute calls about doubts in French, and Viviane Déprez for help over the internet..

Outside of the U.S, I owe thanks to my Mexican "cuates" Esthela Treviño y Jose Lema for our linguistic discussions and for making it possible for me to discover the richness south of the Rio Bravo.

To my professors in the Universitat Autònoma de Barcelona, I thank Gemma Rigau, Maria Lluïsa Hernanz, and José Maria Brucart for making so appealing the switch from the world of literature to the world of generative linguistics. Gemma has also been a good correspondent

whenever I was afraid my Catalan was mixing with my Spanish. I deeply thank Maria Lluïsa for shipping me to Italy, despite the fact that my knowledge of Italian was zero. In Girona, I would like to thank Avel.lina Suñer and Laura Ripoll for being a wonderful hosts, and for their friendship. For Catalan and Spanish intuitions as well as linguistics discussions and friendship, I thank Francesc Roca, Joan Rafel i Xavier Villalba.

To my professors in during the year I spent in Venice, I thank Guglielmo Cinque, Giuseppe Longobardi, and Michael Kenstowicz. I also thank Anna Cardinaletti for discussions about post-verbal subjects and Cecilia Poletto for sending me some of her work on clitics in the North of Italy. Additionally, I would like to thank Maria Teresa Guasti and Carlo Cecchetto for all the contact we had through the internet.

During all these years, I had the opportunity to develop my professional side, besides working on my studies. In Rutgers, I thank the late Robert Jeffers and Jane Grimshaw. I thank Cynthia Pyle for her friendship and for my Renaissance experience with Piero della Francesca. I also thank Marlene Gottlieb for letting me experience teaching Spanish at Lehman College.

At a more personal level, I thank my parents José and Francisca for their love across the Atlantic. They always wondered how come it was taking me so long to finish

studying when they hardly had the opportunity to do it. To my siblings: Raimunda, Pepín and Ricardo for being there every other Sunday when I called home.

To my other family in New York, I thank Bob and Ruth for help and support during all these years since I have been with Michael. This dissertation owes a lot to Michael for all the love and support I have received from him. Michael is also responsible for all the good editing (for all the errors I am the only one to blame). He always complains that I had never edited his papers written in Spanish when we were in Barcelona. I do not know how I will return him this favor. Michael! What about starting another Ph.D in Spain or Mexico?

ABSTRACT	iv
ACKNOWLEDGMENTS	vi
1 INTRODUCTION	1
1.1 FRAMEWORK: ANTISYMMETRY	3
1.2 BACKGROUND: HIERARCHICAL STRUCTURE AND LINEAR ORDER	4
1.3 SOME INADEQUACIES OF THE SYMMETRIC VIEW	8
1.3.4 <i>The asymmetry of specifiers</i>	8
1.3.5 <i>Asymmetries in the Agreement patterns</i>	10
1.3.6 <i>Asymmetries on the directionality of Head Movement</i>	11
1.4 SPEC HEAD COMPLEMENT AS UNIVERSAL ORDER	12
1.5 THE FORMULATION OF THE LCA	14
1.6 LCA AND ITS CONSEQUENCES	22
2 THE V S O / V O S ALTERNATION IN SPANISH	28
2.1 INTRODUCTION	28
2.2 THE V S O AND V O S ORDER IN SPANISH	29
2.2.1 <i>The V S O order</i>	30
2.2.2 <i>The V O S order</i>	33
2.3 THE ANALYSIS OF V S O AND V O S	35
2.4 THE ASYMMETRIES	40
2.4.1 BINDING	40
2.4.2 <i>Post-verbal wh-elements</i>	52
2.4.3 <i>Interpretation of indefinites</i>	58
2.4.4 <i>The distribution of post-verbal subject pronouns</i>	64
1. <i>Doubling with indirect objects</i>	67
2.5 CONCLUSION	74
CHAPTER 3	77
LIGHT PREDICATE RAISING AND POST-VERBAL SUBJECTS IN ROMANCE 77	
3.1 INTRODUCTION	77
3.2 DISTRIBUTION OF POST-VERBAL SUBJECTS IN ITALIAN, CATALAN AND FRENCH	78
3.2.1 <i>The V O S order</i>	78
3.2.2 <i>V S DP (object)</i>	80
3.2.3 <i>V S PP (complement)</i>	81
3.2.4 <i>V S Adj</i>	84
3.2.5 <i>V S Adv (de-adjectival)</i>	85
3.2.6 <i>V S INF</i>	86
3.2.7 <i>V S CP</i>	87
3.3 DISTRIBUTION OF POST-VERBAL SUBJECTS IN SPANISH	90
3.4 POST-VERBAL SUBJECTS IN NEUTRAL PHRASE	92
3.5 POST-VERBAL SUBJECTS IN FOCUS PHRASE	95
3.5.1 <i>Scrambling</i>	96
3.5.2 <i>Light Predicate Raising (LPR)</i>	98
3.6 PROPOSAL: LPR WITH POST-VERBAL SUBJECTS	102
3.7 CONSEQUENCES FOR NONARGUMENTS	105
3.8 CONSEQUENCES FOR ARGUMENTS	110

3.8.1 <i>LPR and C-commanding of arguments</i>	115
3.9 SPANISH V O S ORDER.....	117
3.10 COMPARING LPR TO THE RIGHT ADJUNCTION ALTERNATIVE.....	121
3.11 CONCLUSION.....	127
CHAPTER 4	128
THE INVERSION CONSTRUCTION IN INTERROGATIVES IN SPANISH AND CATALAN	128
4.1 INTRODUCTION.....	128
4.2 ANTISYMMETRY AND THE LANDING SITE OF CLITICS	130
4.3 THE POSITION OF THE POST-VERBAL SUBJECTS IN INTERROGATIVES	135
4.3.1 <i>Auxiliaries and Vpp</i>	136
4.3.2 <i>Catalan and the position of subjects</i>	138
4.3.3 <i>Floating quantifiers</i>	139
4.4 V-TO-C AND THE "FREE INVERSION " CONSTRUCTION.....	142
4.5 PIEDMONTESE.....	144
4.6 THE OBLIGATORINESS OF INVERSION IN INTERROGATIVES IN SPANISH AND CATALAN.....	145
4.6.1 <i>A -Minimality</i>	145
4.6.2 <i>A-bar minimality</i>	147
4.6.3 <i>Head movement. Movement of the complementizer</i>	151
4.7 CONCLUSION.	158
4.8 APPENDIX.....	159
CHAPTER 5	164
LEFT DISLOCATED SUBJECTS AND PRO-DROP	164
5.1 INTRODUCTION.....	164
5.2 EMPIRICAL EVIDENCE	168
5.2.1 <i>Ellipsis</i>	168
5.2.2 <i>Quantifier extraction</i>	172
5.2.3 <i>The scope of quantifiers in preverbal position</i>	179
5.3 DISLOCATED SUBJECTS. PREVIOUS ACCOUNTS.	185
5.3.1 <i>Non Polysynthetic Approaches</i>	186
5.3.2 <i>Polysynthetic approaches</i>	188
5.4 PERSON AGREEMENT AS A CLITIC.....	194
5.4.1 <i>Morphological evidence</i>	208
5.5 CONCLUSION	212
REFERENCES	214

Chapter 1

Introduction

This dissertation explores a number of issues involving the clausal structure of Romance with special emphasis on Spanish. The most important theoretical foundation of the study is Kayne's (1994) antisymmetry proposal, and the relation of hierarchy to linear order found there directly informs Chapters 2 to 4. The analyses in these chapters are not only made possible by the theoretical tools of Kayne (1994). The results also provide support for that proposal. Specifically, the study shows that analyses compatible with antisymmetry provide superior empirical coverage to traditional ones that make use of mechanisms barred by Kayne's proposal.

The topics of the chapters break down as follows: In Chapter 2, I present and defend new analyses coherent with the principles of antisymmetry for two marked orders in Spanish, V S O and V O S. I conclude that the alternation between these two orders can be explained by obtaining V O S from V S O by moving the object to the left. Chapter 3 explores the distribution of postverbal subjects comparatively. In this chapter I focus on the relatively looser restrictions on the distribution of these subjects in Spanish than in Catalan, French, and Italian. I propose a hypothesis in which focused subjects end up post-verbally by moving the TP to the left in a way parallel to Light Predicate Raising proposed in Larson (1988). The topic of Chapter 4 is the analysis of interrogatives and restrictions on word order. As predicted by Kayne (1995), I show that there is no movement of the verb to C. Chapter 5 looks at interesting questions concerning sentences containing pre-verbal subjects. In this final chapter, I explore the idea that pre-verbal subjects are in a left dislocated position. Following up on work by Taraldsen (1992), I link the left-dislocated nature of these subjects to the relatively rich inflectional system of many Romance languages. Unlike the rest of the problems explored in this study, the structures examined here do not directly impinge on the theoretical issues elucidated in Kayne (1994). Nevertheless, the

analysis of sentences with preverbal subjects are crucial in understanding Romance clausal structure. Furthermore, they follow naturally from the questions explored previously.

1.1 Framework: antisymmetry

As discussed in the previous section, the most important theoretical foundation of this study is the antisymmetry proposal made by Kayne (1994). The core of antisymmetry is the unification of the two fundamental dimensions of syntax: hierarchical structure and linear ordering of the constituents of a sentence. As a consequence, antisymmetry is more restrictive than previous approaches to syntactic analysis in terms of the theoretical apparatus allowed.

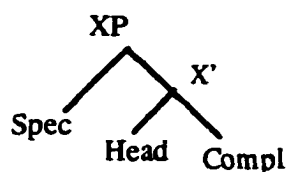
Evidently, this reduction in available mechanisms is a potentially important advance because it makes for a more highly restrictive syntactic theory. Nevertheless, it poses a challenge for the field. Those analyses of empirical facts that had depended until now upon theoretical apparatus barred by antisymmetry must be replaced if the proposal is accepted. Most relevant for this study, a number of these now eliminated mechanisms have been widely assumed in syntactic analyses of Romance until now. At the same time, the plausibility of the theory depends upon the superiority of the alternative analyses. In the end, the

success of the new theory rests in good part the success of these new explanations as much as the explanations depend on the theory. Because of this interdependence, it is important to have a clear idea of the theoretical issues involved.

1.2 Background: hierarchical structure and linear order

Syntacticians have long distinguished between hierarchical relations and linear order. In generative grammar, hierarchical relations have traditionally been encoded under the X'-schema as in (1).¹

(1)



Under this schema, the hierarchical arrangement of phrases corresponds to one where every phrase is made up of a head and a complement, which together make an intermediate constituent. This constituent and the specifier form a maximal projection XP. This pattern has been taken to apply to lexical categories (i.e., adjectives, nouns, prepositions, adverbs, and verbs) (Chomsky 1970, Jackendoff 1977, Speas 1990). Recently, it

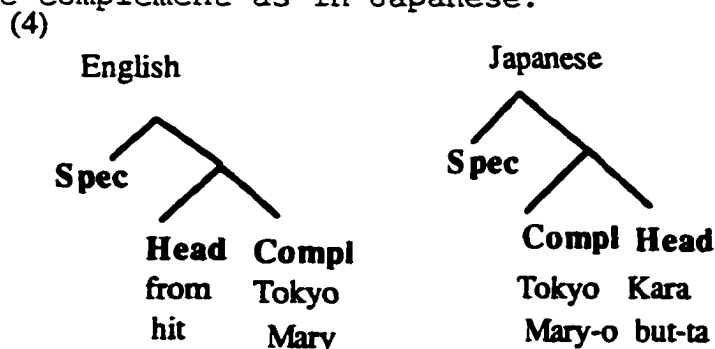
¹Chomsky (1995) departs from the tenets of X'-theory. He proposes a derivational model in which Phrase Structure is derived by the more primitive operation of Merge.

has been extended to complementizers, inflection, and agreement (Pollock 1989, Chomsky 1986).

The other important notion, the order in which constituents appear, has been considered to be a product of language-specific grammars. This less universal approach follows from contrasts such as those between (2) and (3).

- (2) a. **from Tokyo**
 b. **Sandra hit Mary**
- (3) a. **Tokyo kara (Japanese)**
 Tokio from
- b. **Sandra-ga Mary -o but - ta. (Japanese)**
 Sandra Mary hit

In these examples, languages such as English and Japanese appear to be mirror images of each other, English being head initial and Japanese head final. Given such variations, it has traditionally been assumed that the hierarchical arrangement between head and complement can have two symmetrical realizations in linear terms. That is, the head may precede as in English, or it can follow the complement as in Japanese:



Thus, linear order and hierarchical structure have been taken to be disconnected. To appreciate the radical nature of antisymmetry, it is worth noting that separate treatments of constituent order and hierarchical structure have been a constant in generative linguistics. Although the specific formalizations of both facets of phrase structure have changed considerably over time, there have been few if any attempts at unification.

For example, in its early stages Transformational Grammar encoded both relations through different notations in phrase structure rules. A phrase structure rule such as (5) states that an NP dominates a determiner and a noun, the hierarchical relation being indicated by the arrow. In the same rule the precedence relations were indicated by the $\bar{\text{~}}$ symbol. So the determiner precedes the noun.

(5) NP \rightarrow Det $\bar{\text{~}}$ N

This over-all separation of hierarchy and linear order was preserved in the development of nontransformational approaches such as GPSG and HPSG. Gazdar, Klein, Pullum, and Sag (1985) and Pollard and Sag (1994) propose Immediate Dominance rules (ID), which express hierarchical relations, and linear precedence statements (LP), to account for order. The same rule (5) would be expressed by the two rules in (6) and (7). The symbol " \rightarrow " exclusively signifies dominance, whereas " $\bar{\text{~}}$ " indicates precedence.

(6) NP \rightarrow Det, N (ID Rule)

(7) Det < N (LP Statement)

The GB framework preserved the same separation through the X' schema presented above. This format expressed that a maximal projection (XP) dominates an intermediate projection (X') and a XP (a Spec) (Rule 8a). It also expressed the fact that X' dominates a head and a complement (Rule 8b)

(8) a. $XP \rightarrow XP(\text{Spec}), X'$

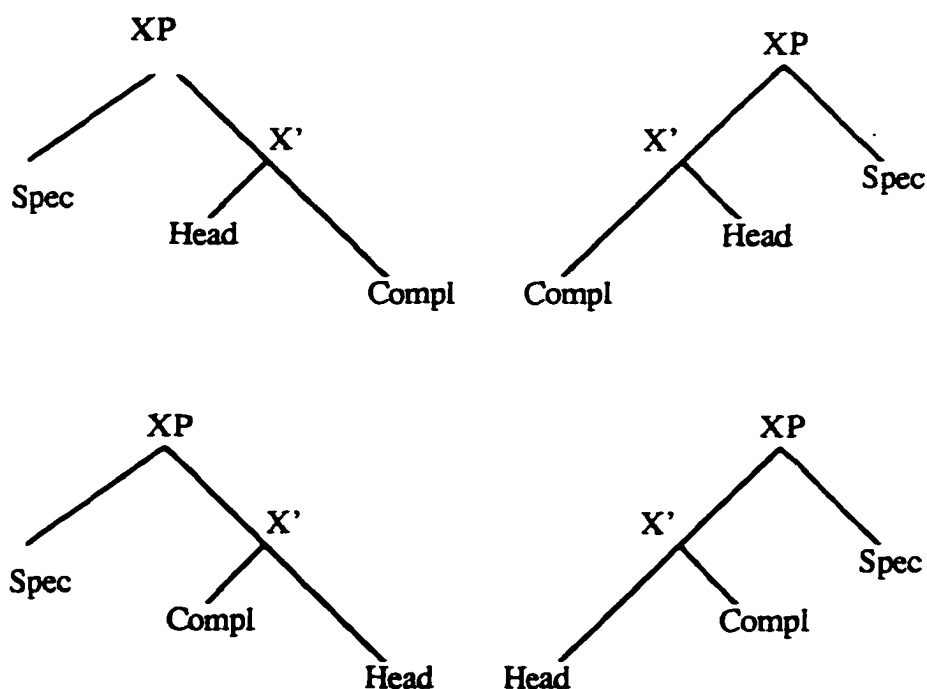
b. $X' \rightarrow X^0, XP(\text{Complement})$

In this approach, hierarchy has been explored with an eye to universals, while variation in order has been accounted for by parameters (Chomsky 1986, pag 91 fn 1). For example the difference between English and Japanese with respect to the order of complements and heads was expressed by the Head Parameter. The Head Parameter states that heads precede their complements in English, but heads follow their complement in Japanese. Travis (1989) takes a further step and proposes that linearity is not only determined by the Head Parameter. She extends concept of linearity to other modules of grammar. On this view, case assignment as well as theta role assignment are sensitive to what it is called directionality. Different settings for the directionality determine different typologies of languages.

1.3 Some Inadequacies of the Symmetric View.

Evidently, in all these approaches, hierarchical relations and linearity are dissociated. Under these views symmetric orders for the same hierarchical relations are crucially not excluded. Thus, we expect the following possible four realizations of the Spec Head Compl template in the different grammars.

(9)



1.3.4 The asymmetry of specifiers.

Kayne (1994) shows that this way of conceiving UG is too permissive; natural languages are less symmetrical than this pattern predicts. One asymmetry involves the position

of the specifiers in phrase structure. Because complements may appear either before or after the head, it might be expected that the specifier would be capable of a similar mirror-image pattern. However, in human language, specifiers typically appear initially; the predominant orders are Spec-Head-Compl and Spec-Compl-Head.

For example, subjects, which are in the specifier position of a verb phrase, precede the verb and complement far more often than they follow them. Languages with a predominantly subject-verb-object (S V O) order—such as English—and subject-object-verb (S O V) order—such as in Japanese—are quite common. However, languages with a predominant order of object-verb-subject (O V S) and verb-object-subject (V O S)—are, on the other hand, “excessively rare” as pointed out by Greenberg (1966) in his survey of genetically unrelated languages.

Another example of the asymmetry of specifiers is Spec CP. Since Chomsky (1986), it has been assumed that Spec CP is the landing site for Wh-elements. In languages like English or Spanish Spec CP is at the left edge of the clause. However a mirror image language, which consistently moves its wh-element to a final position is hardly attested.²

² The exception to this claim is would be Khashi as mentioned in Kayne (1994), who cites Ultan (1978) and Bach (1971) as sources.

1.3.5 Asymmetries in the Agreement patterns.

Many languages, including Spanish, permit permutations in constituent order, yet in these cases the different orderings have different morphosyntactic consequences. For example, some languages like Arabic alternate S V O and V S O orders. In the S V O order the verb and the subject must agree, but in the V S O order this agreement may fail to appear. There is no language that presents the opposite pattern.

The facts point to the conclusion that the failure of agreement is possible when the verb C-commands the DP subject (as in the V S O order). If subjects in the V S O order were able to be in the same specifier of the verb, instantiating a case of specifier to the right, no asymmetry would obtain between V S O and S V O orders.

Yet another asymmetry in the agreement system is found with adpositions. Post-positions allow agreement between the NP and P; however, this relation is not typical of prepositions. If agreement is taken to be a Spec Head relation, the complements of a postposition are in an specifier position, while this is not the case with a preposition, contrary to what one might expect given the directionality parameter.

In conclusion the asymmetries in agreement patterns overwhelmingly show that specifiers have to be thought of as being to the left of the head.

1.3.6 Asymmetries on the directionality of Head Movement.

Another set of asymmetries involve movement. The V2 phenomenon typical of many Germanic languages has been described as consisting of head movement of the verb to a C^0 position. Under this view, verb movement takes place from right to left. Thus, the complement IP, where the verb moves from, is to the right of C^0

(9) [ϕ Wh [C V_i [ϕ t]]]

Yet the mirror image of the Germanic V-2 does not seem to be attested in natural languages. That is, there is no known language in which a verb precedes the final constituent of a sentence in root clauses. This fact implies that the opposite configuration with a Complement IP preceding the Head C cannot be a possible configuration in natural languages.

(10) [[[t ϕ] V 0 C] Wh ϕ]

Another case in which head movement seems to be leftward is shown by the patterns of number agreement in languages that present the V S O and S V O alternation. These patterns indicate that the verb must C-command the subject in the V S O order, but it cannot do so in the S V O order. Thus, there can be no rightward head movement of the verb past the subject to yield the S V O order.

The facts presented in this section indicate that head movement is always to the left. Assuming that head movement takes place from the head of the complement to a

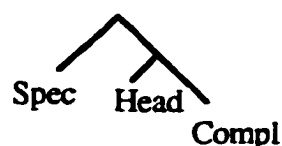
hierarchically more prominent head, we conclude that heads must precede the complement where the head movement begins.

In conclusion, the phenomena reviewed in this section indicate that there is great tendency in natural languages for specifiers to appear to the left of their respective head and complement. It was also shown that complements follow their head in the cases of head movement. These simple facts indicate that the symmetric view advocated by theories in which hierarchical structure and linear order are independent leaves us with a underconstrained theory for UG.

1.4 Spec Head Complement as Universal order.

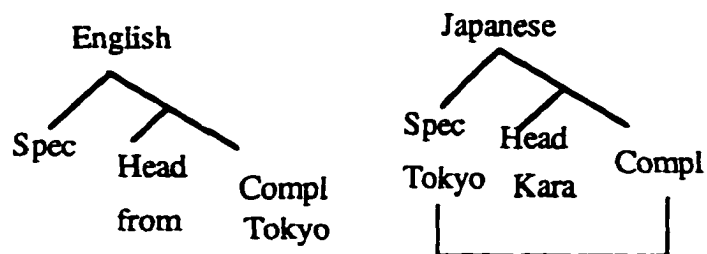
Given the asymmetries shown in the previous sections, Kayne (1994) advances a new and radically restrictive schema. In spite of superficial appearances, the relation between linear order and hierarchical structure is rigid. The only order in human language is the one where the specifier precedes the head, and the head precedes the complement as in (11):

(11)



According to this view, the different orders we see on the surface between take English and Japanese as discussed in (2) and (3), are product of movement. While in English the object remains in complement position, it gets displaced to the left becoming a specifier in Japanese.

(12)



Note that according to this hypothesis, these English and Japanese examples do not merely differ with respect to linear order; they also differ with respect to hierarchical structure. That means that the object in Japanese is not only to the left of the preposition, but it is also more external in hierarchical terms. Thus, one of the outcomes of this hypothesis is that every difference in linear order in the same language or across languages must reflect a difference in hierarchical structure.

Kayne (1994) attempts to go beyond the idea that the universal order is specifier-head-complement by positing a direct mapping between hierarchical structure and linear order:

It is legitimate and necessary to ask why the human language faculty displays the particular linear ordering that it does. Why do heads always precede complements and why do specifiers and adjoined phrases always precede heads? I provide a partial answer to this question, starting from the assumption that there exists a mapping between hierarchical structure and the observed linear order that is rigid. (Kayne, 1994, p. xiv)

He refers to this mapping as the Linear Correspondence Axiom (LCA). The function of this axiom is to map the different hierarchical relations established between specifier, head, and complement into the corresponding linear order. The formulation of the LCA signifies a major shift in our conceptions of how language is designed, and its consequences are therefore far reaching.

1.5 The formulation of the LCA.

Assuming that the universal order is Spec-head-Compl, there is a redundancy between hierarchical relations and linear order. In a given projection, less embedded elements always precede more embedded ones. Thus specifiers (least embedded) precede heads and complements. Complements (most embedded) are preceded by heads and specifiers.

Thus, there is a need to find a hierarchical relation with similar properties of linear order. Such a relation must be antisymmetric, transitive and total. Kayne

postulates that such a hierarchical relation is the notion of asymmetric C-command. C-command is defined as follows:³

- (13) C-command: A C-commands B, if all categories dominating A dominate B and A excludes B.

The relation between hierarchy and linearity is mediated by a trivial mapping from non terminal nodes, which are the ones relevant for hierarchical relations, to the corresponding terminal nodes, the relevant ones for linearization. This mapping is called $d(X)$. Kayne postulates that for any given non terminal node A which enters into asymmetric C-command with other non terminal B, there will be a map into precedence of the terminals dominated by a non terminal node A with respect to the terminals dominated by the non terminal B.⁴ The mapping must necessarily cover all the non terminal nodes in a given phrase marker. The principle that governs this mapping is called the Linear Correspondence Axiom (LCA).

- (14) ...Take A to be the maximal such set; that is, A contains all pairs of nonterminals such that the first asymmetrically C-commands the second.(...) for a given phrase marker P, with T the set of terminals and A as just given) (Kayne 1994,)

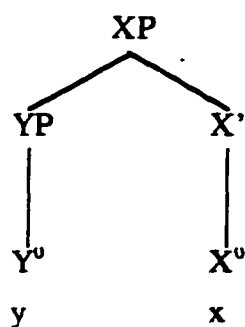
³ The only difference between the notions of linearity (e.g. precedence) and asymmetric C-command is that asymmetric C-command is only partially total. Thus, there might be nodes in which the asymmetric C-command relation is not established. However, given binary branching, Kayne observes that it is partially total in the sense that for a given node in the tree, it covers all the nodes that asymmetrically C-command that node.

⁴ This is only a partial answer as to why the order has to be Spec Head Complement. Nothing bars the possibility that the mapping from asymmetric C-command into subsequence, instead of precedence. This second option would yield the Compl Head Spec order. Kayne takes the first possibility to be the right one (see his discussion in 4.3)

This specific formulation of the LCA has important consequence for the whole conception of phrase structure. For the purposes of this dissertation I will just review the consequences of antisymmetry for the way of conceiving specifiers and adjunctions.

In order to see how specifiers and adjunctions fit into this whole approach, we have to discuss the phrasal status of X' . Consider a tree like (15) in which X' is taken to be an intermediate projection and YP is in the specifier position. The tree should not be admissible by the LCA given the fact that it leads to mutual asymmetric C-command between YP and X^0 and between X' and Y^0 .

(15)



Therefore, trees with Specifiers must be reconsidered. Kayne proposes a solution in which X' is taken to be a segment in the sense of May (1985) and Chomsky (1986). If we assume that C-command is only relevant for categories, the tree under (15) is allowed. The X' is a segment and it is unable to C-command any structure inside the specifier.

The category YP can C-command X^0 . The revised definition of C-command is the following as in (16):

- (16) X C-commands Y iff X and Y are categories and X excludes Y and every category that dominates X dominates Y.

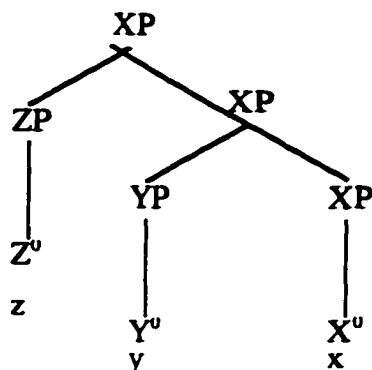
This solution has a number of important consequences. For one thing, the status of intermediate category is eliminated. Phrase structure only considers heads (non terminals immediately dominating a terminal), maximal categories (non terminals dominating another non terminal), and segments of maximal projections and heads. As a consequence, the formal differences between specifiers and adjuncts are eliminated.⁵

The assumptions thus far also eliminate the possibility of multiple adjunction to the same projection. Consider the following tree in which two maximal projections ZP and YP are adjoin to the same projection XP. ZP asymmetrically C-commands Y^0 and YP asymmetrically C-commands Z^0 . We obtain

⁵ Chomsky's (1995) bare phrase structure system does not have these consequences. Chomsky dissociates the notions of maximal/minimal and projected/non projected as in Muysken (1982). For Chomsky an intermediate X' projection is not maximal and not minimal and is therefore invisible for the computational system. Thus X' is not able to C-command into its sister specifier. Since Chomsky's system maintains the notion of intermediate projection and separate segments, adjuncts and specifiers are formally distinguished.

a situation of mutual asymmetric C-command between ZP and YP. The trees are not admissible.⁶

(17)

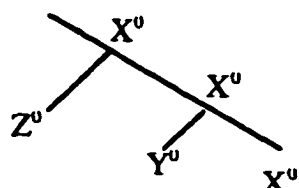


The situation of multiple heads is slightly different. In a tree like (18), corresponding to the adjunction of two heads to the same projection, we obtain that Z^c and Y^c C-command each other mutually since they are dominated by the same maximal projections. There is no asymmetric C-

⁶ Cinque (1996) considers a new definition of C-command that would allow multiple specifiers. The definition proposed is the following: "X C-commands Y iff X and Y are categories and X excludes Y and every segment that dominates X, dominates Y". In that case the upper specifier ZP in the tree in (17) is dominated by one more segment of XP than the lower Specifier YP, thus creating asymmetry. This, however, has some undesirable consequences. It does not allow a head adjoined to another head to C-command out, since segments are barriers for C-command. Thus, a head X^0 adjoined to another head Y^0 cannot C-command out its trace since the upper segment of Y^0 dominates X^0 but not the trace of X^0 . Equally, an XP adjoined to YP in a successive way will not be able to C-command its trace. Barbiers (1995) proposes an alternative in which C-command includes the linear notion of left "branching". In this alternative multiple specifiers are allowed and head movement is allowed by the general principles of semantic interpretation that he proposes.

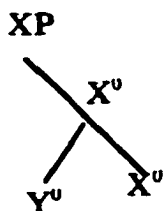
command, and no order between the heads Z^0 and Y^0 is obtained.

(18)



However, we still should permit cases of adjunction of one head to another head. Given the definition of C-command, we can obtain this result by taking advantage the notion of exclusion. Thus in (19), X^0 does not C-command Y^0 since X^0 does not exclude Y^0 , even if they are dominated by the same categories. However, Y^0 C-commands X^0 since it excludes X^0 . This asymmetry in the exclusion relation, allows Y^0 to C-command X^0 asymmetrically. Therefore, head to head movement is still allowed in the system.

(19)



Let us summarize the different aspects of the definition of C-command that can lead to antisymmetry in a given tree:

Non Adjunctions

- A. Non terminal nodes A and B that exclude each other. Asymmetry is induced by the fact that B is

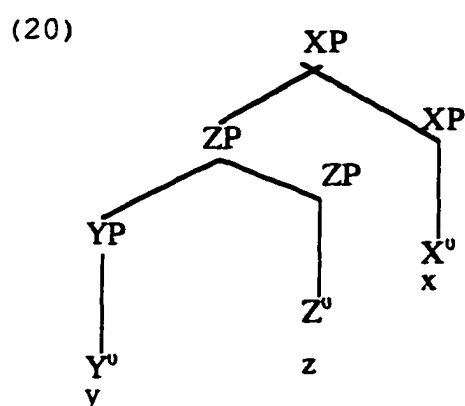
dominated by one more projection than those that dominate A. In that cases A asymmetrically C-commands B. This is a simple case of a tree containing a head and a complement.

Adjunctions

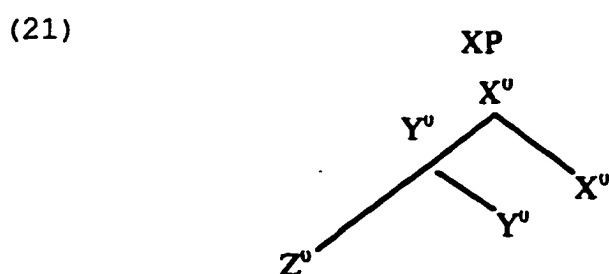
- B. When Category A adjoins to category B, A excludes category B, while B does not exclude category A. By definition asymmetry between the two categories is obtained. Thus A asymmetrically C-commands B.
- C. Asymmetry is also obtained between category A - adjoining to category B- and the lower segment of category B. By definition segments cannot C-command, thus A can C-command into the non terminals dominated by B, while a segment of B cannot C-command into the non terminals dominated by A.

As we have seen so far multiple adjunctions to the same head, or multiple adjunction to the same maximal projection is banned. However, more than one adjunction is still allowed in an interesting way. Adjunction structures are permitted in the system because the adjoining category excludes the projection it is adjoining to (the adjoinee) (Paragraph B). Moreover, adjunction creates segments which by definition cannot C-command (Paragraph C). Thus, we can always create antisymmetry by adjoining to a category, as

far as this category has not been already adjoined to. One example of this type of adjunction is given in the following tree: YP asymmetrically C-commands ZP since it excludes it. ZP does not C-command YP because it does not exclude it and the lower segment of ZP does not C-command Y^0 . This is called successive adjunction as opposed to multiple adjunction.



The same procedure of successive adjunction can be shown to work with adjunction of one head to another head as in (21). Z^0 C-commands Y^0 and X^0 since it excludes both Y^0 and X^0 . However, neither X^0 nor Y^0 exclude Z^0 . And neither lower segment Y^0 and X^0 C-command Z^0 by definition.



To conclude this section, I would like to summarize some of the most important consequences of adopting the antisymmetry proposal of Kayne (1994) for specifiers and adjunctions:

- a) The difference between specifiers and adjunctions collapses.
- b) Specifiers and head categories C-command out of their category they are adjoined to.
- c) There is no possibility of multiple adjunction to the same head or to the same maximal projection. Thus, there can be no multiple specifiers in the language.
- d) It is nevertheless possible to have "successive" adjunction.⁷

1.6 LCA and its consequences

The adoption of the LCA and its consequences for the conceptualization of phrase structure puts into question many analyses assumed until now in the Romance languages.

For example, linguists have long taken the availability of right adjunction or specifier to the right for granted, and they have used these mechanisms in various analyses. However, the use of such apparatus obviously conflicts with

⁷ See Barbiers who exploits this possibility for the analysis of extraposition in Dutch.

the claim that specifiers and adjuncts are to the left of the constituent [head-complement].⁸

One construction in which right adjunction has been used is subject inversion, a phenomenon common in a number of Romance languages, as illustrated in (22) to (24).

(22) Ayer compró el diccionario un chico.(Spanish)
 yesterday bought the dictionary a kid
 A kid bought the dictionary yesterday.

(23) Ahir va comprar el diccionari un noi.(Catalan)
 Yesterday bought the dictionary a kid

(24) Ieri ha comprato il dizionario un ragazzo.(Italian)
 Yesterday has bought the dictionary a kid

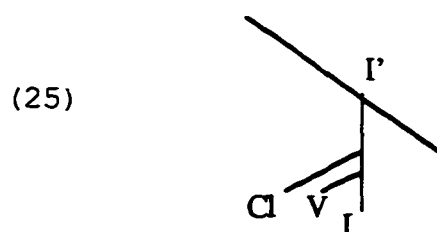
Since the earliest analyses of subject inversion in Romance, it has been assumed that subjects are moved to a post-verbal position in which they appear adjoined to the right edge of the VP. This was the position taken by Kayne (1972) in his analysis of stylistic inversion, Kayne and Pollock (1978), and Rizzi (1982). It was subsequently adopted by Suñer (1994) and Torrego (1984) for Spanish, by Motapayane (1991) for Romanian, and by Solà (1992) and Bonet (1988) for Catalan.⁹ The rethinking of this analysis for subject inversion will be the major topic of discussion of Chapters 2 and 3.

With respect to the new analysis of adjunction, antisymmetry crucially eliminates multiple adjunction to

⁸Recall that Greenberg (1966) pointed out that that V O S orders are quite rare.

⁹ Giorgi and Longobardi (1991) also adopt the position that subjects in nominal are to the right in Romance

the same maximal projection and multiple adjunction to the same head. Multiple adjunctions to the same head have been assumed in certain analysis of clitic constructions in the framework of Pollock's (1989) inflectional projections. One example is Kayne (1991). We can distinguish two sub-cases: (i) adjunction of V and clitic to the same inflectional projection and (ii) adjunction of two clitics to the same inflectional projection. For the first case, Kayne (1991) suggested that in French or Italian verb and clitics might both directly adjoin to the same inflectional projection in finite clauses:



This multiple adjunction to an inflectional projection has also been taken as a possibility for the cases of combination of clitics (see Kayne 1989 for the cases of clitic climbing) :

(26) *Glielo darò.* (Italian)
to him/her it will give
I will give it to him/her

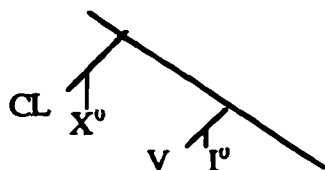
(27) *Se lo daré.* (Spanish)
to him/her I will give

These analyses, obviously, are not compatible with the antisymmetry approach. Therefore, Kayne (1994) considers a new analysis in which proclitics do not adjoin to the same inflectional projection than the verb. They are taken to

be adjoined to a higher inflectional projection X^0 as in

(28):

(28)



This analysis have various consequences. For the Romance languages, it implies that the verb and a proclitic do not form a complex head before Spell Out. Consequently, a verb and a proclitic cannot be subject to head movement, contrary to what it had been assumed in earlier approaches.

The elimination of this movement is particularly important for the analysis of interrogatives. As we observe in examples in (29) and (30), in interrogatives subjects must appear obligatorily in post-verbal position in many Romance languages.

(29) a. *Cosa lui mangia? (Italian)
 What he eats
 What does he eat

b. Cosa mangia lui?
 What eats he

(30)a. *¿Qué él come? (Spanish)
 What he eats
 What does he eat

b. ¿Qué come él?
 What eats he

One common approach to all these cases has been the idea that verb has moved to a higher position, C^0 as in Germanic

languages. This type of approach was adopted by Kayne (1983) for subject clitic inversion in French, by Rizzi (1991) for Italian, by Ambar (1988) for Portuguese, and by Poletto (1993) for northern Italian dialects. However, there is a certain clash between all these approaches and the idea that the verb and clitic do not form a constituent. As we observe in the following examples proclitics must precede the verb in interrogatives

- (31)a. ¿Qué le dijo Juan?
 what cl-said Juan
 What did Juan say to him/her
- b. *¿Qué dijo le Juan?
 what said-cl Juan
- (32) a. Cosa gli dice Gianni?
 What cl- says Gianni
 What does Gianni say to him/them?
- b. *Cosa dice gli Gianni?
 What says-cl Gianni

Thus, from the perspective of the antisymmetry approach the obligatory inversion effects cannot only be due to the fact that verb has moved higher in these constructions. This will be topic of our discussion in Chapter 4.

The final goal of this study is to be able to arrive at a better understanding of the various word order permutations in the Romance languages within the highly restrictive approach of antisymmetry. Investigations of this type are necessary in our attempt to attain a better conceptualization of syntactic knowledge and phrase

structure in general and of word order permutation in particular.

In the end, the main aim of contemporary formal linguistics is to develop a theory of the human language faculty, which is general enough to capture the universal features of language, and flexible enough to account for the variability that is in fact observed among specific languages. The variability manifested by the Romance languages offers an ideal domain of investigation towards the accomplishment of the above aim.

Chapter 2

The V S O /V O S alternation in Spanish

2.1 Introduction

This chapter deals primarily with the alternation V S O and V O S in languages that allow it such as Spanish. Traditionally the V O S order has been understood as involving adjunction of the subject to an inflection projection to the right or as a case in which the Specifier of the subject projects to the right (Rizzi 1982, Torrego 1984, Suñer 1994, Solà 1992). As I mentioned in the introduction, such hypotheses are incompatible with Kayne's antisymmetry proposal. In this chapter, I will propose an alternative in which the V O S order is generated by the movement of the objects to the left of the subject.

Empirical support for this hypothesis comes from certain syntactic asymmetries between V S O and V O S. Some of these asymmetries reflect the fact that the object C-commands the subject in the V O S order but not in the V S O order. In other cases, the asymmetries show that certain types of objects cannot move to the left and yield the V O S order. This is the result predicted by the constrained nature of scrambling. Furthermore, there is a parallel between these alternations in Spanish and ones described in scrambling languages (e. g. German) with the S O V and O S V alternations. Finally, this hypothesis fits neatly with Kayne's antisymmetry proposal since right adjunction is eliminated in favor of an already attested mechanism of scrambling.

I will start by discussing the focus properties of V S O and V O S in Spanish, leaving aside the discussion of the V O S orders in Italian and Catalan to Chapter 3.

2.2 The V S O and V O S order in Spanish.

Spanish is an S V O language which nevertheless allows its subjects to appear post-verbally before or after objects. The V S O order is attested in declaratives as well as questions, as in (1) and (2):

- (1) ¿A quién le prestó Juan el diccionario?
 to whom cl-lent Juan the dictionary
 Who did Juan lend the dictionary to?

- (2) Espero que te devuelva Juan el libro.
 I hope that cl-you-return Juan the book
 I hope Juan returns the book to you.

The V O S order is also attested in questions and declaratives, as in (3) and (4).

- (3) ¿A quién le prestó el diccionario Juan?
 to whom cl-lent the dictionary Juan.
 Who did Juan lend the dictionary to?
- (4) Espero que te devuelva el libro Juan.
 I hope that cl-you-return the book Juan.
 I hope that Juan returns the book to you.

2.2.1 The V S O order.

Pragmatically, the V S O and V O S orders differ with respect to their interaction with focus.¹⁰ Zubizarreta (1995) points out that the V S O order can be associated with a number of different focus structures. The specific structure depends on which element receives main sentence stress. If the object receives the main sentence stress, the assertion could be the object and the subject together as in (5a). If the subject receives main sentence stress, the object gets downstressed. In this case the subject will be the only assertion, as in (5b).¹¹

- (5) a. ¿A quién le prestó Juan el diccionario?
 to whom cl-lent Juan the dictionary
- b. **A quién le prestó Juan el diccionario**
 to whom cl-lent Juan the dictionary

¹⁰ For focus I understand all possible material that might be part of the assertion, as opposed to that material which is already presupposed.

¹¹ I indicate main sentence stress in bold typeface and possible assertion in underline typeface.

To better see the discourse properties of the V S O order I will use the question-answer test. For a question such as (6)—in which the subject is introduced in the discourse—an answer with a V S O order as in (7a) will be considered inappropriate. Only a response such as (7b), with the S V O order, is possible. It can be concluded that subjects in the V S O order must not be presupposed

- (6) ¿Qué compró Juan Ayer?
 What bought Juan yesterday
- (7) a. Answer: #Ayer compró Juan un libro.
 Yesterday bought Juan a book.
- b. Answer: Ayer, Juan compró un libro.
 Yesterday, Juan bought a book.

On the other hand, the V S O order can be an answer to a "what happened" type question as in (8). This fact is evidence that the subject in the V S O must be included in the assertion.

- (8) a. ¿Qué pasó ayer?
 What happened yesterday
- b. Answer: Ayer ganó Juan la lotería.¹²
 Yesterday won Juan the lottery.

¹²₁₂ In the context of an answer to a question the V S O and V O S orders seems to require an initial XP before the verb. So the order XP V S O sounds more natural than the V S O order. The V S O order might also be preceded by the conjunction "que":

- (i) ¿Qué pasó?
 what happened
- (ii) answer: # compró Juan un perro
 bought Juan a dog.
- que compró Juan un perro.
 that bought Juan a dog.

Note that the subject need not receive main sentence stress, and therefore it need not be understood as the only focus in this V S O orders.

Further support for this last claim can be found in an examination of Bare Argument Ellipsis (in the sense of Reinhart 1991). One important property of this construction is that the element appearing on the other side of the conjunction—the remnant—can only be associated with the DP that bears main sentence stress in the main sentences (what Reinhart labels as the “correlate”).

Observe the following contrast:

- (9) a. **The King** ordered the killing, not the queen.
 b. # **The King** ordered the killing, not the banquet.
- (10) a. The King ordered the **killing**, not the banquet.
 b. # The King ordered the **killing**, not the Queen.

In Spanish the V S O order can be associated with two types of remnants in bare arguments ellipsis cases. Either the remnant has the subject as the correlate as in (11a) or the object as the correlate as in (11b).

- (11) a. Ayer me regaló tu hermano el disco, no tu hermana.
 yesterday cl-gave your brother the record, not your sister.
- b. No me regaló tu hermano el disco, sino la libreta.
 Not cl-gave your brother the record, but the notebook.

Interestingly, with determinerless DP objects in the V S O order, subjects cannot be correlates:

- (12) a. En nuestra opinión, no nos dio tu hermano **alegría**, sino **tristeza**.
 In our opinión, not cl-gave your brother happiness, but unhappiness.
- b. #En nuestra opinión, no nos dio tu hermano **alegría**, sino tu tía.
 In our opinion, not cl-gave your brother happiness, but your aunt.

- (13) a En tu casa, no da tu hermana besos, sino tortazos
 In your house, not gives your sister kisses, but slaps.
- b. #En tu casa, no da tu hermana besos, sino tu padre.
 In your house, not gives your sister kisses, but your father.

This last fact clearly shows, that whereas subjects in V S O are part of the assertion—as in (7a)—sometimes they cannot have main sentence stress and be narrowly focused.

To conclude, we have seen that in Spanish the V S O order can be associated with two informational structures: In the first the subject is part of the assertion but does not bear main sentence stress (what I will call a neutral post-verbal subject). In the second—and more marked case—the subject bears main sentence stress and is also part of the assertion, while the object that follows is downstressed.

2.2.2 The V O S order.

In the V O S order, the subject receives main sentence stress, and it can be the only understood focus of the sentence.

- (14) ¿A quién le prestó el diccionario **Juan?**
 to whom cl-lent the dictionary Juan

This can be shown because V O S order can only be an answer to a question about the subject, as in (15). It cannot be the answer to a question like “what happened?” as in in (16).

- (15) a. ¿ Quién ganó la lotería ayer?
 Who won the lottery yesterday
- b. answer: Ayer ganó la lotería **Juan.**
 Yesterday won the lottery Juan

- (16) a. ¿Qué pasó ayer?
 what happened yesterday
- answer: #que ayer ganó la lotería Juan.¹³
 that yesterday won the lottery Juan.

The narrow focused nature of the subject can also be shown by the bare argument ellipsis construction discussed in Reinhart (1991). Example (17b) is marginal with the object as the correlate.¹⁴

- (17) a. No me envió un telegrama tu madre, sino tu hermana.
 Not ci-sent a telegram your mother, but your sister
- b. #No me envió un telegrama tu madre, sino una carta.
 Not sent a telegram your mother, but a letter.

Thus, we conclude that in the V O S order in Spanish, contrary to the V S O order, the subject must receive the main sentence stress and be narrowly focused.

Finally, parallel to the special nature of the V O S order in Spanish, Webelhuth (1992, p. 165 fn. 2) has pointed out that in German, an S O V language, the O S V order is possible only when the S is heavily focused.

¹³ It is important not to confuse the V O S order discussed here with a V O S pattern in which the subject is downstressed and there is an intonational break before the subject. Under those circumstances, the answer in (16b) becomes appropriate in a context in which *Juan* is presupposed in the discourse.

- (i) a. ¿Qué pasó ayer?
 what happened yesterday?
- b. answer: que ayer gano la lotería // Juan.
 that yesterday won the lottery Juan

5. Again, the sentence is perfect if the subject is right adjoined. This is not the reading that is relevant for this discussion.

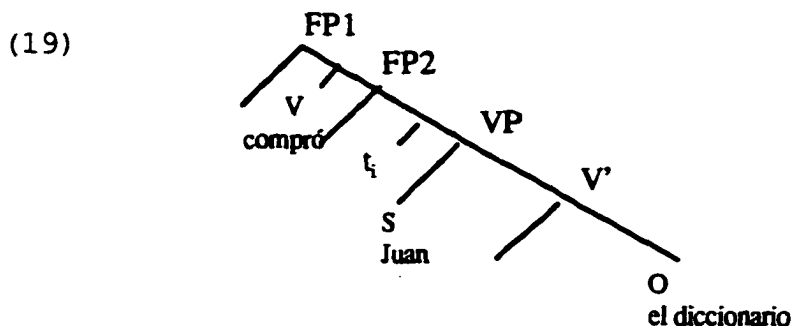
- (i) # No escribió un libro # Juan, sino un poema
 Not wrote a book # Juan, but a poem.

- (18) weil das Buch niemand gelesen hat. (from Webelhuth 1992)
 because the book nobody read has.
 Because nobody has read the book.

Thus there seems to be a parallelism between Spanish V O S and German O S V with respect to the restriction on focus in both languages.

2.3 The analysis of V S O and V O S.

In view of the proposals about verb movement (Emonds 1978, Pollock 1989) and the VP internal subject hypothesis (Koopman & Sportiche 1991) the V S O order is derived by head movement of the verb past the position of the subject. Suñer (1994), in fact, gives independent arguments to think that verbs in Spanish always move to the highest inflectional projection of the verb (FP1), and the subject stays in situ. The core idea of this analysis, which is that V S O is produced by head movement of the verb past the position of the subject, will be accepted here¹⁵.

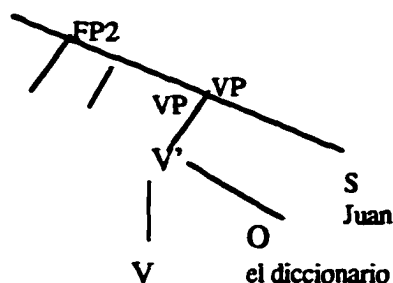


For the V O S order, Suñer (1994) and Torrego (1984) follow Rizzi's (1982) analysis of subject inversion in

¹⁵ This analysis will be enriched in chapter 3.

Italian and propose that this order is obtained by having the subject right-adjoined to the VP as in (20).

(20) The Right Adjunction Hypothesis



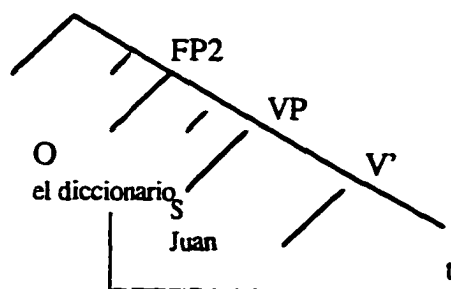
Theoretically, there was little reason to question this analysis before two subsequent advances in linguistic theory: the proliferation of inflectional projections (Pollock 1989) and the subject VP internal hypothesis (Kitagawa 1986, Koopman & Sportiche 1991). After all, before the VP internal hypothesis subjects were considered to be base generated in the Spec of INFL. Thus, they could only end up post-verbally by movement of the subject to the right, leaving a dummy empty category in Spec of INFL.

Yet even after these advances made alternatives available, linguists have continued to assume variations of this Right Adjunction Hypothesis. One representative version is the idea that post-verbal subjects in Romance are in Spec VP, which branches to the right. This proposal has been accepted, for example, by Bonet (1988) and Solà (1992) for Catalan and by Friedemann (1995) for French. It is illustrated in (21).

(21) [_{VP} [_v]SU]

The proposal that I make here departs from these views. I claim that the V O S order must be created by the movement of the object to the Spec of a higher inflectional projection to the left of the base position of the subject. The landing site for this movement of the object would be to the right of the final position of the verb. This movement should be thought of essentially as scrambling of a object to the left, and for this reason I refer to it as "the Scrambling Hypothesis."¹⁶

(22) The Scrambling Hypothesis



These two hypotheses differ crucially in the hierarchical representation of the V O S order. In the Right Adjunction Hypothesis, the subject adjoined to the VP C-commands the object in its base-generated position. The Scrambling Hypothesis posits, on the contrary, that the

¹⁶. As we discussed in chapter 1 the distinction between adjunction to a maximal projection and specifier of a maximal projection collapses in Kayne (1994). I will assume that this scrambling is movement to a mixed position as discussed by Webelhuth (1992). As we will see in the discussion of wh-in situ there are good reasons to think that scrambling is A' movement. However, see chapter 3 sections 3.8.1 and 3.9 for some motivation that this movement is L-related. For the debate about the status of scrambling with respect to the A-A' dichotomy see Van Riemsdijk and Corver (1994).

scrambled object in Spec of FP2 C-commands the subject in Spec of VP.¹⁷

Thus, with the Right Adjunction hypothesis there are no hierarchical differences between the V O S and V S O. In both orders the subject C-commands the object. The only differences lie in the linear ordering of the object and subject, and so there should be no syntactic asymmetries in hierarchical terms. From a scrambling perspective, on the other hand, the orderings are indeed asymmetrical: The subject C-commands the object in the V S O order while the object C-commands subject in V O S order. Therefore, the Scrambling Hypothesis can accommodate the syntactic asymmetries shown in subsequent sections.

Interestingly, the alternations between subject and object in post-verbal position are similar to equivalent cases that have been described for pre-verbal positions in

¹⁷ There is a third possibility to obtain the V O S order, one in which the object is scrambled to the left and the subject is right adjoined to the VP. Observe, that under this alternative the object C-commands the subject, which is nevertheless right adjoined:

(i) [_{FP} object_i [_{VP} [_{VP} t_i t_i] subject_j]

However, simple economy considerations block the possibility of this derivation. Given that that the basic order is S V O (see Suñer 1994), there are two alternatives to derive the (V) O S with the same number of steps in the derivation: the Right Adjunction Hypothesis and the Scrambling Hypothesis. The alternative suggested in (i) involves the union of those two derivations (right adjunction and scrambling together). Therefore it involves one more step and consequently economy will bar it. Observe that the derivation in (i) also violates the ban against crossing dependencies (see Pesetsky 1987).

languages such as German, Hindi, and Korean. In these languages a scrambling analysis is widely assumed. The differences between Spanish, on the one hand, and Korean, German, and Hindi, on the other, can be reduced to a difference in the syntax of verb movement. Verbs end up to the right of the subject before Spell Out in Spanish but not in German, Hindi, or Korean. In any case, the Scrambling Hypothesis predicts that there will be constraints on V O S in Spanish that parallel those on scrambling found in languages such as German, Korean, and Hindi.

Before continuing, it may be useful to take an overview of the different syntactic asymmetries: Section 2.4.1 deals with the asymmetries between V O S and V S O with respect to binding (quantifier binding in 2.4.1.1, Principle C effects in 2.4.1.2, and certain reconstruction effects with subject binders also found in other scrambling languages (Section 2.4.1.3). Section 2.4.2 examines asymmetries in the distribution of post-verbal Wh-words in situ. Section 2.4.3 looks at how the interpretation of indefinite objects is affected by the scrambling of these elements to the left. Section 2.4.4 deals with constraints on the distribution of weak subject pronouns. Finally, section 2.4.5 consists of a discussion of scrambling of the indirect object (IO), which has effects on the appearance of dative clitic doubling.

2.4. The asymmetries

2.4.1 Binding

2.4.1.1 Quantifier binding

The first asymmetry is found in the domain of quantifier binding. It is a standard claim in the literature about anaphora that in order to have a pronoun interpreted as a variable bound by a quantifier, that pronoun must be in the C-command domain of that quantifier (Reinhart, 1983, p. 122, among others). This condition is violated in the examples in (23) where the subject possessive pronoun is meant to be understood as coreferent with the object quantifier:

- (23) a. *Su_i amigo le regaló un libro [a cada niño]_i para su cumpleaños
 his friend cl-bought a book [for each boy] for his birthday
- b. *Su_i madre le presentó (a) [cada niño]_i al director
 his_i mother cl-introduced [each boy] (DO) to the director (IO)

As expected, the same constraint holds with the post-verbal subjects when they precede the object quantifier as in (24):

- (24) a. *¿Qué le regaló su_i amigo [a cada niño]_i
 what cl-bought [his friend] (S) [for each boy] (IO)
 What did his friend buy for each boy for his birthday?
- b. *Este libro se lo regaló su_i amigo [a cada niño]_i
 this book cl-gave [his friend] (S) [for each boy] (IO)
 This book, his friend gave it for each boy.
- c. *¿A quién le presentó su_i madre (a) [cada niño]_i?
 To whom cl-introduced his mother (S) each boy (DO).
 Who did his mother introduce each boy to?

- d. *Aquí presentó su madre (a) [cada niño]_i?
 here introduced his mother (S) each boy (DO)
 Here, his mother introduced each boy.

In the analysis of the V S O order represented in (19), the possessive pronoun in the subject in Spec of VP is not C-commanded by the object, and therefore pronominal binding cannot be established.¹⁸

However, when the object quantifier precedes the subject, the bound interpretation becomes available in all examples.^{19, 20}

¹⁸ As discussed above, there are two prosodic structures associated with the V S O order, a more neutral one in which the object receives the main sentence stress and a marked one in which the subject receives main sentence stress. While there seems to be consensus that the WCO clearly obtains under the more neutral structure, some people find that the cases of WCO improve under the more marked focus structure in which the subject receives main sentence stress. There is no agreement between the speakers I consulted; however, although some seem to get better, they are not judged as fully grammatical as the ones in (25).

- (i) ?? Aquí presentó SU_i MADRE [a cada niño]_i.
 Here introduced his mother every child
 here his mother introduced every child

Observe that the same speakers that allow the marked (i) also allow tend to allow also (ii):

- (ii) ?? SU_i MADRE presentó [a cada niño]_i.
 His mother introduced every child

This problem suggests that certain discourse factors may override the condition on WCO for some speakers. See Zubizarreta (1995) for an account in terms binding and discourse.

¹⁹ An important issue arises with respect to the impossibility to C-command out of the dative PP. The possibility of an NP binding outside its PP has been taken as a problem for the C-command approach for binding (see Reinhart 1983). Recently, Fergusson (1997) proposes a solution to this puzzle in terms of feature checking at LF. The relevant features of the NP subcategorized by P would move out of P and would be taken to a position from which they would be able to C-command outside.

- (25) a. ¿Qué le regaló [a cada niño]_i su _i amigo ?
 what cl-bought [for each boy] (IO) [his friend] (S)
- b. Este libro se lo regaló [a cada niño]_i su _i amigo
 This book cl-gave [for each boy] (IO) [his friend] (S)
- c. ¿A quién le presentó (a) [cada niño]_i su _i madre?
 To whom cl-introduced [each boy] (DO) his mother (S).
- d. Aquí presentó (a) [cada niño]_i su _i madre?
 Here introduced [each boy] (DO) his mother (S)

The right adjunction analysis of the V O S as represented in (26) is incapable of rendering an easy

²⁰ The examples containing negative quantifiers do not seem to work as well:

- (i) *? ¿Qué no le regaló [a nadie]_i su _i amigo ?
 What not cl-gave to nobody his friend
 Whad did not give his friend to anybody?
- (ii) *? ¿Por qué no me recomendó a nadie_i su director de tesis?
 why not cl-recommended to nobody his dissertation supervisor
 Why did not his dissertation supervisor recommend anybody to me?

However, with more complex negative quantifiers, the sentences improve, though I do not find them completely grammatical:

- (iii) ?? ¿Por qué no me recomendó a ningún estudiante_i su_i director de tesis?
 Why not cl-recommend any student his thesis supervisor
 Why didn't recommend his thesis supervisor any student?

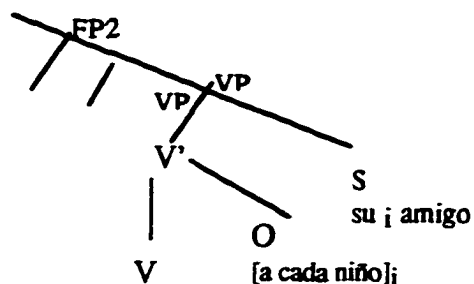
It is interesting to point out that similar effects are found in English with passives and with certain double PP complements. Observe the following contrasts:

- (iv) a. This book was given to every boy_i by his_i father.
 b. * This book was given to_i no boy by his_i father
- (v) a. I talked [about every boy_i] with his_i counselor
 b. *? I talked [about no boy_i]_i with his_i counselor

I think that part of the explanation for these puzzling facts has to be found in the special properties of negative quantifiers with respect to focus. If we suppose that negative quantifiers must get main sentence stress then that leads to the downstressing of the X P that follows. This downstressing could be taken to show that that XP must be necessarily right dislocated. I leave the topic for further research, noting only that the parallelism between the Spanish and English facts seems to suggest a uniform solution.

account of these examples in (25). Under this structural analysis, the subject right adjoined to the VP would not be C-commanded by the object quantifier, just as in the V S O order.

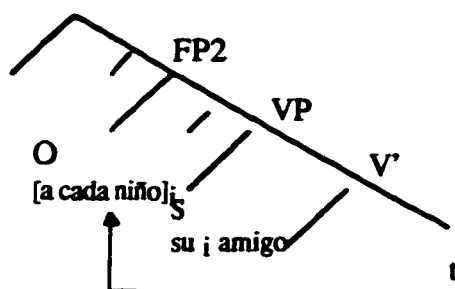
(26) The Right Adjunction Hypothesis:



Under the scrambling proposal, on the other hand, the examples are analyzed as in (27). The object quantifier (IO or DO) in the Spec of FP2 C-commands the subject in Spec VP and quantifier binding can be established. Scrambling creates a new binding possibility which was not available in either the S V O or the V S O orders.²¹

²¹ I assume in agreement with Frank, Lee, and Rambow (1992) view that binding theory is a constraint on non-operator positions.

(27) Tree of the Scrambling Hypothesis



Parallel asymmetries with respect to the possibilities of pronominal binding between the object quantifier binder and subject binder have been found as in German, Korean, and Hindi. These languages differ from Spanish in that the alternations occur in pre-verbal position. The overt or covert possessives in the (a) cases of (28)-(30) cannot be bound because, with their subject object quantifier order, the C-command condition is not met. However, in the (b) cases with the order object quantifier subject order, the binding can be established:

German (From Frank, Lee & Rambow 1992)²²

- (28) a. *Ich glaube, daß [sein; Vater] jedem; das Bild gezeigt hat
 I think that [his father (S)] everyone- (IO) the picture shown has
 I think that his father has shown everyone the picture

²² See Müller and Sternefeld (1994) disagree with the idea that scrambling has any improvement effect on the binding facts contrary to Haider (1988), Fanselow (1990), Grewendorf (1988), Frey (1989), Moltmann (1990), and Santorini (1990). They do still find some WCO effects in sentences like in (i):

- (i) *?Daß jeden seine Mutter mog
 that everybody-ACC his mother-NOM liked

- b Ich glaube, daß [jedem _i]j [sein _iVater] das Bild gezeigt hat
 everyone (IO) [his father- (S)] the picture shown has

Korean (From Frank, Lee & Rambow 1992)

- (29) a. *[pro_i apeci]-ka mwukwu-eykey_i-na yongton-ul cwunta
 pro-GEN father (S) everyone-DAT-UQ (IO) money-ACC (DO) gives
 His father gives everyone money
- b. [mwukwu-eykey_i-na]j [pro_i apeci]-Nom yongton-ul cwunta
 everyone-DAT-UQ (IO) pro-GEN father (S) money-ACC (DO) gives

Hindi (From Mahajan 1992)

- (30) a. *[unkii _i bahin] sab-ko_i pyaar Kartii thii
 their sister (S) everyone (DO) love do-imp-f be-pst-f
 Their sister loved everyone
- b. [sab-ko_i] [unkii _i bahin] pyarr kartii thii
 everyone (DO) their sister (S) love do-imp-f be-pst-f

In these languages, all the (b) examples have been analyzed as cases of scrambling of the object to the left of the subject. Mahajan (1991) took the facts in (30) to indicate that there is movement of objects to an A position (AGRO P), since scrambling feeds pronominal binding in all these cases.

2.4.1.2 Principle C effects

Similar asymmetries with respect to scrambling are found in the domain of Principle C of binding theory. In (31) the referential expression *Eva* embedded in the subject position can be coindexed with the IO pronoun *a ella* without triggering any violation of Principle C since there is no C-command.²³ These same facts hold in post-verbal

²³Strong pronouns must be doubled in Spanish. What counts for binding is the doubled XP. See Varela (1988) for a justification of this view.

position with the order V S O in (32). However, with the V O S order the co-indexing yields an ungrammatical result as in (33).²⁴

Spanish

- (31) Los hermanos de Eva_i le compraron el libro a ella_i
Eva's brother (S) bought the book for her (IO)
- (32) a. ¿Qué le compraron los hermanos de Eva_i a ella_i?
What cl-bought Eva's brothers (S) for her (IO)
What did Eva's brothers bought for her?
- b. El libro, se lo compraron los hermanos de Eva_i a ella_i
the book cl-bought Eva's brothers (S) for her (IO)
The book, Eva's brothers bought for her.
- (33) a. *¿Qué le compraron a ella_i los hermanos de Eva_i?
What cl-bought for her (IO) Eva's brothers (S)
- b. *El libro, se lo compraron a ella_i (IO) los hermanos de Eva_i (S)
The book cl-bought for her Eva's brothers

From a scrambling perspective, the ungrammaticality of (33) with the V O S is explained since the IO has been preposed to a C-commanding position with respect to the following subject, and consequently it is able to trigger a Principle C effect.²⁵

²⁴ It is important to distinguish the case in (33) from one where there is a pause between the IO and the subject as in (i). With right dislocation of the subject binding can be established:

- (i) ¿Qué le compraron a ella_i #los hermanos de Eva_i?
What cl-bought for her (IO) Eva's brothers (S)

²⁵The deviance of (33) cannot be an effect of backward anaphora. Backward anaphora is perfectly possible with the V O S order as in (i).

- (i) ¿Qué le compraron a su_i hijo [los directores]_i?
What cl-bought for his son(IO) the directors (S)?
What did the directors buy for his son?

Parallel contrasts to the ones found in (31-33) are reflected in German and Korean. I just report here the German examples given by Frank, Lee, and Rambow (1992):

- (34) a., daß [die Brüder vom Hans] ihm; das Bild gezeigt haben
 That the brothers of Hans(S) him(IO) the picture shown have
 that the brothers of Hans have shown him the picture
- b. *..daß ihm; [die Brüder vom Hans] ; das Bild gezeigt haben
 That Him(IO) the brothers of Hans(S) the picture shown have

2.4.1.3 Reconstruction effects.

The parallelism between Spanish and the languages where a scrambling analysis is assumed holds even for cases where this type of movement shows reconstruction effects. If the relationship between binder and bindee is reversed—so that subject is a quantifier binder and the object contains the possessive pronoun—no asymmetry is established i.e.: Binding is possible with both orderings as can be seen in (35) and (36).

- (35) a. ¿Qué le regaló [cada niño]i a su; amigo ?
 what cl-bought each boy (S) for his friend (IO)
- b. ¿Qué le regaló a su ; amigo [cada niño] i ?
 what cl-bought for his friend (IO) each boy (S)
- (36) a. Aquí besó [cada niña]i [a su ; amiga]
 here kissed [each girl] (S) [her friend] (DO)
- b. Aquí besó [a su ; amiga] [cada niña]i
 here kissed [her friend] (DO) [each girl] (S)

A similar lack of asymmetry is found in equivalent cases in German and Korean:

German (From Frank, Lee, and Rambow 1992)

- (37) a. Ich glaube, daß jeder ; [seinem ; Vater] die Bilder gezeigt hat.
 I think, that everyone-(S) his father-(IO) the pictures shown has
 I think that everyone has shown his father the pictures

- b. Ich glaube, daß [seinem j Vater] jeder j die Bilder gezeigt hat.
his father(IO) everyone(S) the pictures shown has

Korean (From Frank, Lee & Rambow 1992)

- (38) a. [Nwukwuna-ka]j [pro jchinkwu]-eykey komin-ul thelenohnunta.
everyone(S) pro-Gen friend(IO) problem- tell
Everyone tells his friend problems
- b. [pro jchinkwu]eykey [Nwukwuna-ka]j komin-ul thelenohnunta.
pro-Gen friend(IO) Everyone(S) problem- tell

Reconstruction effects are also found with anaphors: the subject binds the object anaphora—*de sí mismas* (about themselves)—whether it precedes or follows the subject binder. The same effects are found in Hindi with reciprocals; the scrambling of the object reciprocal does not destroy the anaphoric relations as shown in (40).

Spanish

- (39) a. ¿Cuándo hablaron [tus hermanas] j [de sí mismas] j ?
When talked your sisters (S) about themselves.
- b. ¿Cuándo hablaron [de sí mismas] j [tus hermanas] j ?
When talked about themselves your sisters (S)

Hindi (Mahajan 1992)

- (40) a. [raam Or siitaa] ek duusre-ko pasand Karte hEn
[Ram and Sita] j (S) each other j (DO) like
Ram and Sita like each other.
- b. ek duusre-ko [raam Or siitaa] pasand Karte hEn
each other; (DO) [Ram and Sita] j (S) like

All these facts add a puzzle to our previous proposal. Why is it the case that we are not obtaining any reconstruction effects for all these cases? The first person to notice any kind of generalization was Santorini (1990). She observed that only when the subject is the binder in all these relations is reconstruction required.

Under the Scrambling Hypothesis all the cases that do not show asymmetry are accommodated in terms of reconstruction. This in itself is an important reason for thinking that the V S O and V O S orders are mediated by the creation of a chain of the movement of the object to the left. In Chomsky's (1995, chapter 3) understanding of reconstruction as an option left by the copy and deletion theory of movement, these cases would appear as in (41).²⁶ The tail of Chain *j*, formed by the scrambled object has been deleted at PF. Observe, that the C-command requirement is established between the subject quantifier and the tail of the chain formed by the scrambled object.

- (41) Aquí besó [a su *i* amiga]_i [cada niña]_i [a su *i* amiga]_i
 Here kissed [to her friend] [each girl]

As noted in the previous sections, the relevant configuration for the computation of bound anaphora and Principle C is the C-commanding relationship between the head of the scrambling chain and the subject. Thus, no reconstruction effects were obtained. The examples are repeated here as (42) and (43).

- (42) Este libro se lo regaló [a cada niño]_i su *i* amigo [a cada niño]_i

- (43) ¿Qué le compraron a ella_i los hermanos de Eva_i a ella_i ?

Therefore there is a need to explain why in some cases reconstruction effects are obtained.²⁷ To do so, I will adopt a derivational approach for the computation of

²⁶ The deleted phonetic material is in bold.

²⁷ I leave aside the question of reconstruction effects with respect to A-movement.

pronominal binding and Principle C effects²⁸. Under this approach, any point of the derivation in which the relevant relation of C-command is obtained will trigger pronominal binding and Principle C effects.

Note that the idea that Principle C has to be computed derivationally is not a new; it was already proposed by Lebeaux (1988) and Heycock (1995). Given this approach, in the previous example (43), the movement of the indirect object "a ella" enters into C-command with "los hermanos de Eva" when it is scrambled. At that point, Principle C is triggered, rendering the sentence ungrammatical. Thus, no reconstruction effects are obtained.

Similarly, Santorini and Lee (1994) have proposed a condition on bound interpretation of pronouns that is also derivational in essence. According to their condition, binding between a quantifier and a pronoun obtains any time a quantifier or link of a chain of a quantifier C-commands a pronoun or a link of a chain containing a pronoun.²⁹ From that perspective, reconstruction effects depend upon whether the relevant C-command relation is obtained at any

²⁸ As pointed out to me by Juan Uriagereka, this approach is incompatible with the minimalist idea that binding is all computed at LF. However, in an alternative framework with multiple Spell Outs as in Uriagereka (forthcoming), the derivational approach could be accommodated.

²⁹ Given that binding had to be understood as restrictions on nonoperator elements, we automatically exclude the possibility of Wh in Spec CP binding into a pronoun in subject position. Thus, the WCO effects are still maintained in the examples with interrogatives.

stage, be it earlier or final, in the derivation. Thus, pronominal binding for the scrambling of quantifiers can be satisfied at a later stage of the derivation as we saw in (25), (28b-29b-30b) and (41). Specifically, C-command is obtained between the head of the chain and the subject.

On the other hand, in examples (35b), (36b) (37b), (38b) and (42) the C-command relationship was already established at the starting point of the derivation. At this point the pronoun of the object was already C-commanded by the subject quantifier.³⁰ Further movement of the object containing the bound pronoun is irrelevant since the condition on bound anaphora has already been satisfied. To conclude, from a derivational perspective, variation between examples without reconstruction as in sections 2.4.1.1 and 2.4.1.2 and examples with reconstruction as in section 2.4.1.3 reduces to a single difference: the stage of derivation in which binding conditions are satisfied.

In conclusion, we observe striking parallelisms with respect to binding possibilities when the object precedes the subject in post-verbal position in Spanish and the equivalent pre-verbal position in German, Korean, and

³⁰ Santorini and Lee's (1994) formulation is more complex than what I have expressed in the main text. The principle requires that pronominal binding be satisfied in a certain domain defined by the existence of a subject Agreement (what they call binding domain). In this domain all theta roles are satisfied (what they call argument domain). See Santorini and Lee (1994) for a more explicit formulation of their principle.

Hindi. For the latter cases a rule is widely assumed that preposes the object over the subject to a higher position. It is natural and empirically plausible to extend this analysis to Spanish.

2.4.2 Post-verbal wh-elements.

Another asymmetry between the two orderings is found in the relative distribution of post-verbal wh elements. The post-verbal wh-subject must precede the post-verbal wh-object as can be shown by the contrasts in (44) and (45):

Post-verbal S wh-element and Object wh-elements

- (44) a. ¿Qué le compró quién a quién?³¹
 what cl-bought who (S) for whom (IO)
- b. *¿Qué le compró a quién quién?
 what cl-bought for whom (IO) who (S)
- (45) a. ¿Qué dijo quién de quién?
 what said who (S) about who (O)
- b. *¿Qué dijo de quién quién?
 what said about who (O) who (S)

The same contrast holds with the respective ordering of post-verbal wh-DO and wh-IO in (46):

- (46) a. ¿Quién le compró qué a quién?
 Who cl-bought what to whom
- b. *¿Quién le compró a quién qué?
 who cl-bought to whom what

³¹ For all these examples we abstract away from the echo interpretation.

Under the scrambling proposal, the post-verbal sequence of wh-elements is the result of scrambling the wh-object to the left of the wh-subject in the examples (44b-45b) and the movement of the wh-IO to the left of the wh-DO in (46b).

The distribution of the post-verbal wh-elements in the (b) configurations seems analogous to a standard case of violation of the superiority condition. In these cases, a wh-element has been moved overtly across another hierarchically superior C-commanding wh-element. However, it is difficult for a superiority approach reconcile the ungrammaticality of the (b) cases with the fact that such a "superiority effect" does not arise between a wh-word in Spec CP and the post-verbal wh-word (Jaeggli 1982). A object-wh can be in CP crossing over a hierarchically superior subject in (47b):

- (47) a. ¿Quién compró qué?
Who bought what
- b. ¿Qué compró quién?
What bought who

It is thus worth considering that the ungrammaticality of (44b-46b) may not be reducible to the superiority phenomenon, but to some constraint on the scrambling of wh-element in situ. It has been noticed for German that wh-phrases, unlike nonwh-elements, resist scrambling.³² This

³²Hindi and Korean do allow scrambling of wh-words. See Müller & Sternefeld(1995) for a possible parametrical explanation for the differences between these languages.

constraint was pointed out by Fanselow (1990) and Müller and Sternefeld (1995) as can be shown by the contrast between (48b)-with the scrambling of the Wh-Object was -and (48c)-with the scrambling of the NP *das Auto*³³:

- (48) a. Wie hat der Fritz was repariert? (Müller and Sternefeld 1994)
 how has Fritz what fixed?
 How has Fritz repaired what?
- b. *?Wie hat was der Fritz repariert?
 how has what Fritz fixed?.
- c. Wie hat das Auto der Fritz repariert?
 how has the car Fritz fixed?

More examples, similar to the German ones, which show the ban on scrambling wh-XP in Spanish are given in (49) which contrasts with (50):

- (49) a. ¿Quién regaló estas flores para quién?
 who bought these flowers for who
- b. ¿Qué dijo comprarle Luis diariamente a quién?
 what said to buy Luis everyday to whom
- (50) a. *?¿Quién regaló para quién estas flores ?³⁴
 who cl-bought for who these flowers.
 Who told whom what happened.
- b. *?¿Qué dijo comprarle a quién Luis diariamente?
 What said to buy to whom Luis everyday.

In order to cope with this ban on the scrambling of wh-words in situ, Müller and Sternefeld (1993) propose that the grammar should distinguish between different types of

³³ Similar constraint has been pointed out for the topicalization of wh-elements in Lasnik and Uriagereka (1988).

³⁴ This order is felicitous with a right dislocation of the NP that follows as in (i). This is why the cases involving more than one wh-word in situ (44-45b) in post-verbal position are clearer since a right dislocation of a wh-word in situ is completely impossible.

(i) b. ¿Quién regaló para quién # estas flores ?
 who cl-bought for who # these flowers.

A' movement (scrambling, wh-movement and topicalization) in terms of their landing site.³⁵ They show empirical evidence that these different processes obey different locality conditions in the same language. It also supports the idea that the grammar should have a principle of Unambiguous Binding that avoids any interaction between these conditions. This principle would avoid one type of A' movement (scrambling) feeding another type of movement (Wh-movement).³⁶

³⁵ There are two landing sites for the cases discussed: Spec of functional projection for scrambled elements and Spec of CP for wh-movement. We leave topicalization aside.

³⁶ If we assume wh-elements to be indefinites, it is tempting to think that the ban on the scrambling of wh-elements is due to the ban on scrambling of nonspecific indefinites as predicted by the mapping hypothesis of Diesing (1992). However, the idea is problematic: on the one hand, Heim (1987), who assumed that Wh elements are decomposed into an operator and an indefinite or existential component, states that the existential component is always semantically interpreted in its base position. Thus, at LF the indefinite part would always be interpreted inside the VP domain in all the cases of scrambling, rendering the mapping hypothesis irrelevant. On the other hand, we still might predict that we would be able to find cases in which the scrambling of wh-word would be good under a certain specific interpretation. See Heim (1987) for specific interpretation of sentences containing a single Wh-elements. However, such sentences are judged ungrammatical. Finally, that the restriction on specificity for scrambled indefinites does not go in tandem with restriction on scrambling of wh-words is shown by Hindi, which allows scrambling of wh-elements (Mahajan 1992), but restricts scrambling of indefinites to the ones with specific interpretation (Mahajan 1991).

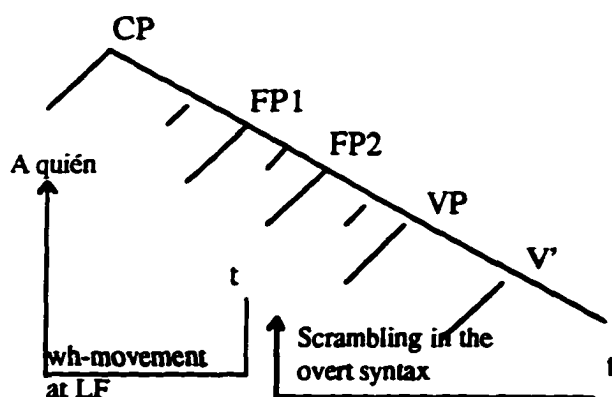
(51) PRINCIPLE OF UNAMBIGUOUS BINDING

a variable that is alpha-bound must be beta-free in the domain of the domain of the head of the chain (where alpha and beta refer to different types of positions)

(Müller & Sternefeld 1993)

In the ungrammatical cases (examples 44b-45b) the wh-word IO a *quién* has been moved to Spec of FP2 the landing site for scrambled elements before Spell Out. At LF a *quién* would have to move to Spec CP in order to yield an operator variable configuration.³⁷ However, at this point there is a violation of the principle of unambiguous binding at LF. The original trace of a *quién* in the VP shell is simultaneously linked to the trace in the scrambling site Spec of FP2 (*t'*) and the wh-word adjoined to CP at LF:³⁸

(52)



³⁷Given Kayne's proposal on antisymmetry (1994) the wh-word moves at LF adjoins to the one already in Spec CP at Spell Out.

³⁸We adopt Kayne's definition of C-command. Under this definition "a *quién*" C-commands outside the CP in (53).

This principle has the additional advantage of explaining why Spanish has WCO effects with wh-words in Spec CP as in (53):

- (53) a. *? ¿A quién_i vio su madre?
 To whom (DO) saw his mother (S)
 Who did his mother see?
- b. [VP [A quién_i] [FP₁ vio [FP₂ t_i [VP su madre [t_i]]]]]

In section 2.3.1.1, I showed that scrambling of an DO or IO can override WCO effects (example 25). In this case, this overriding would be possible if overt wh-movement in Spanish used an intermediate scrambling position as an escape hatch toward its final landing site in Spec CP. This potential movement is represented in (52). In the first movement to Spec FP₂ the Wh-word *a quién* would C-command the subject in Spec VP *su madre* and binding could be established with the possessive pronoun. For the unambiguous binding approach, however, this could not be a possibility since scrambling can never feed wh-movement.

In sum, there is good reason to think that the restricted distribution of post-verbal Wh-words in situ in Spanish is due to some ban on the scrambling of these elements. This fact was already noticed for German by Fanselow (1990) and Müller and Sternefeld (1993). It is possible to adopt Müller and Sternefeld's approach of unambiguous binding which supplies a theoretical way to deal with the problem. Moreover, the unambiguous binding condition seems to be independently motivated in Spanish in

order to explain the existence of WCO effects with overt wh extraction.³⁹

2.4.3 Interpretation of indefinites

The objective of this section is to support the claim that the order verb object-subject is obtained by scrambling of the object to the left. As has been pointed out recently in the literature, scrambling has effects on the specificity and related scopal properties of indefinites which are moved by scrambling. For example, Kural (1992) shows that scrambling can affect the scopal possibilities of the different quantifiers in Turkish. In sentence (54a), the subject quantifier "three" is naturally understood as taking wide scope over the IO "every car." However, in sentence (54b), where the IO is scrambled, the judgments are reversed, and it is naturally understood with a wide scope interpretation for the IO:

- (54) a. [Üç kişi] [her arabaya] binmis (Turkish, Kural 1992)
 Three person (S) every car(dat) get-in-pst-agr
 Three persons got in every car.
- b. [Her arabaya] [üç kişi] binmis
 every car(dat) tree person(S) get-in-pst-agr.
 Three persons got in every car.

³⁹ The ban of scrambling of wh-words in situ could be looked from an economy approach as in Epstein (1992). Under this view, movement of the wh-word from the scrambled position would be blocked by a more economical derivation in which the wh-element in its basic position moves in one swoop to Spec CP at LF. See Müller and Sternefeld (1995) for comparison between both approaches and for advantages of unambiguous binding versus the economy approach.

Similarly, an example of the restriction of scrambling to specific indefinites is pointed out by Diesing (1992) for German. A subject indefinite inside the VP is naturally interpreted as nonspecific—or nonpresuppositional in Diesing's (1992) terminology. If the subject is scrambled, (i.e., when it appears to the left of the sentential adverb "indeed"), the interpretation obtained is specific—or in her terms presuppositional. Thus, example (55a) simply asserts the existence of two cellists in a hotel nonspecifically. In (55b) the two cellists are already presupposed in the discourse:

- (55) a. Weil ja doch zwei Cellisten in diesem Hotel abgestiegen sind. (From Diesing 1992)
 Since indeed two Cellists in this hotel have-taken- rooms
- b. Weil zwei Cellisten ja doch in diesem Hotel abgestiegen sind.
 Since two Cellists indeed in this hotel have-taken-rooms

Given these asymmetries in the scopal and specific interpretation of indefinites, it is predicted that, following the Scrambling Hypothesis, similar effects should be found in Spanish. In fact, the asymmetry can be clearly seen in cases where the subject is a universal quantifier and the object is an indefinite. Examples (56) with the order V S (universal quantifier) O (indefinite) are ambiguous. The indefinite can be interpreted as specific, a reading that we can express as having an existential quantifier taking scope over the universal as in (57a) which corresponds to example (56c). Another natural reading is the one where the indefinite is not specific,

which we represent as the universal having scope over the existential (57b).⁴⁰

- (56) a. ¿Qué le regalaron todos los estudiantes a un profesor?
 what cl-gave all the students (S) to a professor (IO)
- b. ¿De qué informó cada agente a un espía?
 of what informed each agent (S) to a spy.(DO)
 What did each agent inform a spy about?
- c. Estos libros, se los dieron todos los estudiantes a un profesor.
 These books, cl-cl-gave all the students (S) to a professor (IO)
- (57) a. $\exists y \forall x$ (student (x) \wedge professor (y)) (give-a-book (x, y))
- b. $\forall x \exists y$ (student (x) \wedge professor (y)) (give-a-book (x, y))

However, the previous ambiguity disappears when the object with the indefinite precedes the subject (58). These examples force the specific reading of the indefinite (see also footnote 40):

- (58) a. ¿Qué le regalaron a un profesor todos los estudiantes?:
 what cl-gave to a professor (IO) all the students (S)
- b. ¿De qué informó a un espía cada agente?
 of what informed to a spy (DO) each agent (S)
- c. Estos libros, se los dieron a un profesor todos los estudiantes
 These books, cl-cl-gave to a professor (IO) all the students (S)

This same contrast is also found with an indefinite IO and universal quantifier DO. Sentence (59a) with the order V DO IO is also ambiguous between the two readings.

⁴⁰There is, actually, a third reading in which the indefinite has narrow scope and nevertheless is understood as notionally or pragmatically specific. This reading arises when the indefinite refers to different individuals out of an already presupposed set. For example in (56b), that reading would be obtained when we know the spies involved in the discourse and know that each agent informed one spy about something -i.e. we have a distributional reading. For a discussion of this narrow reading of a specific indefinite see Diesing (1992), and for a general nonscopal approach to the interpretation of specific indefinites see Enç (1991).

However, the V IO DO order in (59b) forces the reading where the indefinite IO takes scope over the universal quantifier in the object. This similarity in the alternation DO IO with the alternation S IO suggests a uniform treatment of both cases:

- (59) a. Los profesores le dieron cada libro a un estudiante
Professors cl-gave every book (DO) to a student (IO)
- b. Los profesores le dieron a un estudiante cada libro
Professors cl-gave to a student (IO) every book (DO)

The restriction on specificity of XPs for certain orderings is further attested with inherently nonspecific XPs. Such is the case of NPs with the postposed determiner *cualquiera*. The prediction that these NPs could not appear in the scrambled orders V IO DO and V IO S is attested in the contrasts between (60) and (61):⁴¹

⁴¹ It has been pointed out to me that the constraints in examples in (61) might be related to focus. Presumably, the post-posing of determiner "cualquiera" makes the DP more emphatic. Parallel effects are found with the post-posing of the demonstrative "este" with specific DP's as in (ii).

- (i) Este niño.
This boy.
- (ii) El niño este.
The boy this

If focus, and not specificity, were the only factor to explain the marginality of (61), it might be expected that examples involving the scrambling of "el niño este" might be as marginal as the ones involving "una secretaria cualquiera". However, these examples seem to improve as in (iii). This, again, suggests that specificity, and not only focus, is the crucial factor in explaining the marginality of the previous examples involving postposed "cualquiera".

- (iii) El director le pasará al niño este el libro de matemáticas.
The director cl-will give to the boy this the book of mathematics.

- (60) a. El director le pasará este manuscrito a una secretaria cualquiera.
The director cl-will give this manuscript (DO) to secretary whichever(IO)
- b. El libro, se lo dará el profesor a un estudiante cualquiera.
The book, cl - will give the teacher (S) to a student whichever.(IO)
- (61) a. ??El director le pasará a una secretaria cualquiera este manuscrito.
The director cl-will give to a secretary whichever (IO) this manuscript (DO)
- b. ??El libro, se lo dará a un estudiante cualquiera el profesor.
The book, cl-will give to a student whichever (IO) the teacher (S)

The examples with V IO DO and V IO S in (61) each contrast with those of (62). The examples in (62) force the specific reading for the IO by introducing a partitive in the sequence with the indefinite determiner *cualquiera*:⁴²

- (62) a. El director le pasará a cualquiera de estas secretarias el manuscrito.
The director will give to any of these secretaries (IO) the manuscript (DO).
- b. El libro, se lo dará a cualquiera de estos estudiantes el profesor.
The book, cl-will give to any of these students (IO) the professor (S).

There has been a common assumption that the indefinite loses its nonspecific interpretation when it moves out of its basic position in scrambling structures. In Diesing's view, for example, this difference on the restriction on interpretability for scrambled indefinites could be described under the "mapping hypothesis" under a DRT model. Diesing postulates that trees in LF are mapped into logical representation where material inside and outside the VP corresponds to different kinds of quantification. The material remaining in the VP maps into the nuclear scope of the quantification. In this domain all nonspecific

⁴²See Enç (1991) for a proposal that relates specificity to partitivity.

readings of indefinites are obtained by existential closure.⁴³ The material outside the VP maps into the restriction clause of the quantification. All quantificational elements, including indefinites with a specific reading,⁴⁴ must appear outside of the VP at LF to be able to map into the restrictor. One of the empirical facts that this hypothesis tries to accommodate is that indefinites already taken outside the VP domain at Spell Out can only have a specific reading. This is what, in fact, we have seen for the scrambling example (55b) for German and (58) and (59b), for Spanish as well.⁴⁵

⁴³ Diesing (1992) following and modifying ideas by Heim (1982) and Kamp (1981) supposes that Indefinites with nonspecific readings introduce a free variable which is bound by an implicit existential operator in the nuclear scope.

⁴⁴ Diesing assumes that indefinites with a specific reading are Quantificational elements which undergo QR. Indefinites that are in the VP as in examples (56) QR under the specific reading.

⁴⁵ Another well-known explanation for the restriction on specificity has been given by De Hoop (1992). She divides indefinites into strong (presuppositional) and weak (nonpresuppositional), which are assigned two different types of cases (weak and strong). Weak case can only be assigned in its deep structure position (inside the VP) while strong case is freer. Thus, scrambling is limited to strong indefinites.

Finally, Reinhart (1995) postulates that the restrictions on the specificity on indefinites derives from the fact that the scrambled element is downstressed and therefore already presupposed in the context under normal circumstances. This downstressing is consequence of the rule of assignment of sentential stress. Following Cinque (1993), she proposes that sentential stress is assigned to the most embedded element in the structure. In scrambling structures the downstressed element is the one that precedes the XP that has sentential stress (see section 2.2.2 for the V O S order in Spanish). Consequently, Reinhart's proposal has to assume that the

In sum, in Spanish the specific reading is forced for the object in the V O S order but not the V S O order. This result is obtained under the standard assumption that scrambling is only possible if the scrambled element has a specific interpretation. The effects in Spanish thus match those found in other languages in which a scrambling analysis is widely accepted. Again, this fact corroborates the idea that the first order is obtained from the second by scrambling of the object to the left.

2.4.4 The distribution of post-verbal subject pronouns.

The fourth asymmetry is found with the distribution of post-verbal subject pronouns. Unlike fully referential NP's, unstressed post-verbal subject pronouns are restricted to the V S O order as can be seen by the contrast in (63) and (64):⁴⁶

- (63) a. ¿Qué les compró él a sus hermanos?
 what cl-bought he (S) for his siblings (IO).
- b. ??¿Qué les compró a sus hermanos él?
 what cl-bought for his siblings (IO) he (S)?

scrambled indefinites are in a more hierarchically prominent position than the focus element that follows. This fits very nicely with our proposal that the object is C-commands the subject in the V O S order.

⁴⁶ Pronouns which are morphologically complex like nosotros, vos-otros do not trigger the effects observed by the mono-morphemic ones (i). Under Cardinaletti and Starke's (1994) approach, these pronouns pattern with what they call Strong pronouns, which are not subject to the distributional restriction that the monomorphemic ones are.

- (i) b. ¿Qué les comprasteis a sus hermanos vosotros?
 what cl-bought for his siblings (I.O) you-plural (S)
 What did you buy for his siblings?

- (64) a. ¿Qué le compraron ellos a él ?
 what cl-bought they (S) for him (IO) ?
- b. ??¿Qué le compraron a él ellos ?
 what cl-bought for him (IO.) they (S) ?

The ungrammatical examples with the subject pronoun following the complement contrast with the example where the post-verbal subject in the V O S order is a full NP. Observe the contrast between (63b-64b) and the examples in (65).

- (65). a. ¿Qué le compraron a él los estudiantes?
 what cl-bought for him ((IO) the students
- b. ¿Qué le compró a él el profesor?
 what cl-bought for him (IO) the professor (S)

In order to obtain the V O S order in these cases, the pronouns must be heavily stressed, and an intonational break must appear before the pronoun as in (66). It might also appear in this order when coordinated with another NP (67):

- (66) a. ¿Qué les compró a sus hermanos // ÉL?
 what bought for his siblings (IO) HE (S).
- b. ¿Qué le compraron a él // ELLOS?
 what cl-bought for him // THEY
- (67) ¿Qué le compró a sus hermanos él y su hermana?
 what bought for his siblings (IO) he and his sister (S).

The data in (63) and (64) suggest that post-verbal subject pronouns in Spanish must necessarily be scrambled to the left. It has been noted in the literature that the distribution of unstressed pronouns can be different from the distribution of full NPs or stressed pronouns.

For example, in Scandinavian languages there is a process referred to as "object shift", which distinguishes

between object pronouns, lexical NPs, and stressed pronouns. This process obligatorily scrambles unstressed pronouns to the left of the negation in Icelandic (Johnson 1991).

- (68) a. **að Jón Keypti ekki hann*
that John bought not it
- b. *að Jón Keypti hann ekki*
That John bought it not

Similarly, subject pronouns also have a peculiar distribution, which distinguishes them from full NP's. German allows scrambling of a complement over a subject full NP (69a). However, the scrambling of a complement over an unstressed subject pronoun is much more degraded (69b). Finally, in Swedish unstressed subject pronouns must necessarily appear scrambled to the left of sentential adverbs (70):

- (69) a. ...*daß dem Hans der Automat ein Fahrschein gegeben hat.* (From Cardinaletti & Starke 1994a)
that to Hans (IO) the machine (S) a ticket has given
that the machine has given a ticket to Hans.
- b. ...**daß dem Hans er ein Fahrschein gegeben hat.*
That to Hans (IO) it(S) a ticket has given
- (70) a. ...*att möjligen Anna inte har sett boken.*
that possibly Anna not has seen book-the
- b. ...**att möjligen hon inte har sett boken.*
...that possibly she not has seen book-the

In conclusion, the facts reviewed in this section point to the conclusion that the constrained distribution of pronouns in post-verbal position can be explained by the Scrambling Hypothesis.

2.4.5 Doubling with indirect objects.

The fifth asymmetry concerns clitic doubling. Spanish allows clitic doubling with indirect objects. Some full NP indirect objects are optionally doubled in the configuration V DO IO:

Order DO IO:

- | | | | | | |
|------|----|---------------------------------|------------------------------|-----------------------------|---|
| (71) | a | El director
the director(S) | (les) entregó
dat-cl-gave | las notas
the grades(DO) | a unos estudiantes.
to some students(IO) |
| | b. | El director
the director(S)- | (le) dio
dat-cl-gave | un libro
a book(DO) | a María.
to María(IO) |

Hernanz and Brucart (1987, pag 267) observe that doubling of the indirect object in these situations becomes necessary when the order of the objects is reversed.⁴⁷ The examples in (72) are deviant without the clitic:⁴⁸

Order IO DO:

- | | | | | | |
|------|----|--------------------------------|--------------------------------|--|------------------------------|
| (72) | a. | El director
the director(S) | *?(les) entregó
dat-cl-gave | a los estudiantes
to the students(IO) | las notas.
the grades(DO) |
|------|----|--------------------------------|--------------------------------|--|------------------------------|

⁴⁷ Zubizarreta (1995) mentions the same intuition (chapter 3, p. 21). See also Uriagereka (1988) for a treatment of these cases as counterparts of Dative Shift of English.

⁴⁸ There is some dialectal variation with respect to the different possibilities of clitic doubling in Spanish. In some dialects the clitics are almost always required, in which case the discussion of this section does not reflect the grammar of those speakers. For those speakers in which the clitic is optional, special attention should be paid to intonation. The judgments reported in (72) have to be read with sentence stress on the final object, the structure that corresponds to the intonational properties of scrambling as in (i). The intonation with the right dislocation of the DO as in (ii) is not relevant for the discussion.

- | | | | | | |
|------|----|-------------|-------------|--------------------------|-------------------|
| (i) | a. | El director | les entregó | a los estudiantes | <u>las notas.</u> |
| (ii) | a. | El director | entregó | <u>a los estudiantes</u> | # las notas. |

- b. El director *?(le) dio a María un libro.
 the director(S) dat-cl-gave to María(IO) a book(DO)

We find that doubling is also required in the V IO S order, but not in the V S IO:

S IO order:

- (73) a. Ésta es la asignatura que (les) enseñaba el profesor a varios estudiantes.
 this is the subject that dat-(cl) -taught the professor (S) to some students (IO)
- b. Ésta es la señal que (les) hizo el alcalde a varios hombres.
 this is the sign that dat-(cl) -made the mayor (S) for some men (IO)

IO S Order:

- (74) a. Ésta es la asignatura que *?(les) enseña a varios alumnos el profesor.⁴⁹
 this is the subject that dat-cl-teaches to some students (IO) the professor (S)
- b. Ésta es la señal que *?(les) hizo a varios hombres el alcalde.
 this is the sign that dat-cl-made to some men (IO) the mayor (S)

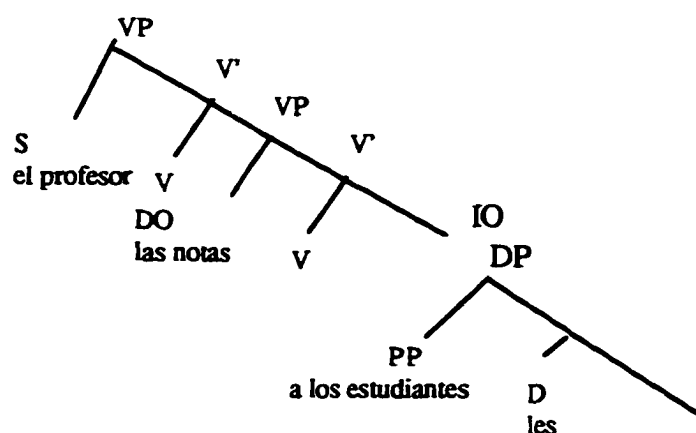
These contrasts are clearly problematic for the right-adjunction hypothesis. Under that proposal, there should be no contrast for the dative arguments in the V DO IO and V IO DO orders on the one hand and the V S IO and V IO S orders on the other with respect to clitic doubling. In both cases the dative is in situ. With the scrambling proposal, however, there is no incompatibility. Scrambling therefore must be triggering the clitic doubling, but there is still a need to account for these facts. To do so, it is helpful to employ Torrego's (1992) hypothesis that clitics head their own DP projection.⁵⁰ In the case of doubling, the double XP is realized in the Spec of the DP

⁴⁹Again, these cases should not be confused with the ones where we have the same structure but there is a right dislocation of the final subject.

⁵⁰ I will put aside DO, which do not admit doubling in general. From our perspective, they cannot be subsumed under representation (75).

where it enters into Spec head agreement with the clitic D counterpart.⁵¹ This DP would be embedded in the lower Larsonian VP shell.⁵² Example (75) corresponds to (71a) with the overt clitic dative before Spell Out:

(75)



As a natural extension of the DP hypothesis for clitics, we also have cases where the D heading the DP is an empty

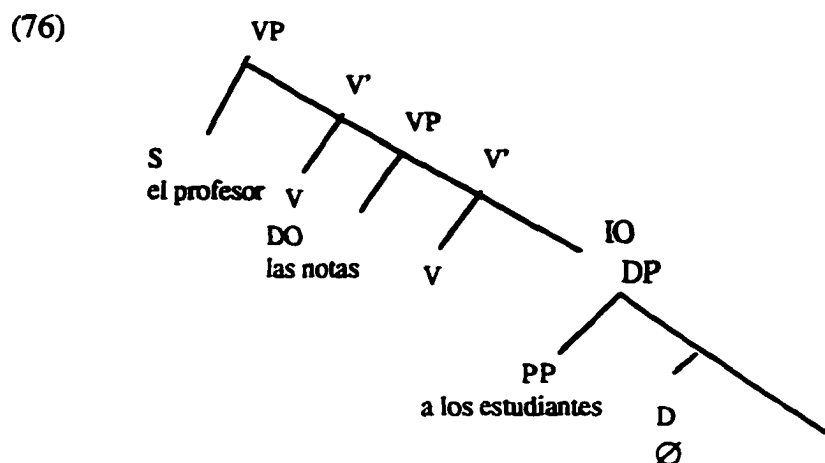
⁵¹This matching is the responsible of the identification of a "pro" when there is no overt counterpart as in (i):

- (i) **les entregó las notas pro**
to them-cl I gave the grades.
I gave the grades to them

Finally, the matching does not involve the feature \pm specific. It has been shown by Suñer (1988) that indirect object clitics can double nonspecific DP. See example (73), in which the indefinite can be read as nonspecific when it is doubled.

⁵²The overt D clitic moves by Spell out to some inflectional projection. (Kayne 1992).

category. This case corresponds to the counterpart of (71) with no overt clitic:⁵³



In general, DPs headed by an empty D have a more restrictive distribution than lexically realized ones. Romance DPs headed by an empty head are not permitted in pre-verbal position.⁵⁴ They are only allowed in a head-object relation with the verb as seen by the contrast in (77) with a passive and (78) with an unaccusative verb:⁵⁵

⁵³Contrary to overt D's, we assume that empty D's do not cliticize overtly. If we think that cliticization before Spell Out is motivated by the need of a clitic to be checked in an inflectional projection, empty D's are excluded because they do not have phi-features to be checked.

⁵⁴ Only cases of focalization in pre-verbal position seem to allow such empty D's (Contreras 1985).

⁵⁵There are interpretative difference between empty D in the cases of clitic doubling in (76) and the empty clitic D in in DP's in (77)-(78). In this chapter, we are just concerned about the syntactic distribution of these empty elements, which seems constrained by the same syntactic principles. Another element which has a similar syntactic pattern is empty complementizer. Many linguists have proposed that empty complementizers are constrained by lexical government, as well, see Stowell (1980).

- (77) a. *?[Ø Petroleo] fue encontrado.
oil (S) was found.
- b. Fue encontrado [Ø Petroleo] (example from Bosque 1992)
was found oil (S).
- (78) a. *?Aquí [Ø turistas] llegan de todas partes.
Here tourists (S) come from everywhere
- b. Aquí llegan [Ø turistas] de todas partes
here arrive tourists from everywhere

Longobardi (1994) proposes that the appearance of the empty determiner is constrained by a lexical government requirement. As has been pointed out several times in the literature (Chomsky 1981, Rizzi 1982, among others), this requirement is not met in the pre-verbal position in (77-78). Following this idea, I propose the following principle for the licensing of \emptyset :⁵⁶

- (79) A DP headed by \emptyset must be contained in the projection of the head which assigns a theta role to it.⁵⁷

⁵⁶ This proposal is actually very similar to proposal on the distribution of D \emptyset by Uriagereka (1988) and Uriagereka (1996).

⁵⁷ Being in a theta position plays an important role for the licensing of \emptyset . Empty determiners are not possible for subjects of small clauses as pointed out by Contreras (1985) and Longobardi (1994). In these cases, the verb in the matrix clause does not assign a theta role to the Spec position of the small clause. From this fact, it is concluded that lexical government is not enough to explain the distribution of empty D's.

- (i) *Consideravo studenti intelligenti (from Longobardi 1994)
I considered students intelligent

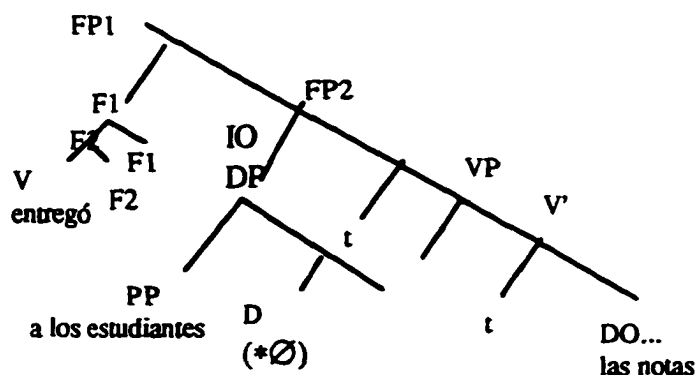
We could alternatively reformulate (79) in terms of θ -government in the sense of Chomsky (1986).

- (79') \emptyset must be θ -governed.

θ -government: α θ -governs β iff α is a zero-level category that θ -marks β , and α , β are sisters.
(Chomsky 1986)

This requirement is met in (77b) and (78b) with the only argument in the object position, but not when it is moved to the pre-verbal position in (77a) and (78a). In example (71) with a dative DP, \emptyset is also included in the V, which is responsible for the assignment of the goal theta role to the whole dative DP. However, this configuration is destroyed when the DP IO is scrambled to the left to Spec FP2. Scrambled XPs end up in a nonthematically selected projections. This has been taken to be a crucial point in the explanation for the constraint on extraction out of scrambled XPs in German (Diesing 1992, Grewendorf & Sabel 1994). In (80), which represents sentence (72a), the DP dative is in the Specifier of FP2, which is not thematically selected by V. Consequently the empty determiner in representation (80) is excluded by principle in (79).⁵⁸

(80)



⁵⁸ θ -government is not met in (80) either. V and the dative DP in Spec FP2 are not sisters in the strict sense.

Another instance of the requirement in (79) comes from the distribution of generic bare plural IOs. As pointed out by Fernández Soriano (1989) and Jaeggli (1982), these elements are incompatible with an overt dative clitic. They are only possible with the empty D counterpart.⁵⁹

- (81) a. No (*les) des tus llaves a personas desconocidas.
 don't cl-give your keys to strangers.
- b. Luis no (*les) envia sus cartas a niños indefensos.
 Luis not cl-sent his letters to defenseless children.

Consequently, these datives would not be able to scrambled to the left, as shown below:⁶⁰

- (82) a. *?No des a personas desconocidas tus llaves.
 don't cl-give to strangers your keys.
- b. *?Luis no envia a niños indefensos sus cartas.
 Luis not cl-sent to defenseless children his letters

In conclusion, we have seen that empty and overt D's in a dative XP alternate when these element are in-situ. The conditions which license empty D's are destroyed once the DP is scrambled to a higher inflectional projection. As has been assumed for German (Diesing 1992 and Grewendorf & Sabel 1994), scrambled XPs end up in nonthematically selected positions.

⁵⁹ I have no account for why bare plural IO are impossible with the overt clitic. Presumably, the same factors that make the presence of a determiner incompatible with the generic interpretation for plurals DP in languages like English, may also explain the incompatibility of the doubling clitic with the IO generic bare plural in Spanish.

⁶⁰ Generics, like specifics indefinites are equally classified as "presuppositional" in Diesing's sense. They both, map into the restrictor. Therefore the Mapping Hypothesis as stated in Diesing (1992), cannot be an explanation for the marginality of (82).

2.5 Conclusion.

In this chapter I have shown certain asymmetries between objects and subjects in the orders V O S and V S O in Spanish. The asymmetries in quantifier binding and Principle C between the two orders were explained by having the hierarchical relation between subjects and objects reversed, implying that objects C-command subjects only in the V O S order. This relation could only be obtained by moving the O to the left to some higher inflectional projection and having the subject in a lower position. The ban on wh-objects in situ in the V O S order was reduced to a ban on scrambling wh-in situ. The obligatory specific interpretation of the indefinite object in V O S order was seen as a consequence of the effects of scrambling on indefinites. The restriction of subject pronouns to the V S O order was explained by their semi-clitic nature which forces them to scramble to the left. Finally, the impossibility of having an empty counterpart of the dative clitic in the V IO S order was reduced to the fact that the conditions for licensing this empty category are not met in the landing site for scrambled XPs. In every case support for a scrambling account is found.

This conclusion implies that the alternation S O and O S found in verb final languages like Korean, Hindi and German needs to be extended to languages where this alternation is obtained post-verbally such as Spanish. In principle,

there is little reason why the same basic alternation should have two different analyses in UG (scrambling of the object to the left in verb final languages and adjunction of the subject to the right in nonverb final languages). The introduction of functional projections in the syntactic trees (Pollock 1989) and the hypothesis of verb movement (Emonds 1978), made scrambling a plausible analysis for nonverb final languages. It can therefore provide this uniform account. From the particular perspective of Spanish, it has also been shown that this analysis is empirically superior to the alternative Right Adjunction Hypothesis.

Finally, our analysis, contrary to the free inversion hypothesis, conforms with and supports the line of research put forward by Kayne (1994), which derives linear order from hierarchical structure. This is done by what he calls the "Linear Correspondence Axiom" (LCA) which maps asymmetric C-command into linear precedence. Since the mapping is done into linear precedence, no right-adjunction is generated in syntactic trees.

For the scrambling proposal, the subject asymmetrically C-commands the object in the representation in (19) and the object C-commands the subject in the representation in (22). LCA correctly yields the two orderings V S O and V O S. However, the Right Adjunction Hypothesis represented in (20) is incompatible with such a reduction

of linear ordering from hierarchical relations. According to this hypothesis, the subject asymmetrically C-commands the object in both V S O and V O S. It is then a logical result to eliminate right adjunction of subjects from UG, in favor of an independently established phenomenon of scrambling.

Chapter 3

Light Predicate Raising and post-verbal subjects in Romance

3.1 Introduction.

In Chapter 2 I showed that Spanish allows both the V S O and V O S orders, and I proposed that the derived V O S order is obtained by movement of the object to the left. In this chapter, I address the question of the status of post-verbal subjects in other Romance languages such as Catalan, French, and Italian. This comparison shows that Spanish allows a wider distribution possibilities for post-verbal subjects than these other languages. In order to understand the more restricted nature of post-verbal

subjects in these languages, I consider an approach in which the TP has moved over the subject in a process akin to Light Predicate Raising (LPR). The subjects are then in a focus position. This analysis of post-verbal subjects in Catalan, French and Italian is then extended to Spanish V O S orders I analyzed in Chapter 2.

3.2 Distribution of Post-verbal subjects in Italian, Catalan and French.

As we examined in the previous chapter, Spanish seems to allow post-verbal subjects in the V S O or V O S order. However, Italian and Catalan or French are not as flexible with respect to the different possible positions of post-verbal subjects. I will first examine the distribution of post-verbal subjects of these languages in the following sections.

3.2.1 The V O S order.

The V O S is perfectly possible in Catalan with a focused subject as in (1).

- (1) Demà comprarà un llibre la Magda.
 Tomorrow will buy a book Magda

However, this kind of sentence appears to be more delicate in Italian. For instance Rizzi (1991) judges a parallel sentence such as (2) as marginal.⁶¹

⁶¹It is important not to confuse this V O S sequence with one in which the S is marginated or right dislocated. Those sentences are characterized by a clear intonational

- (2) ?Ha risolto il problema Gianni. (Rizzi 1991)
Has solved the problem Gianni.

Nevertheless, Calabrese (1990) has pointed out that the order is plausible in some presentational contexts with an indefinite object as in (3).

- (3) Ti ha dipinto un quadro Sandro. (from Calabrese 1990)
cl-has painted a portray Sandro

Similarly, Delfitto and Pinto (1992) also report that the V O S order is plausible with an indefinite subject as in (4) and (5).

- (4) Le ha cantato una canzone Paolo. (from Calabrese 1990)
cl-has sung a song Paolo.
- (5) Ha recensito il libro un professore. (from Delfitto & Pinto 1992)
Has summarized the book a professor

Therefore, I will assume that the V O S order is possible in principle in Italian

French, on the other hand, is more restrictive. The V O S order is very marginal as reported in Friedemann (1995).

- (6) *A qui donnera le livre ton ami? (from Friedemann 1995)
Who will give the book your friend.

Nevertheless, the most important differences between Spanish, on the one hand, and Italian, Catalan, and French, on the other, is found in the possible elements that can follow the postverbal subject. In these languages, the order V S O seems to be quite restricted. Here we should

break before the final subject such as in (i) (see Calabrese 1990).

- (i) Ha risolto il problema// Gianni
has solved the problem Gianni

distinguish different subcases: V S DP, V S PP, V S Adj., V S Adv., V S INF, and V S CP.

3.2.2 V S DP (object)

It is generally reported that Catalan does not allow the V S DP (object) order, and this judgment is reflected in (7a), (8a), and (9a).⁶² The (b) cases with the V O S cases, on the contrary, are all grammatical.

- (7) a. ???Avui farà en Joan el dinar. (from Solà 1992)
Today will make Joan lunch.
- b. Avui farà el dinar en Joan.
Today will make lunch Joan.
- (8) a. *Va córrer en Lluís la Marató. (from Bonet 1988)
Ran Lluís the marathon.
- b. Va córrer la Marató en Lluís.
Ran the marathon Lluís
- (9) a. *Quan va fer l'Anna el cafè? (from Vallduví 1990)
When made Anna the coffee.
- b. Quan va fer el cafè l'Anna ?
When made the coffee Anna .

However, there seems to be a dialectal split in this respect. The negative judgments are much less robust in some central and Southwestern varieties⁶³.

⁶² Again, I leave aside emarginated or right dislocated subjects in my discussions of Catalan and Italian.

⁶³ I thank Francesc Roca from Sabadell (Central Catalan) and Mercè Pujol from Lleida (Western Catalan) for judgments in this respect. It remains to be seen whether there is a new tendency in Catalan towards admitting these orders. Such a tendency would presumably be the result of the influence of Spanish, owing to the large number of bilingual speakers (See Ruaix 1994 pp. 12-14).

Arguably, in spite of the dialectal variation, all varieties seem to coincide in not allowing the V S O order with determinerless DPs as shown in the following examples:

(10) *Quan va discutir el professor lingüística?
When discussed the professor linguistics

(11) *A la Maria, li donarà en Joan pastissos.
To Mary, will give Joan pastries.

Italian seems clearly more restrictive than Catalan. The order V S O is very difficult in all varieties consulted.

(12) *Scrisse Gianni la lettera. (from Zubizarreta 1994)
Wrote Gianni the letter

(13) *Ha mangiato spesso Gianni gli spaghetti
Has eaten often Gianni the spaghetti

Obviously, the sentences are ungrammatical with determinerless DPs:

(14) *Ieri, hanno mangiato i ragazzi piselli.
Yesterday, have eaten the boys peas.

The same kind of restriction is also encountered in French:

(15) *Quand a écrit Jean la lettre? (from Zubizarreta 1994)
When has written Jean the letter

(16) *Où répare Marie sa voiture? (from Friedemann 1995)
Where repairs Marie his car

(17) *A qui donnera ton ami le livre? (from Friedemann 1995)
to who gave your friend the book

3.2.3 V S PP (complement)

The V S PP order is slightly better, but still marginal in these languages. Observe the contrast between V S PP and V PP S in (18), (19), and (20). Note that those Catalan

speakers, who accept V S O with full DP objects, find the

(a) sentences grammatical:

- (18) a. ??Ahir parlava en Joan de la universitat
yesterday spoke Joan of the university
- b. Ahir parlava de la universitat en Joan.
yesterday spoke of the university Joan
- (19) a. ??No pensa La Magda en les conseqüències.
Not thinks Magda about the consequences
- b. No pensa en les conseqüències La Magda.
Not thinks about the consequences Magda
- (20) a. ??Ahir va discutir el professor sobre lingüística?
Yesterday discussed the professor about linguistics.
- b. Ahir va discutir sobre lingüística el professor ?
Yesterday discussed about linguistics the professor.

Solà (1992) points out an improvement with IO PPs.⁶⁴

This improvement is reported by all speakers.

- (21) ?Aquest llibre el va regalar en Joan a la Maria (from Solà 1992)
This book gave Joan to Maria

Finally, sentences with temporal and locative PPs are grammatical:

- (22) Què feia en Joan al 1968?
what did Joan in 1968
- (23) El llibre, l'ha posat en Joan al prestatge. (from Solà 1992)
The book, put Joan on the shelf.

For Italian, V PP S orders are also difficult as shown in (24a), (25a), and (26a), which contrast with their (b) counterparts:⁶⁵

⁶⁴ In some varieties of spoken Catalan there is doubling of IO. For those speakers the S V IO without clitic is difficult.

⁶⁵ These sentences should be read with heavy stress on the final subject. It is interesting to point out that the V S PP in relative clauses these sentences seem to improve.

- (i) ?I giorno in cui ha litigato Piero con sua sorella
the day in which has fought Piero with his sister

- (24) a. ??Ha litigato Piero con sua sorella.
Has fought Piero with his daughter
- b. Ha litigato con sua sorella Piero.
Has fought with his daughter Piero
- (25) a. ??Non si è lamentato Piero del mal di testa.
Not complained Piero about his headache
- b. Non si è lamentato del mal di testa Piero.
Not complained about his headache Piero
- (26) a. ??Non mi ha parlato Gianni del suo professore.
Not cl-talk Gianni about his professor
- b. Non mi ha parlato del suo professore Gianni .
Not cl-talk about his professor Gianni

However, the sentences seem to improve with prepositional

IOs:

- (27) Questo regalo, l'ha spedito Giuliana al suo nipote
This gift cl-has given Giuliana to her nephew
- (28) Il regalo que ha spedito Giuliana al suo nipote
the gift that has sent Giuliana to her nephew

Furthermore, sentences with locative and temporal PPs are grammatical:

- (29) Dove era Gianni nel 1968?
where was Gianni in 1968?
- (30) Ti ha visto Gianni nella tua casa
cl-saw Gianni in your house.

The French judgments are somewhat similar. Sentences with complement PPs are not as bad as with DOs, but they are still awkward:

- (31) ?? Le jour où parlera Jean à Marie. (Kayne 1986)
The day when will speak Jean to Marie
- (32) ?? Quand changera cette fille d'avis? (Kayne 1972)
When will change this girl of opinion.
- (33) ?? Quand écrira ton frère à sa petite amie? (Kayne 1972)
When will write your brother to his friend.

-
- (ii) ??Il giorno in cui si è lamentato Piero del mal di testa
the day in which complained Piero of a headache.

IOs in French can appear after the post-verbal subject, and they render the sentence completely acceptable:

- (34) Le cadeau qu'a envoyé Jean à Marie. (from Kayne 1986)
 The gift that has sent Jean to Marie.
- (35) La fille de qui s'est plaint Jean à Marie. (from Kayne 1986)
 The girls to whom complained Jean to Marie.
- (36) Qu'a dit Jean au jardinier ?
 What said Jean to the gardener
- (37) Que promet un bon mari à sa nouvelle épouse?
 What promises a good husband to his new wife?

Other locative PP or temporal PP allow the V S PP order:

- (38) Que fait ton frère dans la vie? (from Kayne 1972)
 What makes your brother with his life
- (39) Où est allé votre ami pour trouver la paix? (from Kayne 1972)
 Where has gone your brother for finding peace
- (40) A quoi s'intéressait cette personne en 1968? (from Kayne 1972)
 What was interested this person in 1968

3.2.4 V S Adj.

In the previous sections, there was some variation in the possible positions of post-verbal subjects in the different languages. However, all the varieties explored seem to coincide in not allow adjectives, presumably part of a small clause, to follow the post-verbal subject. Thus we find the following contrasts between V S Adj and V Adj S.

- (41) a. *Per què no sembla en Joan intel.ligent? (Catalan)
 Why not seems Joan intelligent?
- b. Per què no sembla intel.ligent en Joan?
 Why not seems intelligent Joan
- (42) a. *Es fa en Joan vell. (Catalan)
 becomes Joan old
- b. Es fa vell en Joan.
 becomes old Joan

- (43) a. *?Les ha vistes en Joan borratxes. (Catalan)
 them has seen en Joan drunk
 b. Les ha vistes borratxes en Joan .
 them has seen drunk en Joan
- (44) a. *Perché non sembrava Gianni intelligente? (Italian)
 why did not seem Gianni intelligent.
 b. Perché non sembrava intelligente Gianni? (Italian)
 why did not seem intelligent Gianni .
- (45) a. *Si sono sentiti tutti i soldati scoperti. (Italian).
 Have felt all the soldiers discovered
 All the soldiers felt discoverd
 b. Si sono sentiti scoperti tutti i soldati . (Italian).
 Have felt discovered all the soldiers
- (46) a. *È rimasta Maria delusa. (Italian)
 Has remained Maria disappointed
 b. È rimasta delusa Maria.
 Has remained disappointed Maria
- (47) a. ?*Ieri, li ha visti Rita ubriachi. (Italian)
 Yesterday cl-has seen Rita drunk
 Yesterday, Rita has seen them drunk
 b. Ieri, li ha visti ubriachi Rita. (Italian)
 Yesterday cl-has seen drunk Rita
- (48) *Quand deviendra ce comédien célèbre? (French, from Kayne 1972)
 When will become this comedian famous.

3.2.5 V S Adv (de-adjectival).

The same ungrammaticality is found with adverbials derived from adjectives in all varieties of Catalan, Italian, and French in the V S Adv order:

- (49) a. *No parla el teu germà clar. (Catalan)
 Not speaks your brother clear
 b. No parla clar el teu germà. (Catalan)
 Not speaks clear your brother
- (50) a. *Treballa en Joan dur. (Catalan)
 work Joan hard
 b. Treballa dur en Joan. (Catalan)
 work hard Joan

- (51) a. *Sempre juga la Magda brut. (Catalan)
Always plays Magda dirty
- b. Sempre juga brut la Magda.
Always plays dirty Magda
- (52) a. *Lavora Rita dosso, nel suo libro. (Italian).
works Rita hard in his book
- b. Lavora dosso Rita, nel suo libro.
works hard Rita in her book
- (53) a. *? A New York, cammina Gianni veloce. (Italian)
In New York walks Gianni fast
- b. A New York, cammina veloce Gianni . (Italian)
In New York walks fast Gianni
- (54) a. *Quand a risqué cet étudiant gros? (French)
When has risked this student big.
When has this student risked a lot?
- b. ?Quand a risqué gros cet étudiant ? (French)
When has risked this student big.

3.2.6 V S INF

Subjects followed by infinitives of modal verbs are all ungrammatical in Catalan, French, and Italian, as shown in the following contrasts between the subject following or preceding:

- (55) a. *El dia que volia en Joan menjar. (Catalan)
The day in which wanted Joan to eat?
- b. El dia que volia menjar en Joan. (Catalan)
The day in which wanted to eat Joan?
- (56) a. * No podria la Magda menjar? (Catalan)
Not could Magda to eat
- b. No podria menjar la Magda? (Catalan)
Not could to eat Magda
- (57) a. *Il giorno in cui voleva questo ragazzo mangiare. (Italian)
The day in which wanted this boy to eat?
- b. Il giorno in cui voleva mangiare questo ragazzo.
The day in which wanted to eat this boy?
- (58) a. *Non poteva Gianni mangiare (Italian)
No couldn't Gianni to eat.

- b. Non poteva mangiare Gianni.
No couldn't to eat Gianni
- (59) a. *Que voulait ce jeune homme manger? (from Kayne 1972)
What wanted this young man to eat.
- b. Que voulait manger ce jeune homme ?
What wanted to eat this young man.
- (60) a. *Que pouvait ta mère faire?
What could your mother to make
- b. Que pouvait faire ta mère ?
What could to make your mother

However, sentences in Catalan and Italian become less deviant if we change to nonrestructuring verbs or verbs that might be preceded by the complementizer *di/de*.

- (61) ?A nosaltres ens ha promès en Pere de portar-nos a la platja.
To us , has promised Pere to take us to the beach.
- (62) ?Quel giorno in cui ci ha promesso Gianni di portarci in spiaggia.
The day in which has promised Gianni to take us to the beach

In French, however, the sentences are still quite poor:

- (63) *Pour quoi t'a demandé Jean de parler?
Why has asked Jean to read this letter?
- (64) ?*Quand a essayé Jean de le lire?
When has tried Jean to read it

3.2.7 V S CP

With finite clause sentences there is an improvement in general.

- (65) Què deia en Joan que volies fer després ? (Catalan)
what said Joan that you wanted to do afterwards?
- (66) Ahir pensava la Magda que podries venir? (Catalan)
When thought Magda that you could come?
- (67) ?Cosa diceva Piero che tu avevi fatto? (Italian)
What said Piero that you had done?
- (68) La persona a cui diceva Pietro che il professore era venuto (Italian)
the person to who said Pietro that the professor had come.
- (69) A qui a dit Jean que le jardinier était venu ? (French, from Friedemann 1995)
To Whom had said Jean that the gardener had come?

- (70) ?Avec qui a prétendu Marie que sortirait Jean ? (from Kayne and Pollock 1978)
With whom has claimed Marie that will go out Jean?

The following table summarizes the results we have collected in the previous sections:

Key:*=impossible order/ ?=slightly marginal order/

??=marginal or very marginal order/ O.K=possible order

Orders	Catalan	French	Italian
V S DP (object)	?? (north and central) OK southwest	*	??
V S DP determinerless	*	*	*
V S PP (complement)	?? (North) OK/? central	??	??
V S PP (IO)	? to OK (doubling interferes)	O.K	? to O.K
V S PP (locative)	O. K	O K	O.K.
V S Adj.	*	*	*
V S Adv de-adjectival	*	*	*
Modal S Inf.	*	*	*
V S (di +INF)	? (better than Modals)	*	?
V S CP	OK	? to OK	? to OK

In sum, the three languages differ in many details. Note, however, that they coincide in not allowing the V S DO (determinerless), V S Adv (de-adjectival), V S Adj., and Modal S infinitive.

3.3 Distribution of post-verbal subjects in Spanish

Spanish, contrary to Catalan, French and Italian allows a wider distribution of subjects. It allows the V S DO order quite freely as shown in Chapter 2. Subjects can appear between the verb and a determinerless object:⁶⁶

- (72) ¿Cuándo compró usted manzanas?
When bought you apples
- (73) Ayer compró tu hermana manzanas.
Yesterday bought your sister apples

Subjects can even break idiom chunks⁶⁷:

- (74) ¿Por qué no le da tu hermana coba?
Why not cl-give your sister "coba".
Why doesn't your sister kiss up to him?
- (75) No creo que tenga usted tablas para hacer esto.
I do not think that have you tables to do that.
I do not think that you have experience to do that.

Spanish also allows subjects to appear before adjectives part of a small clauses:⁶⁸

⁶⁶ There is certain sensitivity to the heaviness of the subject. Sentences start to degrade when the subject is made heavier, especially with relative clauses:

- (i) ¿Cuándo compró el hermano de Luis manzanas?
When bought the brother of Luis apples
- (ii) *¿Cuándo compró el chico que vino manzanas?
when bought the boy that came apples

⁶⁷ The same observations about heaviness apply to these examples as well:

- (i) ??No creo que tenga el hermano de Luis tablas para hacer eso
Not think that had Luis' brother tables to do that
- (ii) *? No creo que tenga la chica que vino tablas para hacer eso
Not think that had the girl that came tables to do that.

⁶⁸ Again special attention must be paid to intonation patterns. The adjective must be focused.

- (i) A mi no me parecen los niños inteligentes, sino estúpidos.
To me not cl-seem these guys intelligent, but stupid.
These guys don't seem intelligent, but stupid.

- (76) Se hace usted viejo.
become you old.
- (77) En el hospital, siguen los soldados borrachos.
In the hospital, continue the soldiers drunk
- (78) Por qué no parecen los niños inteligentes?
Why not seem the boys intelligent
- (79) Los vio Rita borrachos.
cl-saw Rita drunk
Rita saw them drunk.

They are also allowed preceding de-adjectival
adverbials:

- (80) Jugar Juan limpio a las cartas es una contradicción. (from Suñer 1994)
Play John clean the cards is a contradiction.
Juan playing cards properly is a contradiction.
- (81) Camina usted lento.
Walk you slow
You walk slowly.
- (82) Este año trabaja Paco duro en su tesis.
This year works Paco hard on his dissertation

They are also allowed to intervene with modals and
nonmodals:

- (83) Con quién podrá Cecilia ir a Jackson Heights?
With whom will be able Cecilia to go to Jackson Heights.
- (84) Qué viene Juan de hacer aquí? (from Torrego 1984)
What comes John of doing here.
- (85) No quiere usted salir con este tiempo tan bueno?
Not want you to go out with this weather so good?
- (86) Durante clase, no nos permiten los profesores cotillear con nuestras compañeras.
During class, not cl allow the professors talk with our partners.

And finally, with CPs sentences are perfect as would be
expected:

- (87) ¿Qué piensa Juan que había decidido la familia? (adapted from Torrego 1984)
What thinks Jua that had decided the family

The facts examined raise many questions. I will explore
the following two in the upcoming sections:

- a) How can we explain the difference between Spanish, on the one hand, and Catalan, Italian and French, on the other?
- b) How can we account for the Italian, Catalan and French facts from an antisymmetric point of view?
- c) What explains the restrictions on what can follow a post-verbal subject in Catalan, French and Italian?

3.4 Post-verbal subjects in Neutral Phrase.

As we saw in Chapter 2 (section 2.2.1), post-verbal subjects in Spanish can end up in the V S O order without main sentence stress. Thus, subjects can be neutral in Spanish, apart of being focused as in the V O S order. In Catalan and Italian, on the contrary, post-verbal subjects of nonunaccusative verbs necessarily get main sentence stress,⁶⁹ and they must be focused.⁷⁰ Thus, these languages represent a subset of the possibilities allowed in Spanish.

In other words, Catalan, Italian, and French lack the derivation that yields the possibility of having the

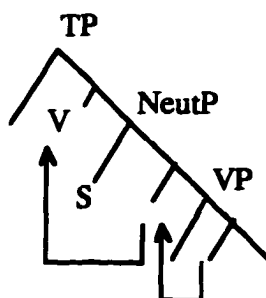
⁶⁹ French is more delicate in this respect. The pragmatics of stylistic inversion are complicated given that French is not pro-drop, and the inversion needs a trigger such as wh-movement or the subjunctive mood. Focus, however, seems to play a crucial role in the subjunctive constructions studied by Kampers-Manhe (1997). For the purposes of this chapter I assume French like Italian and Catalan lacks the extra inflectional projection responsible for the extra distributional possibilities of Spanish.

⁷⁰ See Solà (1992) for such a claim for Catalan and Calabrese (1990) for similar claim in Italian.

subject in neutral position in Spanish. The only derivation left out in these languages must be what is responsible for all the restrictions in the distribution of subjects.

The way to work out this intuition is to propose that Spanish has an extra inflectional projection I call Neutral Phrase. This neutral phrase is below TP and above VP. Thus, subjects move to this NeutP,⁷¹ and Verbs move past this position to T⁰ by head movement yielding V S O. The analysis is similar to that analysis proposed for V S O languages as in McCloskey (1996).⁷²

(88)



Since, V S O is just a product of head movement to T⁰ over NeutP, there will not be any restriction as to the elements that follow the post-verbal subject. In this way, determinerless DPs, PPs, objects of idiom chunks, infinitives, small clauses, de-adjectival adverbials, and

⁷¹ I borrow this term from Szabolscsi (1996).

⁷² However, the details cannot be the same. It is clear that heaviness plays a role for the V S O order as we saw in footnotes (66) and (67) in this chapter. It looks like very heavy DPs are not able to move to this Neutral Phrase position.

modal verbs, will all be allowed. These results are all trivially derived from a head movement analysis perspective.

One interesting prediction that this head movement to T^0 analysis makes is that in constructions with a series of verbs, the subject might only be able to follow the finite tensed verb. Recall that I have proposed that this special NeutP is immediately below TP. Therefore, only the sequence V S INF INF, but not the V INF S INF, is allowed. This prediction is confirmed by the following contrasts.⁷³

- (89) a. Nos pidió Juan volver a recogerlo.
 To us asked Juan to return to pick him up.
 Juan asked us to pick him up again.
- b. *?Nos pidió volver Juan a recogerlo.
 To us asked to return Juan to pick him up
- (90) a. Nos permite usted poder ayudarlo?
 to us permitted you to be able to help you.
- b. ?*Nos permite poder usted ayudarlo?
 To us permitted to be able you to help her.
- (91) a. No quiso usted poder subir.
 Not wanted you to be able to go up
 You didn't want to be able to make it
- b. ?*No quiso poder usted subir.
 Not wanted to be able you to go up

In conclusion, I have proposed that subjects in Spanish in post-verbal position can be in the Spec of a Neutral position. I have also proposed that verbs move past this position to tense in a parallel fashion to what has been proposed for V S O languages. It is therefore not

⁷³ I will leave to section 3.9 the explanation for the ungrammaticality of the (b) examples.

surprising that no restriction applies as to what follows the subject in this neutral position. Finally, we have assumed that Catalan, French, and Italian lack this extra inflectional projection and therefore a derivation in the same fashion is impossible

3.5 Post-verbal subjects in Focus Phrase.

I have pointed out that post-verbal subjects have a very restricted distribution in Catalan, French, and Italian in Section 3.2. I have linked these restrictions to the special status of post-verbal subjects with respect to focus in Italian and Catalan.⁷⁴

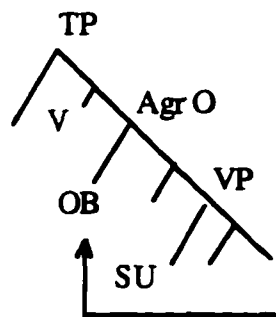
To account for these patterns, it is possible to consider various alternatives compatible with antisymmetry. The first possibility is that complements in Catalan, French, and Italian must scramble to the left of the subject, which stays in the VP. Nevertheless, as we will see, this scrambling is not sufficient. Instead, the proposal I put forward requires another step. It involves movement of the subject to a focus position followed by movement of the TP past this position. Let us examine the two alternatives in the following sections.

⁷⁴ For French, see footnote 65.

3.5.1 Scrambling.

With this first alternative, I propose that Catalan French and Italian move their arguments past the post-verbal subject because they need to check their features overtly in a projection above VP. The subject would remain in situ in Spec of VP and receive focus by default (see Cinque 1993 and Reinhart 1995)

(92)

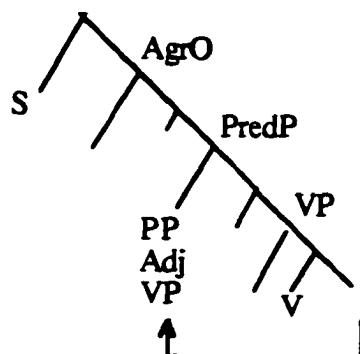


For the V INF S order in (55b-60b) and the V Adj S order shown in (41b-44b) one could consider a possibility in which VP INF and Adj must scramble to the left of the subject. The nature of this new projection could be thought in similar lines to Koster's (1989) Predicate Phrase.

Koster (1993) adopting the antisymmetry proposal of Kayne (1994) proposes that Dutch is an V S O language. In order to accommodate the overt S O V order, he claims that objects move overtly to a higher AgrO projection in order to get case and that the verb always remains lower. Dutch also presents the S PP V order as well as the S Adj V and

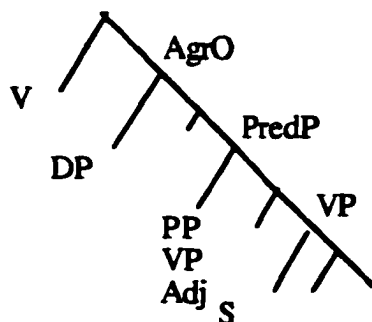
the V SP V order. These facts lead Koster to propose the existence of what he calls Predicate Phrase (PredP). Non finite Vps and adjectives would move for checking reasons to this projection which, by hypothesis, lies between AgrO and VP.

(93)



We could also propose that arguments (PPs or DPs) and predicates (Adjectives and Non Finite VPs) always move to a higher projection above Spec of VP while subjects stay in Spec of VP (see Déprez (1988)). The difference between Dutch, on the one hand, and Catalan, French and Italian, on the other, would be that the verb always moves higher than AgrO P in these Romance languages while it remains lower than PredP in Dutch. The Romance configuration is illustrated in (94):

(94)



There various reasons to make us depart from this simple proposal. The parallelism between Dutch and Catalan, French, and Italian breaks down in a number of respects. Most importantly, the Romance V O S order corresponds to a very marked prosodic construction while the Dutch S O V construction corresponds to the less marked focus pattern.

On the other hand, scrambling has been always considered to be an optional operation. Our conception about Spanish in Chapter 2 fits well into this assumption since it allows both V O S and V S O. Why should this operation be obligatory for Catalan, French and Italian? How is it linked to the fact that subjects are necessarily focused in Italian and Catalan? This is something that a simple obligatory scrambling alternative seems unable to easily answer.

3.5.2 Light Predicate Raising (LPR).

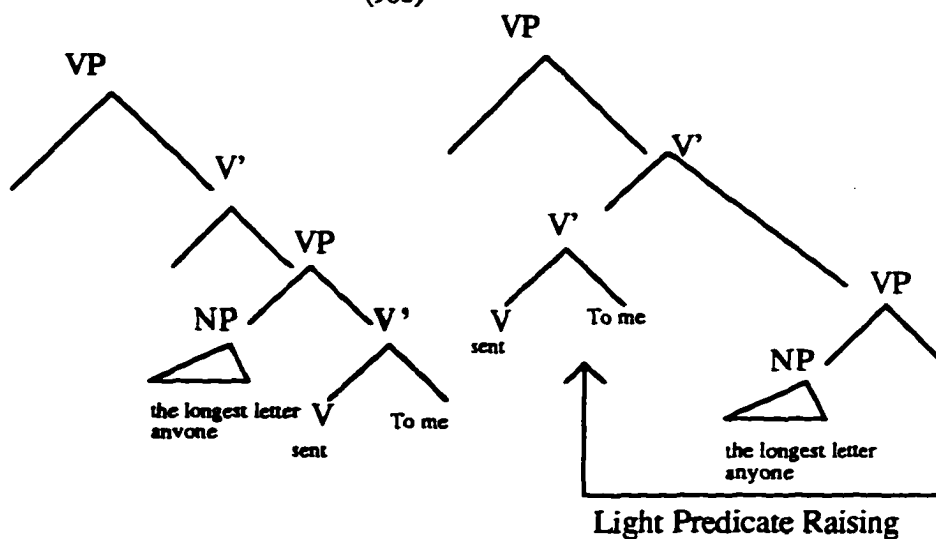
I will develop an alternative that is in accordance with the antisymmetry proposal. The gist of this idea has its origins in the heavy NP shift constructions discussed in

Larson (1988). In the VP shell framework Larson gives a new alternative for the traditional cases of heavy NP-shift of sentences like (95). Under this new hypothesis the verb and the IO reanalyze into a head unit in (96a). This head unit moves to the upper VP shell yielding the desired order V IO Heavy NP in (96b)⁷⁵.

(95) Max sent to me the longest letter anyone had ever seen

(96a)

(96b)



Recently, Den Dikken (1995), following the lines of Kayne's (1994) theory, proposes an antisymmetric analysis of the Heavy NP-Shift in English. This analysis is proposed in response to a heavy NP-shift analysis proposed by Kayne (1994), according to which cases of Heavy NP Shift

⁷⁵ Larson's (1988) analysis is not compatible with the antisymmetry proposal of Kayne. This analysis is based on the idea that the verb and the complement form a head. This would be a case of an XP adjoined to an X⁰. These structures are not permitted in Kayne (1994) pag. 18.

could be treated as simple cases of scrambling of XP over the heavy NP.

In Kayne's original analysis, in example (97a)—analyzed in (97b)—*since 1939* would have been scrambled over the heavy NP *the treasure said to have been buried on that island*.

- (97) a. Johan has secretly possessed since 1939 [the treasure said to have been buried on that island]
 b. Johan has secretly possessed [[since 1939] [X⁰ [the treasure ... buried on that island] [Y⁰ [[e]]]

One of the problems, pointed out by Den Dikken is that this analysis cannot easily cope with more complex cases like (98):

- (98) Johan has expected to find [since 1939] [the treasure ... buried on that island]

From an scrambling perspective it is implausible that the adverb *since 1939* modifying the main clause could end up between the infinitive and the object of the lower clause as shown in (99):

- (99) John has expected to find[[since 1939]; X⁰ [the treasure ... buried in that island] t; Y⁰

Den Dikken proposes an alternative to this scrambling proposal in which the heavy object has moved out of the clause containing the verb and infinitive. This movement will take the heavy object to Spec of AgrO position. The adverbial modifying the matrix clause would originate in the upper clause.

- (100) ...[[_{pp}] [_{pp} since 1939]]...[[_{AgrO P} [the treasure said to have been buried on that island] [_{AgrO} [[_{Spec} [_{VP} has expected to find t_j]]]]]...

Finally, the whole VP is moved to the specifier of the adverbial in a parallel fashion to proposals by Barbiers (1995) about intraposition.

(101) ..._[pp] [_{spec} [has expected to find t_i]] [_{pp} since 1939]]..._[AgrOP] [the treasure said to have been buried on that island] [_{AgrO} [t_i]]...

One advantage of this analysis is that maintains Larson's idea that these cases of heavy NP shift involve movement of a verbal projection to the left, instead of movement of the heavy object to the right. Another important feature is that it takes the heavy object to have moved out of the VP to an AgrO projection, previous to the raising of the VP. This analysis is parallel to Den Besten and Webelhuth's (1989) description of remnant topicalization. Namely, there is movement of a VP projection containing a trace of an element that has scrambled out previously:

(102) [t_i Gelesen] hat Hans das Buch_i nicht (from Den Besten & Webelhuth 1989)
 read has Hans the book not

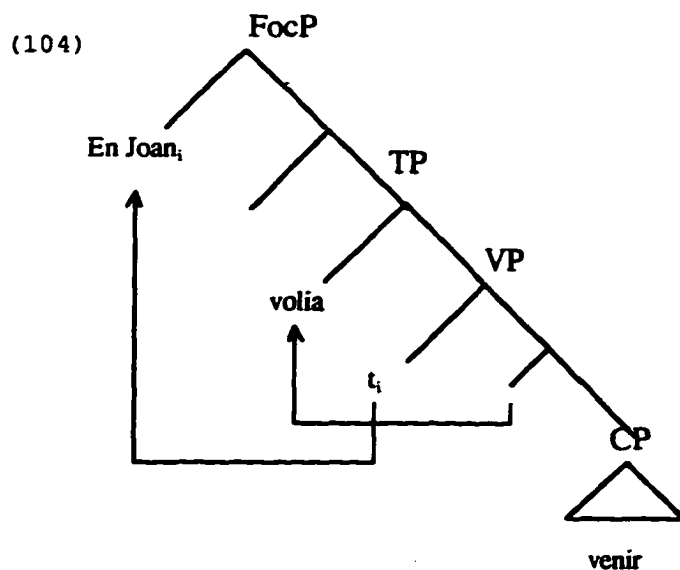
To summarize, there are alternatives to simple scrambling, which involve the movement of VPs (Light Predicate Raising LPR). These alternatives have been adopted for the analysis of Heavy NP-shift as in Den Dikken (1995).

3.6 Proposal: LPR with Post-verbal subjects

In this section I will propose an analysis of Catalan, French, and Italian following proposals by Den Dikken and Larson.

Catalan, French, and Italian, contrary to Spanish, lack a Neutral Phrase position between TP and VP. Thus, subjects cannot end up in a post-verbal position by simple head movement of the verb to a higher position past NeutP as we saw for Spanish. Instead, subjects when focused must move overtly to Spec of a FocP.⁷⁶ I assume that that FocP is above TP.⁷⁷ This first step is represented in (104) for the Catalan sentence (103).

(103) Volia venir en Joan. (Catalan)
Wanted to come Joan

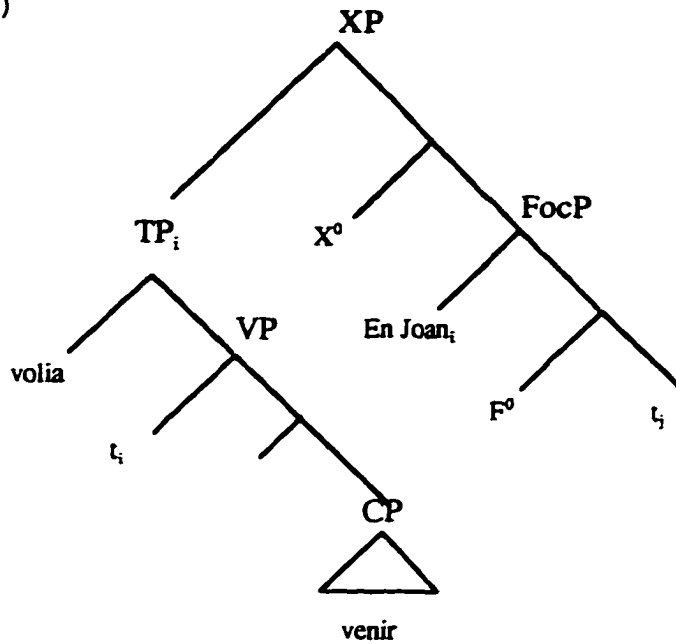


⁷⁶ I will assume that French follows this pattern. I will take that French subjects move to a nonneutral position. This position will have similar properties of focus in Catalan and Italian.

⁷⁷ Focus P could also be between TP and VP, I do not think there is much at stake on this point. Focus could be above CP for this purpose.

This first step is followed by the light predicate raising of the TP to a Spec of a projection X^0 above the FP as in (105):⁷⁸

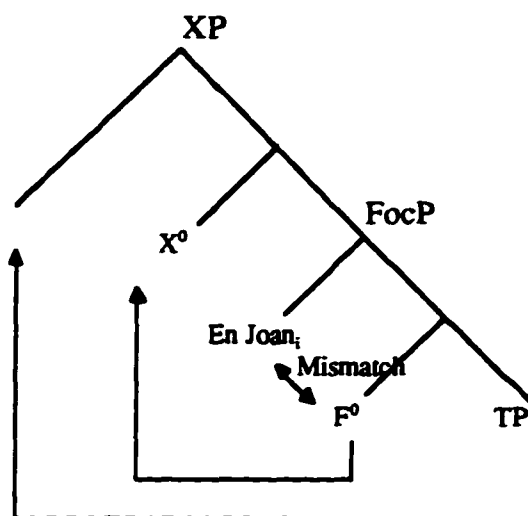
(105)



⁷⁸ For French this LPR of the TP is only possible when TP contains a Wh-element. From this perspective, wh-elements are the only XP able to pied-pipe the whole projection to this higher projection X^0 above the subject, before they can proceed to move to Spec CP.

One obvious question one might ask is the reason for the movement of this TP above the DP in Focus position. This is a common problematic feature of all LPR analyses. However, there are various possible answers: one of them is that some sort of Extended Projection Principle requires the movement of TP above Focus. Another possible answer is based on Kayne's class lectures. The core of the idea is that when *Juan* moves to Spec of FocP there is a mismatch (anti-agreement) between the DP in Spec of FocP and the Focus head. As a consequence of this mismatch the Foc head moves a notch up to X^0 . However this movement is not sufficient; X^0 needs to satisfy its categorial features in a Spec-Head agreement configuration. This requirement to enter into Spec Head agreement in X^0 triggers the obligatoriness of the second movement of the TP. This is represented in the following tree:

(106)



Thus, the core of this proposal, consist in linking and triggering the two XP movements (the movement of the DP *Joan* and of the TP *volia venir*) through the existence of head movement from the focus phrase to the higher inflectional projection

To summarize this section, I have proposed that subjects in Catalan, French, and Italian move overtly to a special position I call FocP. This movement is followed by LPR of the TP to the Spec of a Higher X^0 projection. The consequences of this analysis are obvious: First of all, we capture the fact that subjects must be focalized in order to trigger this kind of light predicate raising in Catalan and Italian. As a consequence of this LPR, the TP moves to a higher projection, with the result that is subject always to the left of TP.

3.7 Consequences for nonarguments

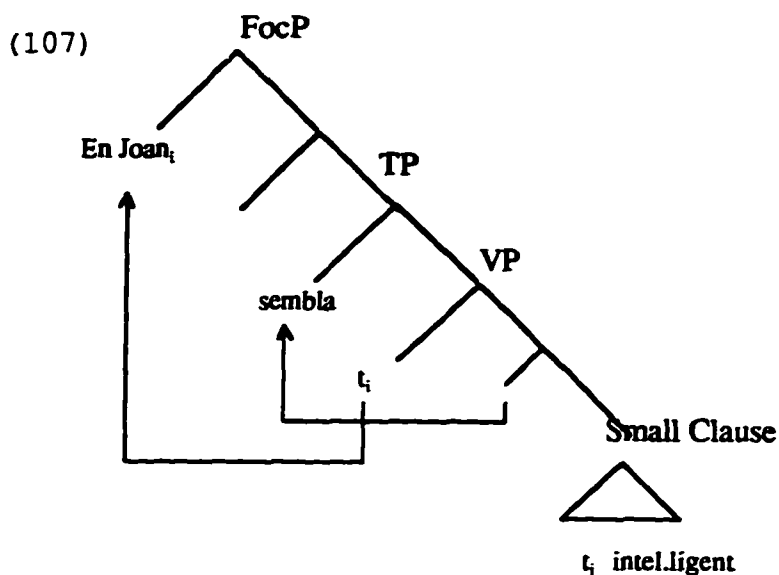
The movement of the TP focus discussed above can explain some of the data given in the first section. In this section I examine the sequences V + Nonarguments (e.g. V Inf, V Adj, and V Adv). I will proceed with the the consequences of verbs + arguments (e.g. V DO, V PP, and V IO) in section 3.8.

In the introductory section I discussed some sharp contrasts. These concerned the possible insertion of a

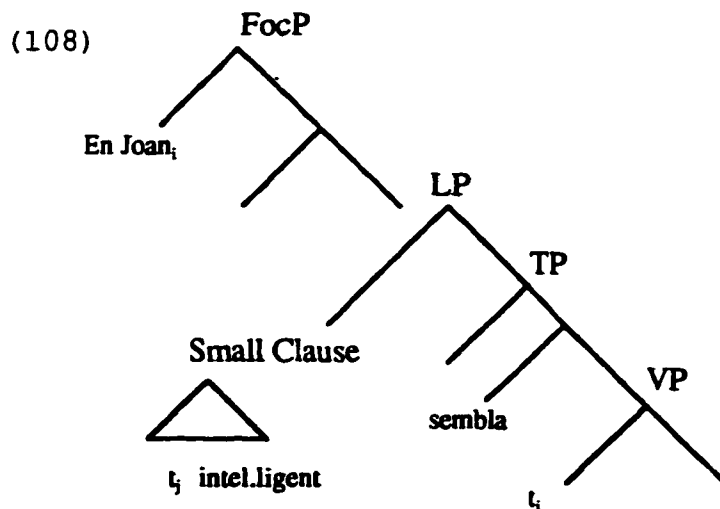
focused subject in Catalan, and Italian between the verb and adjective in a small clause, verb de-adjectival adverbial, and verb and modal and infinitive. I will repeat some of the contrasts in Catalan:

- (41) a. *Per què no sembla en Joan intel·ligent?
 Why not seems Joan intelligent
- b. Per què no sembla intel·ligent en Joan?
 Why not seems intelligent Joan
- (49) a. *No parla el teu germà clar.
 Not speaks your brother clear
- b. No parla clar el teu germà.
 Not speaks clear your brother
- (56) a. *No podria la Magda menjar?
 Not could Magda to eat
- b. No podria menjar la Magda?
 Not could to eat Magda

Given the proposal above we can derive all the (b) cases as we showed in (104); the issue here is to derive the ungrammaticality of (a) examples. From the perspective of the LPR, the derivation would have to proceed as follows for a sentence like (41a). Joan moves to FocP position in (107):



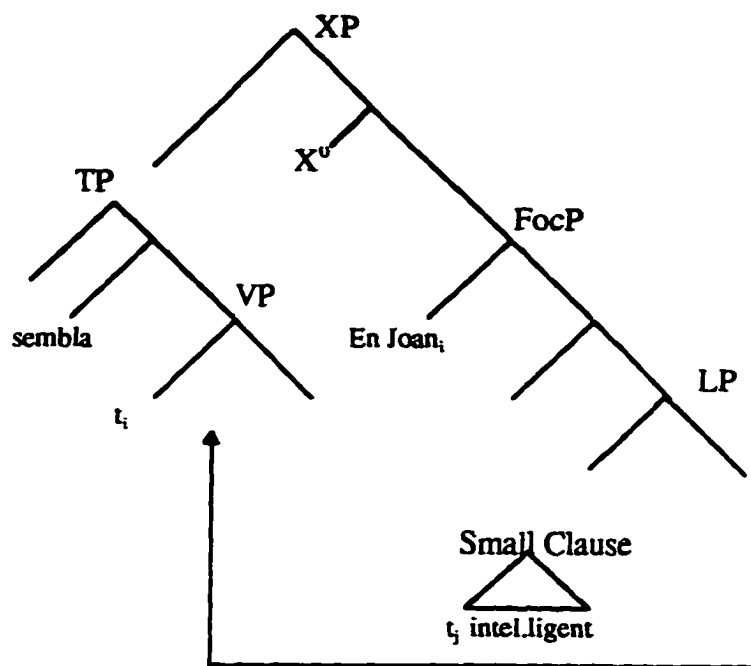
The second would involve movement of the small clause to a projection below focus and above TP as in (108) yielding the sequence *En Joan intel.ligent, [sembla t_i]*. Following Szabolsci (1996), I will call this projection LP.⁷⁹



⁷⁹ Nothing bars a derivation in which the Small Clause moves previously to the movement of *Joan* to FocP. Cyclicity would probably decide in favor of this last derivation.

The third step in the derivation would require final LPR of the TP above FocP yielding the final [*Sembla t_i*] *en Joan intel.ligent_i*:

(109)



This gives an explanation of the ungrammaticality of (41a). What is problematic appears to be the extra movement of the small clause [*e intel.ligent*] to the Spec of LP. Let us suppose that the movement to Spec of LP is as restricted as scrambling. Work on Germanic (e.g. Hoekstra 1984, Koster 1987, Zwart 1995) makes clear that small clauses are highly constrained with respect to their movement possibilities. For example, they cannot be extraposed in Dutch.

(110) a. *dat Jan Marie intelligent vindt*
 that John Mary intelligent find

- b. **.dat* Jan Marie vindt intelligent
 that John Mary finds intelligent (from Zwart 1995)

Müller (1995) also points out that adjectivals that form a part of a small clause are difficult to scramble in German:

- (111) ??*daß* der Fritz [_{CP} stolz auf sein Kind], nicht *t_i* gewesen ist. (from Müller 1996)
 That Fritz proud of his child not been is

It is plausible to think that such a ban against moving small clauses is responsible for the ungrammaticality of example (41a). Similar kinds of constraints must be behind the moving of de-adjectival adverbials—as in (49a)—and bare infinitives to this LP positions—as in (56a)—before the LPR of the TP.

It is interesting to point out that the improvement of the V *di/de* INF order in (61) and (62) in Catalan and Italian recalls the following Dutch contrast between bare infinitives and *te* + Inf studied in Reuland (1981) with respect to the possibility of following a verb:

- (112) **.dat* Ik hoorde [Max een verhall Vertellen.] (from Reuland 1981)
 that I heard Max a story tell
- (113) *.dat* hij Kees vroeg [het boek te lezen.]
 that he Kees asked the book to read.

Finally, we saw that CPs could follow postverbal subjects in Catalan, French, and Italian in (65)-(70). As a matter of fact, CPs must follow the verb in Dutch as pointed out by Koster (114):

- (114) *.dat* hij dacht *.dat* zij kwam. (from Koster 1993)
 that he thought that she came

The crosslinguistic similarities observed in these examples require a uniform analysis. Thus movement of Romance infinitives to LP is blocked for the same reasons that Dutch could not have bare infinitives following the verb in (112).

In conclusion, we observe that the LPR analysis can accommodate straightforwardly that the expected orders in Catalan is V Adj S, V Adv S, and V INF S. From our perspective the V S Adj, V S Adv, and V S INF require an extra step in the derivation, which consists of moving Adj, Adv, and INF to the left previous to the LPR of the entire TP. I proposed that the nature of this movement is highly constrained. I have also pointed out that Movement of adjectival Small Clauses and Bare Infinitives is similarly constrained in Dutch. It is plausible to think that the same analysis in terms of movement should be extended to Catalan, French, and Italian.

3.8 Consequences for arguments

The consequences of this hypothesis for complements are more complex. As discussed above, in many varieties, the insertion of the subject between the verb and object is quite difficult as in the Catalan sentences (7) and (19) repeated below.

(7)	??Avui	farà	en Joan	el dinar (from Solà 1992)
	Today	will make	Joan	lunch.

- (19) ??No pensa La Magda a les conseqüències
 Not thinks Magda about the consequences

From the perspective of the analysis proposed in this chapter, the marginality of these examples implies that movement to LP seems quite restricted.⁸⁰ Observe, however, two important facts that seem to corroborate the line of thought exposed in our analysis. First of all, in the less restrictive varieties of Catalan we found a gradation between determinerless DPs after the subject and regular DPs. This contrast is even felt by the most restrictive speakers:

⁸⁰ There is a possible way to explain the marginality of moving arguments to LP by invoking Müller's (1996) generalization about the restrictions on remnant movement in German. Müller observed that remnant movement was banned whenever the kind of movement the remnant undergoes is of the same type that the antecedent of the remnant had undergone. He explains this generalization in terms of Unambiguous Domination. His principle explains why remnants in German cannot be scrambled.

- (i) *Daß [t_i zu lesen] keiner [das buch], versucht hat
 that to read nobody the book tried has.

Let's assume that the movement of XP to LP and LPR of the TP are basically the same kind of movement. This way, we would have a formal explanation of the difficulty of moving to LP in all derivations in Italian and restrictive dialects of Catalan. The only exception is IO PPs as we will see. Observe that if the movement to LP were of a different kind, the derivation would be allowed under Müller's (1996) generalization. I think this is indeed what we find with *emarginazione* or Right Dislocation of the XP that may follow the subject in Focus. Let's suppose that right dislocation or *emarginazione* are movement (Kayne (1994) and they can be characterize as different from LPR of the TP. By Müller's observation, *emarginazione* or right dislocation would not interfere with LPR.

- (i) No hi pensa la Magda # a les conseqüències (Catalan)
 Not cl-thinks Magda about the consequences
- (ii) Non si lamenta Rita # del mal di testa. (Italian)
 Not complains Rita, about the headache

- (115) *Volia en Joan permís. (Catalan, all dialects)
 Wanted Joan permission.
- (116) ??Volia en Joan el permís. (O.K for Some Catalan varieties)
 wanted en Joan the permit.

I would attribute this gradation to the fact that movement to LP would take the determinerless DP to a position not governed by the verb. As discussed in Chapter 2, bare DPs cannot be scrambled in general in Spanish. It is plausible to extend this restriction to Catalan. From this perspective, it is understandable why there is a gradation between determinerless DPs and normal DPs in these sentences.

The second interesting fact comes from French and the possibility of allowing prepositional IOs to follow the post-verbal subject, contrary to object DPs:

- (117) Le cadeau qu'a envoyé Jean à Marie. (from Kayne 1986)
 The gift that has sent Jean to Marie.
- (118) *Où répare Marie sa voiture? (from Friedemann 1995)
 Where repairs Marie his car.

In the perspective defended here, this means that Step 2 involving movement of IO PPs to LP previous to LPR of TP is exceptionally allowed, contrary to DO.⁸¹⁸² Interestingly,

⁸¹ The same contrast is found with constructions with extraposed prepositional datives in Dutch after the verb. Koster (1975) gives the following example with a PP IO:

- (i) Omdat hij het boek geeft aan Norval (from Koster 1975)
 because he the book gave to Noval

However, a direct object NP after the verb is ungrammatical:

- (ii) *dat hij las het boek (from Koster 1993)
 that he read the book

⁸² The contrasts recalls Cinque's (1990) discussion of Italian clitic left dislocations and is parallel to the discussion of topicalization in French in (119)-(120). We

it is important to notice that the IO seem to be exceptional in other constructions. For instance, an IO can be topicalized without a clitic, while a DO cannot:

(119) À Jean, j'ai donné un livre.
To John, I gave a book.

(120) *Le livre, j'ai acheté.
The book, I bought.

This contrast parallels another contrast pointed out by Kayne (1975) with respect to pre-posing of IO PPs in front of a VP.

(121) a. Je ne veux ni à lui ni à elle dire la vérité.
I not want nor to him nor her to say the truth.

b. *Je ne veux ni lui ni elle revoir demain
I not want nor him nor her see tomorrow

(122) J'aurais , à ces garçons-là, permis de fumer une cigarette. (from Kayne 1975)
I would to these boys permitted to smoke a cigarette

(123) *J'aurais, Jean, invité à la soirée
I would Jean invited to the evening.

Finally, another construction that shows similar contrasts between DOs and IOs is found with subdeletion with *le* as studied in Kayne (1984b). Observe the contrast between (124) and (125):⁸³

(124) *(Il sera photographié beaucoup d'enfants,) et il le sera beaucoup de parents aussi.
it/there will-be photographed many boys, and it will be many parents also.

(125) (Ce livre-ci sera offert à Marie), l'autre le sera à Jeanne.
this book will be offered to Marie, the other will be to Jean

could adopt his explanation for these contrasts by proposing the empty category left by the movement of the DO to LP requires a clitic to identify it, while this is not the case with PPs moving to LP.

⁸³ I thank Richard Kayne for pointing this out to me.

The analysis of these clauses might arguably be considered to the same cases of VP subdeletion in English.

(126) *Mary spoke to John, but she didn't to Bill.*

Kayne (1994) proposes that these cases of subdeletion should involve an inner topicalization of *to John* above the VP, followed by deletion of the VP. If the analysis of the French cases (124) (125) is the same, they would also involve leftward movement of DO, IO followed by deletion. From the LPR analysis the contrast between the DO and the IO PP in subject inversion constructions (e.g. 117 and 118) should be treated in the same fashion as the same contrast in the other constructions discussed above.⁸⁴ These include topicalization (e. g. 119 and 120), leftwards movement above the VP (e.g. 121a and 121b), and *le* subdeletion in French in (124 and 125). In this way, this analysis of leftwards movement of DOs or prepositional IOs to LP, below the position of the post-verbal subject, allows a uniform treatment of all these apparently different constructions.

In conclusion, the analysis presented allows us to understand the deviance of determinerless DPs after focus subjects. Additionally, it permits a uniform account of the DO/IO contrast in French with respect to four

⁸⁴ On this perspective, it could also be explained why Small Clauses are also bad in this sort of subdeletion. These cases would involve leftwards movement of small clauses, which is not permitted as we saw in the previous section.

- (i) *Marie sera rendue hereuse, Jeanne le sera malhereuse
 Marie will be made happy, Jeanne will be unhappy

constructions: Subject inversion, topicalization possibilities, movement above VP, and *le* subdeletion.

3.8.1 LPR and C-commanding of arguments

The analysis proposed so far presupposes that DP arguments move with the VP to the left of the subject and yield the [V O] S order. Thus, one might expect that objects would not be able to C-command the subject under such a configuration. This prediction is the opposite of what we had shown for the V O S order in Spanish in Chapter 2. However, the prediction is not borne out: Objects are indeed able to C-command the subject in the V O S order in Catalan and Italian. Thus, a quantifier object can bind a postverbal subject in the V O S in (127a) in Italian. There is a clear contrast between (127a) and (127b):⁸⁵

- (127) a. Questo libro, l'ha regalato [a ogni ragazzo]_i sua_i madre/ la propria_i madre.
 This book, cl-has given to every boy his mother/ his own mother.
- b. *Su_i madre/la propria_i madre ha regalato un libro [a ogni ragazzo]_i.
 his mother/his own mother has given a book to every boy

Catalan also allows objects to C-command the subject in the V O S order as shown in (128):

- (128) a. Què (li) va regalar a cada nen el seu amic el dia de Nadal/
 What (cl)-gave to each boy his friend during Christmas day

⁸⁵ I thank Nino Gulli for providing me with the Italian data. Careful attention should be paid to intonation. The most normal intonation with downstressing of the subject in the V O S order is not the one relevant in these cases.

With respect to principle C effects, we find similar results. The argument *lei* C-commands the post-verbal subject [*i fratelli di Eva*] in the V O S order:⁸⁶

- (129) *Ieri, hanno visto [*i fratelli di Eva*], non le sue sorelle. (Italian)
 yesterday have seen her Eva's brothers.

I conclude that previous to the LPR of the TP, objects have moved independently to a position above the focus subject position. I take this position to be of the same nature of AgrO, an L-related position in which objects and other complements check their features:⁸⁷ In this sense this position differs from the LP position below focus, which we take to be non L-related. Let us see how the derivation would proceed for a simple sentence like:

- (130) [_{VP} En Joan [_V escriurà [la carta]]]
 Joan will write the letter

Step 1: movement of the subject to focus:

- (131) [_{FocP} En Joan_i [_{TP} t_j [_V escriurà [la carta]]]

Step 2: movement of the object to AgrO, above FocP:

- (132) [_{AgrO} la carta_i [_{FocP} En Joan_i [_{TP} t_j [_V escriurà [t_i]]]]]

Step 3: Light Predicate Raising of TP:

- (133) [_{TP} t_j [_V escriurà [t_i]]]_v [_{AgrO} la carta_i [_{FocP} En Joan_i t_v]]]

⁸⁶ This cases cannot simply be reduced to problems with respect to backward anaphora as the following example shows:

- (i) ?Non hanno visto lei_i i suoi_j fratelli, non le sue sorelle.
 Not have seen her her brothers, not her sisters.

⁸⁷ There is another possible way to integrate this facts into the general picture if the Formal Features of the object are raised out of the raised TP at LF to a position from which they can C-command the subject.

The derivation as proposed explains the C-command facts at the same time it is compatible with the LPR analysis I have proposed in this chapter

3.9 Spanish V O S order.

The analysis proposed above captures the fact that subjects are in focus when they appear post-verbally in Catalan and Italian. We also observed in Chapter 2 that the V O S order of Spanish is characterized by having obligatory focus on the subject. Consequently, the analysis proposed above can be extended to Spanish as well. The V O S order proceeds by the subject moving to focus, objects moving above subject to a position in which they can C-command the subject, and finally, LPR of the TP remnant. Through this comparative perspective, the analysis for Spanish gets considerably enriched.

In Section 3.6, I proposed a different derivation for the V S O order. According to this analysis, subjects move to NeutP, and the verb raises above it by head movement. Thus, we obtain a configuration in which verb can end up to the left of the subject in two different ways in Spanish: by head movement when subject is in NeutP or by LPR of a remnant TP when the subject is focused.⁸⁸

⁸⁸ I do not have any deep explanation for why derivation should proceed in different ways when the subject is focused or neutral. I leave this question for further investigation.

The analysis using focus of the subject and LPR of the TP has the advantage of explaining why there are restrictions as what can follow the post-verbal subject. This is important because of the existence of constraints shared by all the languages examined. In none, for instance, could determinerless DPs, INFs, adjectives, or de-adjectival adverbials follow a focused subject. Given the existence of an alternative derivation in Spanish in which the subjects are in NeutP, these restrictions are not easily noticed. However, there are two contexts in which Spanish does indeed show these constraints. We have already seen one of them with examples such as (89) to (91) involving a sequence of infinitives.⁸⁹ Compare the ungrammaticality of (134b) with acceptability of (134c):

- (134) a. Ayer, nos permiti6 Juan poder hacerlo.
 Yesterday To us permitted Juan to able to make it
- b. *? Ayer, Nos permiti6 poder Juan hacerlo.
 Yesterday, To us permitted to be able Juan to make it
- c. Nos permiti6 poder hacerlo Juan, no Maria
 To us asked to be able to make it Juan, not Mary

I take the contrast between (134b) and (134c) to be the same as the one found in Catalan in the following sentences repeated below:

- (56) a. * No podria la Magda menjar? (Catalan)
 Not could Magda to eat

⁸⁹ The sequence V INF S CP becomes much better. This recalls the fact that in V S CP was the most acceptable in Catalan, Italian and French

- (i) Querrian saber los estudiantes si podrian ir a Brooklyn Heights.
 Wanted to know the students wether they could go to Brooklyn Heights

- b. No podría menjar la Magda?
 Not could to eat Magda

Thus, the derivation of the ungrammatical Spanish (134b) case would proceed as follows:

Step 1: subject moves focus

(135) [_{FocP} Juan_i [_{TP} t_i Nos permiti6 [poder [hacerlo]]]

Step 2: Movement of [hacerlo] to LP

(136) [_{FocP} Juan_i [[_{LP} hacerlo_i [_{VP} t_i Nos permiti6 [poder t_i]]]]

Step 3: LPR of the remnant TP:

(137) [_{TP} t_i Nos permiti6 [poder t_i]]_v [_{FocP} Juan_i [_{LP} hacerlo_i t_v]]

As in the cases of Catalan and Italian the problem is found in Step 2, with the movement of the infinitive to LP. I concluded in previous sections that scrambling of predicates and bare infinitives to this LP position is impossible, and that the obstacle lies in the constrained nature of this movement.⁹⁰ Observe that if Step 2 is eliminated the output after the LPR of the whole TP is the grammatical sentence (134c). I show the final stage in the derivation below without step 2:

(138) [_{TP} t_i Nos permiti6 [poder [hacerlo]]]_i [_{FocP} Juan_i t_i

Other cases that show the restriction on moving to LP previous to LPR involves small clauses. Observe the following contrasts:

⁹⁰ The alternative derivation with the subject in NeutP cannot yield the required order of sentence (134b) either, since, as I argued, this would proceed by movement of the verb to tense leaving the post-verbal subject after the finite verb.

- (139) a. Por entonces consideraban tus hermanas brillantes a los estudiantes.⁹¹
 By then considered your sisters (S) brilliant the students (O)
- b. *Por entonces consideraban a los estudiantes. tus hermanas brillantes.
 By then considered the students(O) your sisters (S) brilliant
- c. ?Por entonces consideraban a los estudiantes. brillantes tus hermanas.⁹²
 By then considered the students(O) brilliant your sisters (S)
- (140) a. Vio la hija del profesor borrachos a los estudiantes.
 saw the professor's daughter(S) drunk the students(O)
- b. *Vio a los estudiantes la hija del profesor borrachos.
 saw the students (O) the professor's daughter(S) drunk
- c. Vio a los estudiantes borrachos la hija del profesor
 saw the students(O) drunk the professor's daughter(S)

It is clear that sentence (139b) and (140b) are the most difficult. The representation of (140b) is in (141) with the object in AGRO, TP above AgrO, subject in FocP and crucially the small clause *brillantes* in LP:

(141) [_{TP} t_i consideraban]] [_{AgrO} a los estudiantes [_{FocP} tus hermanas [_{LP} [t_i brillantes]]]

On this analysis the degradation of all the (b) cases is due to the same reason the following simple Catalan cases are degraded. All these cases involve an illicit step, movement of small clause to LP, just as in the Catalan examples (41) and (42) repeated below:⁹³

⁹¹ Other plausible permutations are:

- (i) Por entonces consideraban tus hermanas a los estudiantes brillantes.
 By then considered your sisters (S) the students (O) brilliant
- (ii). Por entonces consideraban a los estudiantes brillantes tus hermanas.
 By then considered the students (O) brilliant your sisters (S)

⁹² The sentence requires heavy emphasis on *tus hermanas*.

⁹³ There are even some cases that recall the French difference between DO and IO. The sentences involved are fairly heavy, but a distinction is noticed. The sentence with the DO at the end is definitively worse:

- (i) ?Ayer le escribió la carta mi amigo a su abuela.
 Yesterday wrote the letter(DO) mi friend(S) to his grand-mother (IO)

- (41) a. *Per què no sembla en Joan [intel.ligent]?
 Why not seems Joan intelligent?
- (42) a. *Es fa en Joan vell.
 becomes Joan old

To conclude, I have extended the results of previous section about Catalan, French, and Italian to the Spanish V O S order. This extension leads to a welcome result given the fact that some of the restrictions on what follows the focused subject can be seen in Spanish as well. The sentences had to be made more complex given the fact that otherwise an alternative derivation with subjects in NeutP could interfere in evaluating them.

3.10 Comparing LPR to the right adjunction alternative.

Earlier analyses, (e.g. Bonet 1988 and Solà 1992—for Catalan—and Friedemann 1995—for French) have proposed that the Spec of VP branches to the right. As discussed above, the main support for this hypothesis is that complements frequently precede post-verbal subjects in Catalan or Italian as in (142). In order to account for complements that follow the subject, advocates of this approach have had to propose a rule of extraposition to the right as in (143) and (144):

(142) [[V O] S]

(ii) ??Ayer le escribió a su abuela mi amigo la carta
 Yesterday wrote to his grandmother(IO) my friend (S) the letter (DO)

(143) [[V t] S] CP

(144) [[V t] S] PP

The diagram shows two structures. Structure (143) is [[V t] S] CP. An arrow points from the trace 't' to the CP boundary. Structure (144) is [[V t] S] PP. An arrow points from the trace 't' to the PP boundary. A horizontal line connects the two traces, with an upward arrow pointing to the CP boundary and another upward arrow pointing to the PP boundary.

For French, such an extraposition analysis is not so obvious since V O S order is not good in general as shown in (145):

(145) *A qui donnera le livre ton ami?
 Who will give the book your friend. (from Friedemann 1995)

Nonetheless, Friedemann takes the so-called "crossing effects" proposed by Kayne (1986)—based in turn on a generalization by Korzen (1983)—to be an indirect argument in favor of the right adjunction approach in that language. The approach assumes the two points mentioned above: i.e., that subjects are adjoined to the right, and any element following the subject in French must have been extraposed as (143) (144). Given the existence of this extraposition, any movement of Wh-words originating to the right of the trace of the extraposed element would create a crossing effect:

(146) [[V t t] S] PP

The diagram shows structure (146) [[V t t] S] PP. An arrow points from the first trace 't' to the left, and another arrow points from the second trace 't' to the right. A horizontal line connects the two traces, with an upward arrow pointing to the PP boundary. A diagonal arrow labeled 'extraposition' points from the right trace to the right.

In this way, it is possible to explain the marginality and ungrammaticality of the following sentences:.

(147) ??Le jour où [[a écrit t_{VP}]Jean_{VP}] t à Marie t ?
 the day when has written Jean to Marie

The diagram shows structure (147) with the French sentence. An arrow points from the trace 't' to the CP boundary. Another arrow points from the trace 't' to the PP boundary. A horizontal line connects the two traces, with an upward arrow pointing to the CP boundary and another upward arrow pointing to the PP boundary.

- (148) *A qui donnera t t ton ami le livre ?
to whom will give your friend the book
- (149) ??Où a téléphoné t t Marie à Jean ? (from Friedemann 1995)
where has phoned Marie to Jean
- (150) *Dans quelle élection a voté t t votre ami [pour Nixon] ?
In which election has voted your friend for Nixon
-

However, these crossing effects are not triggered when the Wh-element is closer to the verb than the trace left by the element extraposed to the right, thus the grammaticality of the following sentences:

- (151) Le cadeau qu'a envoyé t t Jean à Marie. (From Kayne 1986)
the gift that has sent Jean to Marie
- (152) Qu'a dit t t Jean au Jardinier (from Friedemann 1995)
what has said Jean to the gardener
- (153) La fille de qui s'est plaint t t Jean à Marie (from Kayne 1986)
the girl of whom complained Jean to Marie
-

On this point, it is worth noting that parallel effects are found in Italian and Catalan:

- (154) a. Gianni conosceva la ragazza della quale si è lamentato Francesco con Maria.
Gianni knew the girl of whom cl-complained Francesco with Maria. (from Zubizarreta 1994)
- b. ??Gianni conosceva la ragazza con la quale si è lamentato Francesco di Maria
Gianni knew the girl about whom cl-complained Francesco of Maria
- (155) a. El tema del qual parlava el teu pare al president.
the topic of which spoke your father to the president
- b. ??La persona a la qual parlava el teu pare de política.
the person to whom spoke your father about politics

Spanish contrasts with the above languages as pointed out by Zubizarreta (1994):

- (156) a. El tema del cual hablaba tu padre con el presidente.
 the topic of which spoke your father with the president
- b. La persona con la cual hablaba tu padre de política.
 the person with whom spoke your father about politics

Still, there are various problems with a crossing perspective. For one thing, this approach predicts that the effects should be the same in all the French cases no matter which element is crossed over. Thus, there should be no difference between sentences with the extraction of an extraposed PP as (149) or an extraposed DO as in (148). However cases with DO are clearly degraded. Also, the same effect should be found with extraposed CPs. A sentence like (157) would exemplify such a case with a CP extraposed crossing over an IO.⁹⁴ However, these cases are perfectly grammatical according to Friedemann (1995) .

- (157) A qui a dit t t Jean [_{CP} que le jardinier était venu]? (from Friedemann 1995)
- To whom has said Jean that the gardener had come
-

Finally, and most importantly, if we can show that the grammatical contrasts are found without wh-movement, then a crossing approach becomes unlikely. This sort of contrast is not testable in French since inversion requires wh-movement. Such cases are found in Catalan and Italian. For example, as discussed in the introduction to this Chapter,

⁹⁴ Friedemann notes this problem and proposes CP objects are generated in a more external position than DP objects.

the V S O order independent of wh-movement is difficult in Italian and many varieties of Catalan.

- (8) *Va córrer en Lluís la Marató. (Catalan, from Bonet 1988)
 Ran Lluís the marathon
- (13) *Ha mangiato spesso Gianni gli spaghetti. (Italian)
 Has eaten often Gianni the spaghetti

Furthermore, saw that in many Catalan varieties and Italian, the sentences with PPs are not very good. However, as in French, the sentences are better than the previous ones with DOs:

- (20) a. ??Ahir va discutir el professor sobre lingüística?
 yesterday discussed the professor about linguistics.
- (24) a. ??Ha litigato Piero con sua sorella.
 Has fought Piero with his daughter

However, IO PPs seem to be exceptional and can appear after the focused subject without difficulties:

- (21) ?Aquest llibre el va regalar en Joan a la Maria (from Solà 1992)
 This book gave Joan to Maria
- (28) Il regalo que ha spedito Giuliana al suo nipote
 the gift that has sent Giuliana to her nephew

Finally examples with CPs are substantially better as seen in (66):

- (66) Ahir pensava la Magda que podries venir. (Catalan)
 Yesterday thought Magda that you could come.
- (68) La persona a cui diceva Piero che il professore era venuto (Italian)
 the person to who said Piero that the professor had come.

The parallelisms in the restrictions on what is allowed after the post-verbal subjects in cases without wh-movement internal to Catalan and Italian and in comparison with French deserve a common explanation. Yet the idea that crossing a wh-word is what is determining the

ungrammaticality of examples (147-150)) in French cannot be sustained in the Catalan and Italian examples above.

The third problematic issue comes from comparison with Spanish. Why should the effect not appear in (156)? Recall that Spanish was exceptional in that normal declarative clauses allow V S O, V S PP, V S Adj. I have attributed this exceptionality to the fact that there is an alternative derivation in which the subject is in NeutP.⁹⁵

In conclusion, in this section I have reviewed the major arguments that linguists have proposed for having subjects located on the right edge of the VP. As we have been able to see, the reasons are insufficient. The fact that complements generally precede the subjects as noted by Solà (1992) and Bonet (1988), could also be explained from the light Predicate Raising alternative sketched above. The crossing effects advocated by Friedemann are also an insufficient reason. This solution was unlikely for a number of reasons: 1) it could not explain easily why PPs and DOs have different effects, and 2) the proposal for French cannot be extended to languages that show similar

⁹⁵ Recall that there are complex contexts in which subjects could not be in NeutP in Spanish, but in FocP. In those contexts we might expect similar effects to the ones pointed out by Korzen (1983). The sentences are heavy; however, (ii) is worse than (i)

- | | | | | | |
|------|------------------|---------|----------------|-------------|----------------|
| (i) | El día en que | hablaba | de política | tu padre | con Juan. |
| | The day in which | spoke | about politics | your father | with Juan |
| (ii) | ??El día en que | hablaba | con Juan | tu padre | de política. |
| | The day in which | spoke | with Juan | your father | about politics |

restrictions such as Catalan and Italian. As we saw, those effects show up independently of Wh-movement.

3.11 Conclusion

In this chapter I have proposed that the wider distribution of post-verbal subjects in Spanish is due to the existence of an extra inflectional projection called NeutP. I have proposed that the verb passes this position by head movement yielding the V S O order. I have also proposed that the other languages examined, French, Catalan, and Italian lack this possible derivation. Subjects are necessarily moved to a special position that I have identified with Focus P in Catalan and Italian. This movement of the subject to focus is followed by LPR of the entire TP to a position above this focus projection. All XPs that follow the subject in focus must scramble out of the TP previous to the LPR. It has been pointed out that this operation is tightly constrained. This analysis permits us to make a parallelism between the restrictions on this extra leftward step and other leftward operations in the same language or across languages. Finally, the analysis is extended to Spanish V O S cases, with the subsequent consequence of enriching the account proposed in Chapter 2. Indirect evidence of the LPR analysis in Spanish was seen with certain complex structures with the V O S XP (Adj), V INF S INF, as well as V IO S DO.

Chapter 4

The inversion construction in interrogatives in Spanish and Catalan

4.1 Introduction

In this chapter, I switch to an examination of the structure of interrogatives with special attention to Spanish and Catalan. In Spanish and Catalan, as illustrated in examples (1a) and (2a), there is an obligatory subject-verb inversion in interrogatives.

- (1) a. ¿A quién visitó Juan ? (Spanish)
Whom visited Juan
- b. *¿A quién Juan visitó?
Whom Juan visited

- (2) a. Qui veu en Joan ? (Catalan)
whom sees Joan
- b. *Qui en Joan veu?
whom Joan sees

Some linguists (e.g. Torrego, 1984) have taken this inversion to be the output of a movement of the verb to a position to the left of the subject. Accepting this account, Rizzi (1991) explains the obligatoriness of the movement in terms of the wh-criterion,⁹⁶ a well-formedness principle at LF that requires a Spec-head configuration between a wh-word and a head with wh-features:

(3) Wh-criterion. (from Rizzi 1991)

- a. A wh-operator must be in a Spec-head configuration with an x [+wh]
- b. A X [+wh] must be in a Spec-head configuration with a wh-operator.

Rizzi postulates that the carrier of the wh-feature in (1a) and (2a) is the verbal inflection, which has moved to C overtly in order to enter into a Spec head agreement with the Wh-XP. Such a configuration is not obtained in (1b) and (2b) since the subject in Spec IP is placed between the wh-word and the inflectional head.

Nevertheless, overt V-to-C is problematic on several levels.⁹⁷ Theoretically, it is incompatible with Kayne's (1994) antisymmetry proposal, particularly in its consequences for the position of clitics. Furthermore, it leads to the erroneous conclusion that postverbal subjects

⁹⁶Rizzi discusses mainly English, Italian, and French. However, his proposal is valid for Spanish and Catalan.

⁹⁷ Suñer (1994) is the first to deny the existence of overt V-to-C in Spanish. I will not repeat her compelling arguments in this chapter but in Chapter 5.

could occupy the position of Spec of IP. In addition, it creates a nonuniform account of inversion phenomena. Finally, and crosslinguistically, this approach assumes a similarity between the Catalan and Spanish inversion phenomena and the V2 and Sub-Aux inversion of Germanic. This parallelism, I will show, cannot account for differences in the distribution of clitics and the possible placements of subjects after the auxiliaries in questions between both groups of languages.

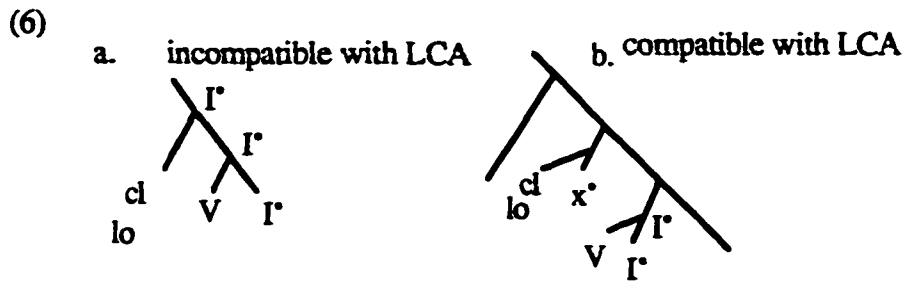
The alternative proposed here relies on the basic idea that pre-verbal subjects are in the Spec of ToPP whose head Top⁰ conflicts in features with the wh-requirements of the Wh-word.

4.2 Antisymmetry and the landing site of clitics

As we saw in Chapter 1, Kayne (1994) concludes that pro-clitics in Romance cannot be adjoined to the same inflectional projection as the verb in sentences such as (4) and (5):

- (4) **Juan le escribió. (Spanish)**
 Juan to-him wrote
- (5) **En Joan li dóna el llibre. (Catalan)**
 Joan to-him gives the book.

The argument is presented in (6):



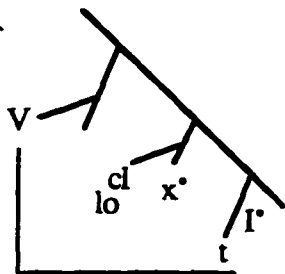
The Linear Correspondence Axiom (LCA) bars multiple adjunction to the same head such as the one shown in (6a) in which the pro-clitic is adjoined to the same head as the verb. Therefore, pro-clitics must be adjoined to an inflectional projection above the landing position of the verb, as represented in (6b).⁹⁸

⁹⁸Another possibility compatible with the LCA is that the clitic adjoins itself to the verb, which is already adjoined to the inflectional projection. However, this possibility is unlikely given that pronominal elements are excluded from appearing within words (see Kayne, 1994, p.42).

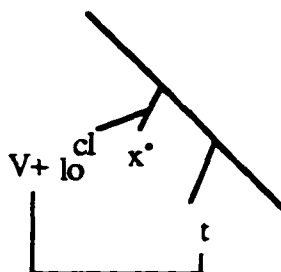
Since right adjunctions are also banned in the antisymmetry approach, there are two possible resolutions when the verb has to move to a position above the clitics, such as C^0 . In the first alternative, the verb could move directly over the position of the clitics as illustrated in (7a).⁹⁹ In the second, it could move left adjoining to the clitic itself, and move along with it to C^0 , as shown in (7b)¹⁰⁰. In either case, the order obtained is always verb-clitic.

(7)

a.



b.



From this perspective, the postulation of movement of the verb to C^0 in interrogatives in Romance would predict the V-cl order. However, the contrasts in (8) and (9) for Spanish and Catalan show that the prediction is not borne out. The sequence V-cl for interrogatives is ungrammatical.

⁹⁹This possibility is entertained by Terzi (1996). The movement of the verb over the place holder would not constitute a violation of the HMC under the shortest movement approach proposed by Ferguson and Groat (1995).

¹⁰⁰This would be a case of incorporation as proposed by Cinque and Benincà (1993).

- (8) a. *¿Qué escribió le?
What wrote to her/him
- b. ¿Qué le escribió?
What to him/her wrote
- (9) a. *Què dónes li?
what give-for her/him
- b. Què li dónes ?
What to him/her give

In this respect, Spanish and Catalan clearly differ from the cases of the V-2 in Germanic. The V-2 phenomenon has been analyzed as involving the movement of the verb to C. In clear contrast to the Spanish or Catalan examples, the Germanic object clitics necessarily follow the verb in second position as shown in the contrasts in (10a) and (10b):

- (10) a. Gestern hat sich der Hans ein Buch gekauft. (from Kayne 1995, pg. 43)
Yesterday has cl the Hans a book bought.
Yesterday Hans has bought a book for himself
- b. *Gestern sich hat der Hans ein Buch gekauft

Finally, the antisymmetry account leads naturally to the idea that verbs have moved further in the order V-cl than in the order cl-V. This allows a simple characterization of the difference between imperatives/nonfinites versus finite verbs in Spanish and Catalan. For instance Rivero (1994) and Rivero and Terzi (1995) propose that verbs in imperatives move to C to get their illocutionary force. Thus, it is not surprising that V-cl order obtains in these cases:

- (11) a. dóna-li (Catalan)
give it to him/her
- b. *li dóna

(12) a **cómpralo (Spanish)**
buy it.

b. ***lo compra**

Similarly, Kayne (1991) proposes that infinitives in Italian (and by extension Spanish and Catalan) move to a projection higher than the one where the clitics are adjoined.¹⁰¹

(13) a **Comprarlo (Spanish)**
To buy it

***Lo comprar**

(14) b **donar-li (Catalan)**
To give to him

***li donar**

This differentiation between infinitives and imperatives on the one hand, and finite verbs, on the other, is problematic for the overt V-to-C analysis in interrogatives. This approach leads to the conclusion that the clitic and verb have moved together as a unit in interrogatives. Thus, it inevitably leaves the contrasts between V-cl and cl-V entirely unmotivated in terms of verb movement. Unlike an antisymmetry based account, it cannot elucidate why the properties of the verb (e.g. tense) play a crucial role in motivating one order or the other in the same language. For example, it might be expected that the verb should allow the cl-V in imperatives in some Romance languages. However, such a possibility is barred in all

¹⁰¹Kayne's (1991) proposal would need to be modified since it involved multiple adjunction of the verb and the clitic to the same inflectional projection.

Romance languages with a specific imperative morphology as pointed out by Rooryck (1992).

In conclusion, V-to-C in interrogatives in Spanish and Catalan is incompatible with the idea that pro-clitics and verbs cannot be adjoined to the same inflectional projection and the general ban on right adjunctions. Additionally, an analysis that denies V-to-C in finite interrogatives in Romance accounts straightforwardly for the difference between Germanic V-2 and Romance interrogatives. In particular, it shows why clitics have to follow the verb in Germanic but not Romance. Finally, it also gives simple characterization the distribution of the clitics in the different tenses in terms of verb movement.

4.3 The position of the post-verbal subjects in interrogatives

Another problematic issue for the overt V-to-C approach can be found in the position of subjects in interrogatives. As we discussed in Chapter 3, Spanish and Catalan allow their subjects to appear post-verbally in normal declaratives. Subjects can appear below TP in NeutP, or they can appear in focus position after the LPR of the TP: The existence of overt V-to-C adds a new possible derivation in which the subject might end up post-verbally in Spanish and Catalan. However, it would need to be shown

that verbs have moved by head movement overtly above Spec IP and that none of the other possible derivations are at hand in interrogatives.

As I will show, there are important reasons to doubt that subjects occupy Spec of IP in interrogatives. If this conclusion is correct, that removes one of the most compelling reasons for the overt movement of the verb to a higher C, namely the nonvacuous movement of the verb over Spec of IP position.

4.3.1 Auxiliaries and Vpp.

On Rizzi's account, an auxiliary, in moving to C, leaves the Vpp in some projection internal to the IP. This leads to the prediction that subjects in Spec of IP might be placed between the auxiliary and the Vpp. However, examples (15)-(17) show that this prediction is not borne out.

- (15) a. *Qui va la Magda veure? (Catalan)
 who aux- Magda see
 who did Magda see
- b. Qui va veure la Magda?
 Who aux-see Magda
- (16) a. *Qui havia la Magda vist? (Catalan)
 who had Magda seen
- b. Qui havia vist la Magda ?
 Who had seen Magda
- (17) a. *¿A quién había la madre de Juan visto? (Spanish)
 Who had John's mother seen?
- b. ¿A quién había visto la madre de Juan ? (Spanish)
 who had seen John's mother

In this respect, there is a clear cross-linguistic difference between Spanish and Catalan, on the one hand, and English and German on the other. In the Germanic languages, the subject is necessarily placed between the auxiliary and the Vpp, as in (18) and (19):

- (18) a. Who has John's mother seen?
 b. *Who has seen John's mother?
- (19) a. Was hat dein Bruder gekauft?
 What has your brother bought?
 b. *Was hat gekauft dein Bruder?
 What has bought your brother

In order to explain this parametric contrast, while maintaining the V-to-C approach, one might conclude, that contrary to German and English, the auxiliary and Vpp do not form a breakable unit in Romance because the Vpp incorporates to the auxiliary. However, there is good reason to be doubtful about such an alternative. For instance, Suñer (1988a) has shown that an incorporation approach would be implausible for Spanish, given the fact that certain tenses in some dialects allow the insertion of material between the auxiliary and the Vpp.¹⁰² On the other

¹⁰² In my dialect the aux-vpp unit is breakable with infinitives and with certain subjunctive tenses. Observe that even in these two cases the complementizer is filled by *de* in (i) and by *si* in (ii). Therefore, it is unlikely that the auxiliary is in C.

- (i) De haberlo yo sabido, no te habría dicho nada.
 of having-it I known, I wouldn't have told you anything
 Had I known, I would not have told you anything
- (ii) ?Si le hubiese yo hecho caso, no tendría ningún problema.
 If I to him/her had paid attention I would not have problems.

The length of the intervening subject is also an important

hand, Rizzi (1991) mentions that the auxiliary-vpp sequence is breakable in Italian with adverbials. Nevertheless, the subject cannot intervene between the auxiliary and the Vpp.

- (20) a. *Che cosa ha il direttore detto? (From Rizzi 1991)
 What has the director said
- b. Che cosa ha detto il direttore?
 What has said the director

In conclusion, if Aux moves to C with compound tenses the subject cannot be in Spec of IP as would be expected given the English and German examples.

4.3.2 Catalan and the position of subjects.

More evidence against the idea that the subject occupies the Spec of IP in interrogatives is given by Catalan in examples of a verb with one DP object and with modal verbs. The overt movement to C approach predicts that subjects in Spec of IP should precede any other object complement in a lower inflectional projection in Catalan. However, this is

factor that limits the possibility of breaking the verb and auxiliary. There is a clear contrast between the above examples and the following ones.

- (iii) *De haberlo la chica que visitaste el otro día sabido, no tendrías problemas ahora mismo.
 Of having the girl that you visited the other day known, you would had no problems
- (iv) *Si le hubiese la chica que visitaste el otro día hecho caso.
 If had the girl that you visited the other day paid attention

In this respect the construction differs clearly from the English subj-Aux inversion.

Finally, it is important to note that some of the examples Suñer (1988) mentions, in which a tense Aux Vpp can be broken, come from the Caracas dialect. This variety belongs to the Caribbean dialect area which also allows the insertion of the subject between the verb and the Wh-word (Thanks to E. Herburger, a native speaker of this dialect for the relevant information).

obviously not the case, as we saw in Chapter 3. I repeat here some of the contrasts under (21). The subject must necessarily follow the object.¹⁰³

(21) a. ??A qui donarà la Magda el llibre? V S O
 whom will give Magda the book.
 Who will Magda give the book to?

b. A qui donarà el llibre la Magda? V O S
 whom will give the book Magda.

The same problem is attested with more complex verbal structures involving modals. If the modal had moved to C, the subject should appear in Spec of IP between the modal in C, and the infinitive in an embedded clause. However, as we saw in Chapter 3 the contrasts in (22) and (23) show that these sequences are ungrammatical.

(22) a. *A qui vol la teva germana [donar aquest llibre]? Modal-SU-INF
 to who wants your sister give this book?
 Who does your sister want to give this book to?

b. A qui vol [donar aquest llibre] la teva germana? Modal--INF-SU
 to who wants give this book your sister

(23) a. *A qui pot la teva germana [demandar aquest llibre]? Modal-SU-INF
 to who can your sister ask this book
 Who can your sister borrow this book from?

b. A qui pot [demandar aquest llibre] la teva germana? Modal-INF-SU
 who can ask this book your sister

4.3.3 Floating quantifiers

Floating quantifiers are licensed in both Spanish and Catalan as shown in (24) - (26)

(24) Aquellos turistas vienen todos de Francia (Spanish)
 these tourists come all from France.

(25) Mis vecinos recibieron ambos una carta de recomendación (Spanish)
 my neighbors received both a letter of recommendation

¹⁰³The same argument applies for Italian.

- (26) Aquests turistes vénen tots de França (Catalan)
 these tourists come all from France

Sportiche (1988) analyzed these cases of floating quantifiers as instances where the NP subject and the floating quantifier originate as a syntactic unit in Spec of VP. In a later stage of the derivation the subject moves to some inflectional projection leaving the floating quantifier stranded as represented in (27):

- (27) [IP Aquests turistes_i [I'vénen [vp tots t_i de França]]](Catalan)
 these tourists come all from France

If the verb had moved to C in interrogatives, the FQ might still be stranded with the subject in Spec of IP.

However, the sequence V Sub FQ is ungrammatical:¹⁰⁴

- (28) * [CP D'on vénen [IP aquests turistes [vp tots t]]]?(Catalan)
 from where come those tourists all
 Where do all those tourists come from?
- (29) * [CP ¿De dónde vienen [IP estos turistas [vp todos]]]?(Spanish)
 from where come those tourist all
 Where do all those tourists come from?
- (30) * [CP ¿Qué recibieron [IP tus vecinos [vp ambos]]]?(Spanish)
 what received your neighbors both
 What did your both neighbors receive?

To finish, all these constraints on the placement of subjects point to the conclusion that subjects cannot appear in Spec of IP in interrogatives in Spanish and Catalan. If V-to-C existed in these languages, it would always have to take place vacuously.

¹⁰⁴ The argument against subjects in Spec IP in interrogatives, based on the distribution of FQs is equally valid if FQs are treated as predicative adverbials.

In order explain why subjects cannot appear in Spec of IP, Rizzi (1991), following Rizzi and Roberts (1989), postulates that V-to-C in interrogatives destroys the Spec-head configuration necessary for case assignment to the subject in Spec of IP. Consequently, Rizzi claims that nominative case is alternatively assigned by tense to the right in sentences like (1a) and (2a).

This solution is problematic in various respects. First of all, we are forced to conclude that expletive or argumental pro, which by hypothesis is in Spec of IP, does not receive case in interrogatives. At the same time, this idea clashes with the derivational approach advocated in the minimalist program (Chomsky 1995). From the minimalist perspective, once a configuration for case is obtained at a certain stage of the derivation, it cannot be undone in later steps.

Finally, this solution is too strong given the existence of Aux-to-Comp constructions. Rizzi (1982) postulated that these constructions involve movement of the Aux-to-C. The auxiliary in C would assign case to the subject in Spec of IP. This at least implies that it is possible for the verb in C to assign nominative case in certain instances.¹⁰⁵

¹⁰⁵ The fact that the subject can appear between the Aux and the Vpp suggest, that contrary to finite verbs, infinitives and gerunds move further up. This seems to be corroborated since, as we mentioned in Section 4.2, clitics follow gerunds and infinitives.

- (31) [Avendo [Mario t [accettato di aiutarci.]]]
 |-----|
 Having Mario accepted to help us

4.4 V-to-C and the "free inversion" construction.

Spanish and Catalan allow subjects to appear post-verbally in declarative sentences in what is called "free inversion" as we saw in Chapter 2 and 3. I will repeat some examples for convenience:

- (32) Van venir alguns estudiants (Catalan)
 came some students.
- (33) Vinieron varios estudiantes (Spanish)
 came some students

The obvious question is whether there should be a common analysis of this type of inversion and the one resulting from interrogatives. The answer must be affirmative since both constructions show exactly the same constraints. For instance, subjects are not allowed between the auxiliary and the Vpp as shown in examples (34).

Aux-SU-V versus Aux-V-SU

- (34) a. * La había la madre de Juan visto. (Spanish) Aux-SU-V
 cl- had Juan's mother seen.
 Juan's mother had seen her.
- b. La había visto la madre de Juan. Aux-V-SU
 cl- had seen Juan's mother

-
- (i) Avendolo Gianni comprato
 Having Gianni bought it
 Having Gianni bought it

Also, the subject cannot appear between the object and the verb in the Catalan as we discussed in the previous chapter. Here I repeat (35):

Catalan V S O versus V O S and Modal-SU-INF versus Modal-INF-SU

- (35) a. * Em donarà la Magda el llibre. V S O
 cl-to me will give Magda the book.
 Magda will give the book to me
- b. Em donarà el llibre la Magda. V O S
 cl-to me will give the book Magda.

Additionally, we also saw that the subject cannot appear between the infinitive and the modal verb in Catalan as in (36):

- (36) a. *Vol la teva germana demanar aquest llibre Modal-SU-INF
 wants your sister to order this book
 Your sister wants to order this book
- b. Vol demanar aquest llibre la teva germana. Modal-INF-SU
 wants to order this book your sister.

Finally the sequence V S FQ is not allowed either.

- (37) a. *Vénen de França aquests turistes tots. (Catalan) V-SU--FQ
 come from France these tourists all
 All these tourists come from France.

However, the possibility of extending the overt V-to-C to the free inversion construction is problematic in two respects. From a theoretical point of view, it is not clear what the trigger for V-to-C movement in these cases could be since there is no obvious criterion to be satisfied. Even more importantly, the free inversion construction can appear in an embedded sentences with a filled overt complementizer as in (38):

- (38) M'han dit que vindran alguns estudiants (Catalan)
 to me have told that will come some students.
 They told me that some students will come

As we have shown in Chapter 3, a simple head movement analysis cannot render an account of all the restrictions we find in the post-verbal subject position in Catalan, French and Italian.

However, the impossibility of extending the overt V-to-C analysis to the cases of free inversion poses problems to this approach overall. On the one hand, it is clearly unsatisfactory to have two analyses for constructions that are otherwise alike. For instance in the interrogative construction V-to-C would apply vacuously, and the free inversion construction V-to-C would not apply at all. On the other hand, it shows the insufficiency of the explanation based on the loss of case of subjects in Spec of IP in the interrogatives. The explanation for the constraints could not be extended to the free inversion construction. There must be a common explanation for the contrasts, and this account evidently cannot not rely on overt V-to-C.

4.5 Piedmontese

Another problem with overt V-to-C is encountered in certain languages with double-filled Comp such as in Piedmontese as shown in (39).

- (39) a. Cosa ch'a fa la mama d' Giuanin tuti i di?
 What that-cl makes the mother of John Every day
 What does John's mother make every day?

- b. *Cosa che la mama d' Giuanin a fa tuti i di?
 what that the mother of John cl- makes every day

Given the presence of an overt complementizer, there should not be any inversion effect since the verb would not have moved to C°. Nevertheless, we do find these inversions.¹⁰⁶ These facts show, that an overt V-to-C approach is not sufficient to explain the obligatory inversion in languages with overt complementizers. Some extra mechanism must be responsible for these effects.

4.6 The obligatoriness of inversion in Interrogatives in Spanish and Catalan.

Once the overt V-to-C approach is eliminated, the explanation for the ungrammaticality in (1b) and (2b) clearly needs to be approached in terms of what blocks pre-verbal subjects from appearing in interrogative contexts:

- (1b) b. *A quién Juan visitó?
 Who Juan visited
- (2b) b. *Qui en Joan veu?
 who Joan sees

There are various possible ways to account for this prohibition.

4.6.1 A -Minimality

Suñer (1994) explores the possibility that the ungrammaticality of (1b) and (2b) could be due to the fact

¹⁰⁶ I thank Luigi Burzio for this information. There are many other Northern Italian dialects that seem to show this pattern.

that subjects in Spec of IP block the movement of a wh-word. She proposes a specific principle of argumental agreement, which expresses the idea that an argumental wh-word in Spec of CP maintains a long distance agreement relation with the inflection of the verb. Such an argumental agreement relationship cannot be interrupted by any other argumental DP between the highest verb in I and the wh-word. Therefore, the ungrammaticality of (1b) and (2b) is accounted for because the subject in Spec of IP counts as an argumental element blocking this relationship.

(40) Argumental Agreement Licensing (From Suñer 1994)

- a. Argumental wh-phrases must be licensed through symmetric Rag-agreement between α (=SpecC) and β (=c)
- b. β arg agrees with γ (=V) only if β and γ are arg-marked and no other Arg-marked element is closer to γ .

Sentences with post-verbal subjects as (41) do not have the same effect since the element in Spec of IP is a non argumental pro, which by (40) does not count as a possible blocking element:

- (41) ¿A quién [IP pro_{expl} visitó Juan] ?
 Who Juan visited

As in the case of overt V-to-C, however, this solution encounters problems when the status of argumental pro is considered in sentences like (42). If argumental pro occupies Spec of IP as in (43a), it should have the same blocking effect as a argumental lexical DP and a sentence

like (42) should be ungrammatical¹⁰⁷. Alternatively, the analysis to be adopted would involve a nonargumental *pro* in Spec of IP co-indexed to an argumental *pro* presumably in Spec of VP as in (43b). However, such an alternative cannot be adequate either since argumental *pro* in Spec of VP would fail to be identified by Agr S, which is too far away.

(42) A quién visitó?
Who visited-3p.s?!

(43) a A quién *pro*+arg visitó
b. A quién *pro*.arg visitó [*VP**pro*+arg

Moreover, this approach also turns out to be problematic from a cross-linguistic point of view. It is not clear why subjects in Spec of IP in English or German do not have the same blocking effects given the grammaticality of run-of-the-mill English sentences like (44).

(44) What did he buy?

4.6.2 A-bar minimality

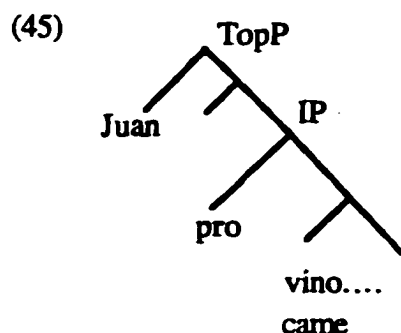
A variety of factors lead to the conclusion that preverbal subjects in Spanish and Catalan must have a different distribution than *pro* and DP subjects in English.

¹⁰⁷ the distribution of "pro" is also a problem to those theories that propose that *wh*-words land in Spec IP while the subject remains in a lower position (Spec VP) (Goodall 1991, Fontana 1993). Under those proposals "pro" would have to remain post-verbal in interrogative contexts, making it impossible for it to be identified under spec-head agreement. If we eliminate the possibility for *pro* to appear in Spec IP, there is no much justification for Spec IP altogether as I will discuss in Chapter 5.

They include (i) elimination of overt V-to-C (ii) the different behaviors of lexical subjects and *pro*, and (iii) the difference of Spanish and Catalan with respect to English with respect to lexical subjects.

The question then is what that distribution is. One hypothesis is that pre-verbal lexical subjects in Spanish and Catalan are dislocated to a more peripheral position. This notion is not new to this study. It has been proposed for Spanish by Contreras (1991), Zubizarreta (1994), Uribe Etxebarria (1995), for Rumanian by Dobrovie-Sorin (1991), and for Catalan by Solà (1992) and Rigau (1988) and for Greek by Alexiadou and Anagnostopoulou (1996). I will explore this idea with some of the results discussed in Chapter 5.

In my hypothesis, DPs appear displaced to a more peripheral position in Spanish. Following antisymmetry and the ban on multiple adjunction, I will assume that preverbal lexical DPs are in the Spec of a topic projection (see also Rizzi 1995). However, let's assume provisionally that *pro* occupies Spec IP.



Since lexical subjects and *pro* occupy different positions, the fact that there is no intervention effect of the *wh*-word when there is no preverbal lexical DP is less surprising. Also, the contrast between Spanish and Catalan with respect to English becomes understandable if preverbal subjects in English are not topicalized, but, contrary to Spanish, have to appear in Spec IP. We will see this in more detail in Chapter 5.

The idea that subjects occupy a more external position in Spanish than in English could be corroborated from the behavior of complementizerless dependent clauses in both languages. It is well-known that complementizers can be dropped in English clauses like (46).

(46) Jane regrets Melissa is not home.

Certain dialects of Spanish also allow this kind of complementizer deletion (see Torrego 1982). What is important is that, contrary to English, Spanish pre-verbal subjects are not allowed in complementizerless dependent clauses as shown in (47b).

- (47) a. Lamento no esté contenta Carmen. (Spanish)(from Torrego 1982)
 I regret is not happy Carmen
 I regret Carmen is not happy
- b. *Lamento Carmen no esté contenta (Spanish) (from Torrego 1982)
 I regret Carmen is not happy

It is tempting to think that the ungrammaticality of (48a) in Spanish is parallel to the ungrammaticality of a sentence of English with a peripheral adjunct as in (48b).

- (48) a. *Lamento [Top P Carmen_i [IP pro_i no esté contenta]]
 b. *Jane regrets [Top P yesterday [IP Melissa went to her house]]

By the analysis given before, the adjunct *yesterday* in English and the pre-verbal subject in Spanish would occupy more peripheral positions, which could not be licensed in this type of construction. Thus, preverbal subjects in English correspond to *pro* in Spanish as lexical subjects in Spanish correspond to adjuncts in English.

If subjects in Spanish and Catalan are in an A' position, it would be possible to understand the ungrammaticality of (1b) and (2b) in terms of A' minimality. Unfortunately, taking an A' minimality approach alone is too simple. From this perspective, topics in an A' position would block the movement of the *wh*-word to Spec of CP. Nevertheless, Torrego (1984) has shown that the extraction of a *wh*-word over a pre-verbal subject is available in embedded declaratives where long distance *wh*-movement has taken place as in (49a).¹⁰⁸ The same possibility seems to be available with other nonsubject topics in embedded declaratives such as in

¹⁰⁸ Torrego (1984) claims there is a distinction between having a sentence with two embeddings and one with three embeddings. The one with three embeddings requires inversion of the lowest clause. In my dialect I do not find appreciable difference between both clauses. They are both fairly heavy because of the number of embeddings.

- | | | | | | | |
|------|--------------|----------------------|--|---|----------------------------|-----------------------------------|
| (ii) | ¿Qué
what | piensas
think-2ps | que Juan había dicho
that Juan had said | que
that | la revista
the journal | había publicado?
had published |
| (ii) | ¿Qué
what | piensas
think-2ps | que Juan había dicho
that Juan had said | que había publicado
that had published | la revista?
the journal | |

(50a). If a subject in topic position were blocking the extraction of a wh-element, there should not be any contrast between (a) and (b) in the two pairs of sentences:

- (49) a. Qué pensabas que [Top P la revista [IP había publicado]] (Spanish)
 What you thought that the magazine had published
 What did you think that the magazine had published?
- b. *Qué [Top P la revista [IP había publicado]]? (Spanish)
 What the magazine had published
 What did the magazine publish?
- (50) a. Qué imaginabas que [Top a ti [IPte iban a regalar?]S]p
 What you thought that to you they were going to give?
 What did you think that they were going to give to you?
- b. *Qué [Top P a ti [IP te iban a regalar]]? (Spanish)
 What for you they were going to give.
 What were they going to give to you?

Thus, it is promising to think that lexical subjects are in a topic position in Spanish and Catalan. This explanation would account for why lexical subjects, but not pro, have a blocking effect in interrogatives. However, the simple idea that topics would create an A' minimality effect in interrogatives seems too strong given the facts from long distance extraction out of embedded declaratives.

4.6.3 Head movement. Movement of the complementizer.

The contrasts in (49) and (50) is also indicative of one other syntactic effect: The blocking of the lexical DP subject only occurs in the sentence where the wh-word lands. Therefore, the principle that explains the contrast in (1) and (2) must be very local. I will maintain, with Rizzi (1991), that this local principle is an agreement

relationship. However, contrary to Rizzi, I propose that the agreement is with the complementizer rather than the verb. The agreement relationship involves an empty complementizer in Spanish and it involves the auxiliary *do* in English as in (51) and (52):

(51) [CP What_{t,wh} did_{t,wh} [IP he I [VP buy t III]?

(52) [CP A quién_{wh} C^o_{wh} [IP [I' visitó]]]? (Spanish)

From our perspective topics interfere with this agreement relationship. We saw that coding this interference in term of A' minimality was too simple. However, there is an interesting difference between interrogatives and embedded declaratives with respect to the complementizers. Embedded declaratives have an overt *que* whereas interrogatives have an empty complementizer.¹⁰⁹

I will start by deriving the grammaticality of embedded declaratives with a pre-verbal subject as in (49a) or an embedded topic as in (50a). I will follow the basic lines of Watanabe (1992) and Browning (1996) and their ideas about CP recursion. These authors propose that embedded topicalizations involve a CP recursion structure "à la Larson." The overt complementizer starts in the lower CP shell and enter in a Spec-head relation with a topic XP.

¹⁰⁹ Rizzi (1991) postulates \emptyset complementizer for French sentences like (i) or English sentences like (ii):

- (i) Je ne sais pas [qui \emptyset elle a rencontré
I not know who she has met
- (ii) I wonder [what \emptyset you saw

This is shown in (54), which represents the first stage in the creation of the complex CP of a sentence like (53):

- (53) Robin met the man that Leslie said that for all intents and purposes was the mayor of the city.
- (54) said [CP for all intents and purposes [that C⁰ [IP was the mayor of the city.

Watanabe proposes that the complementizer *that* targets its own projection and creates another CP shell. The motivation for this head movement is found in the fact that the verb *say* requires a declarative complementizer (see Cheng 1991).

- (55) said [CP that [CP for all intents and purposes [C t] [IP
-

Browning, following Chomsky (1995, Chapter 3) observes that this head movement can explain why the topic *for all intents and purposes* does not count as a blocker for A' minimality effects. The head movement of *that* to the upper CP shell extends the minimal domain of C⁰. Thus the two CP specifiers are equidistant with respect to a wh-word to be moved, given Chomsky's relevant definition of equidistance in (56). Wh-movement can proceed as shown in (57).

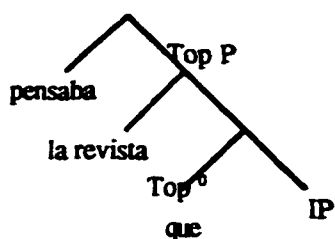
- (56) If α, β are in the same minimal domain, they are equidistant from γ .

- (57) said α [CP that_i [CP for all intents and purposes [C⁰ t] [IP γ
-

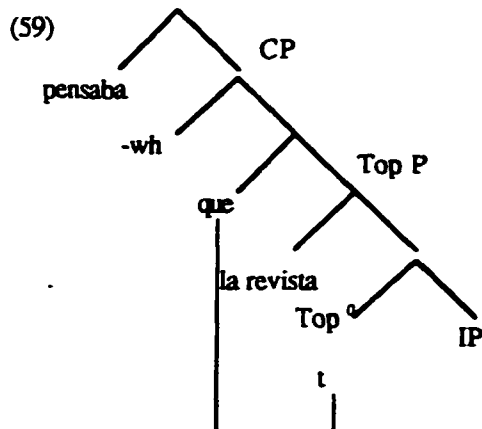
I am going to adopt this approach for Spanish embedded topics in sentences like (49a) and (50a). The first step is shown in the structure in (58); *la revista* is in the

specifier of the complementizer *que*, which is in the head of Top^0 . :

(58)



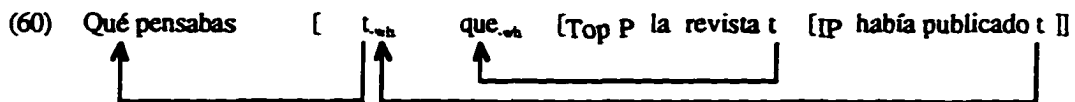
The verb *pensar* "think" requires a CP with declarative force. Top P is part of the CP Field (Rizzi 1995), but has no declarative force. *Que* in Top^0 moves a notch up and creates a new specifier CP as in (59):



The head movement of the complementizer will extend the domain. The upper Spec of CP and the lower Spec of Top would be equidistant to any *wh*-word in IP. This analysis predicts why no A'-Mininality (or MLC) is created when the *wh*-words move cyclically in (49a) and (50a).

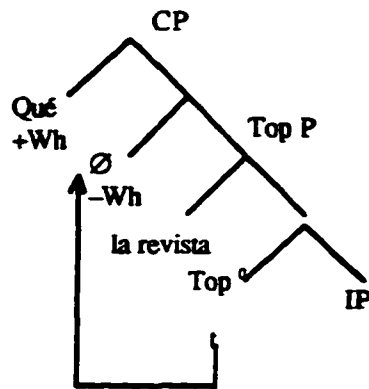
The extension of this perspective lead us to think that in matrix clauses there is movement of a complementizer

when a topic XP pre-verbal as in (49b) and (50b). This complex CP can only be created by recursion through head movement, more or less in the same fashion as VP shells are created. This leads us to a derivation similar to the one seen previously for the embedded cases. However, there is a difference between embedded declarative CPs and matrix question CPs: their specification with respect to features. I am assuming that Top^0 is always specified as [-wh]. In the cases of embedded declarative in (49a) and (50a) this [-wh] specification does not create a problem since traces left by wh-elements are [-wh] anyway, as argued by Lasnik and Saito (1992):



However, with a matrix clause, the empty complementizer starts in the topic head, and it would be specified as [-wh] by Spec-Head agreement. It moves a notch up to create an Spec for the Wh-word. This head movement guarantees that *la revista* in Spec Top^0 will not block wh-movement. However, there is a mismatch between the empty complementizer, which started in Top^0 and the Wh-word in Spec CP as represented in (61). This mismatch in features explains the ungrammaticality of (49b) and (50b):

(61)



In conclusion, the matrix embedded asymmetry in the Spanish examples reduces to a difference between Wh-traces being [-wh] versus wh-words being [+wh]. The same mismatch of features found in matrix questions with the \emptyset complementizer in Spanish is found with the overt complementizer *che* in Piedmontese. As in Spanish, I assume subjects are in Spec Top⁰. The complementizer when appearing with a pre-verbal subject would start off as the head of topic and because of the agreement with subject in topic will be [-wh]. In this configuration, this complementizer would raise to create another specifier for the wh-word. That in turn causes a mismatch configuration between the wh-word in the upper CP and the complementizer *che*:

(62) a. [_{CP}*Cosa
+wh] *che* [_{TOP} la mama d'Giuanin t] [_{IP} a fa]

Importantly, when all these complementizers are not part of a topic, they would acquire their features with direct

agreement with the wh-feature of the XP moved to Spec of CP. Here no problem for mismatching would occur:

(63) [_{CP} Cosa(+wh) ch'a(+wh) [_{IP} fa la mama d' Giuanin

(64) [Qué(+wh) ø(+wh) [IP había publicado la revista]]?

In previous sections, I have proposed that subjects in pre-verbal position in Spanish (48a) have the same distribution as pre-verbal adjuncts in English, as in (48b). Thus we predict rightly that these adjuncts block wh-movement in the same manner as pre-verbal subjects do in Spanish. The DO moves from I to Top⁰ acquiring a [-wh] specification which would create mismatching problem when moving raising to the higher CP as shown in (65):

(65) * [CP What (+wh) did (-wh) [Top Yesterday TOP⁰ [IP Peter buy

This approach also predicts that there should not be any mismatch between matrix and embedded questions, whenever a topic intervenes between IP and CP. This topic would always be specified as [-wh] and would block the matching of features with the higher CP.¹¹⁰

¹¹⁰ Italian subjunctive is a potential problem. Contrary to matrix clauses preverbal subjects can appear pre-verbally producing no intervention effects for some speakers (see Giorgi and Pianesi 1996):

- (i) Gianni si domanda che cosa Mario abbia fatto. (Giorgi and Pianesi 1996)
Gianni wonder what Mario had-3ps done

However, the idea that subjects in subjunctive clause are not in topic position seems to be confirmed by the fact that the fact can also appear in complementizerless clauses:

- (ii) Credeva tu fossi arrivato in tempo (Giorgio and Pianesi 1996)
I thought you had arrived on time

- (66) *I wonder [_{CP} who(+wh) \emptyset (-wh) [_{Top} yesterday t [you saw?
- (67) *No sabía [_{CP} qué(+wh) \emptyset (-wh) [_{Top} la revista t [había publicado
-

To conclude this section, I have extended an approach due to Browning (1996), Watanabe (1992) about CP recursion to the cases involving preverbal subjects in Spanish. I have assumed that subjects are in Topic and that the [-wh] feature value of Top^0 conflicts with the [+wh] feature of the wh-word, creating a mismatch. This conflict is obviated in embedded declarative contexts in which the trace of the wh-element is specified as [-wh].

4.7 Conclusion.

It has been shown that movement of the verb in Spanish and Catalan in overt syntax conflicts in important ways with the antisymmetry theory and its implications for the landing sites of clitics. The difference between Catalan and Spanish with respect to the Germanic languages examined here in this respect can only be understood if the former languages lack overt V-to-C. It has also been shown that post-verbal subjects in interrogatives are not in Spec of IP. These post-verbal subjects in interrogatives behave like post-verbal subjects in the so-called free inversion

Recently Giorgi and Pianesi have pointed out the there is a correlation of the acceptability of (i) with the acceptability of (ii) for Italian speakers. This confirms the correlation previously made in the text inversion interrogatives and insertion of the pre-verbal subject in complementizerless clauses.

construction. It has been pointed out that the overt V-to-C approach is unable to give a uniform account of both constructions.

Once overt V-to-C is eliminated, however, a puzzle appears: Why do empty subjects in Spanish and Catalan not have the same blocking effects as overt subjects? Similarly, why do DP subjects in English, contrary to Catalan and Spanish, allow such extraction? The answer appears to be that lexical subjects in Catalan and Spanish must occupy a topic position. Finally, to explain why there is obligatory inversion in interrogatives, I have adopted a CP recursion approach. I have proposed that the mismatch between the complementizer which starts in Top⁹ and the wh-word in CP is the responsible for the ungrammaticality of sentences with topics such as (1b) and (2b). As we predict, this effect obtains in matrix and embedded questions (67). We have also seen that embedded topics in embedded declaratives do not produce ungrammaticality. This is as predicted by the idea that the trace left by a wh-element in Spec CP and the complementizer are both specified as [-wh].

4.8 Appendix

Finally, some remarks need to be made concerning the fact that certain wh-words do not trigger obligatory

inversion in Spanish. Some authors (e.g. Torrego 1984 and Suárez 1994) have proposed that non argumental wh-words do not require inversion, while argumental wh-words do.

I think that the distinctions they do not cut so much across the argumental/nonargumental difference as the one between complex and noncomplex wh-elements as shown in the following contrasts:

- (68) a. *¿Cuándo tus hermanas se fueron?
When your sisters left
- b. ¿En qué momento tus hermanas se fueron?
In which moment your sisters left
- (69) a. *¿Cómo tu hermana se cayó de la cama?
How your sister fell from bed?
- b. ¿De qué manera tu hermana se cayó de la cama?
In which way your sister fell from bed.
- (70) a. *¿Dónde tus amigos se divorciaron?
Where your friends got divorce.
- b. ¿En qué lugar tus amigos se divorciaron?
In which place your friends got divorced.

The same problem cuts across argumental wh-questions. Speakers find an improvement with complex wh-words compared to simple ones (see chapter 5, section 5.2.2.2):¹¹¹

- (71) a. *¿A quién tu hermana visitó?
Who your sister visited
- b. ¿A cuál de estas chicas tu hermana (la) había visitado en Sicilia?
Which of the girls your sister had visited in Sicily
- c. ¿A cuál de las chicas que vinieron tu hermana (la) había visitado?
Which of the girls that came your sister had visited

¹¹¹Calabrese (1982) reports a similar phenomenon in Italian, as illustrated in (i)

- (i) **Qualle delle ragazze che abbiamo incontrato, Mario ha conosciuto in Sicilia?**
Which of the girls that we just saw, Mario has already met in Sicily? (From Calabrese 1985)

Observe, by contrast, that in English overt V-to-C in questions is triggered no matter how complex the wh-element, as in (72).

- (72) a. Which of the girls that we had met has Mario fallen in love with?
 b. *Which of the girls that we had met Mario has fallen in love with?

This crosslinguistic difference constitutes another argument against a uniform treatment of Spanish/Catalan inversion constructions and the V-2/Aux-NP inversion of Germanic.

Instead, I would like to adopt the idea that complex wh-word in the preceding examples in Spanish are not in Spec CP but are left dislocated. Therefore, since there is no [+wh] agreement involved, it becomes less surprising that preverbal subjects can intervene between the complex wh-word and the verb. As pointed out by Rizzi (1995), complex negative quantifiers in Italian can also be left dislocated contrary to simple ones as shown in the following contrast:

- (73) a. Nessuno di questi ragazzi lo conosco veramente bene (From Rizzi 1995)
 No one of these boys cl- I know very well.
 b. *Nessuno l'ho visto.
 No one cl-have seen

In Rizzi's view, the reasons for this contrast have to do with the possibility of the quantifier in the Spec of the complex DP moving at LF and binding a variable inside that DP as in (74). Even if the whole DP is left dislocated, the quantifier in its Spec can still form the operator-variable configuration needed.

- (74) Nessuno [ec di questi ragazzi] TOP lo conosco veramente bene.

The similarity between these cases requires a uniform treatment. In other words, if the behavior of simple versus complex negative quantifiers is the same as that of simple versus complex question words, these contrasts are likely to have the same explanation. I would like then to suggest that the complex *wh*-constituents are left dislocated and that the quantifier part is moved at LF in order to obtain the needed quantificational interpretation. They, thus, function in a similar fashion to the negative cases.¹¹².

¹¹² An important question that arises is the fact that resumptive clitics do not seem to be required in the examples with complex quantifiers even if they are left dislocated. The same applies for complex negative quantifiers at least in Spanish:

(i) *A ninguno de estos chicos tú conoces realmente.*

It is still conceivable that these quantifiers in the Spec of the left-dislocated DP are capable of licensing the variable internal to the IP and therefore accounting for the absence of the clitic. It has been noticed by Cinque (1991) that certain quantifiers can be left-dislocated and nevertheless license a variable

(ii) *Qualcosa farà.* (Cinque 1991)

- (75) ¿A cuál [ec de las chicas] TOP tu hermana la había visitado antes?
Which of these girls your sister has seen before.

In conclusion, the complexity of the wh-words seems to be an important factor that determines the possibility of inversion in Spanish. Following Rizzi (1995), I have proposed an alternative where complex wh-words are left dislocated.

Chapter 5

Left dislocated subjects and Pro-Drop*

5.1 INTRODUCTION.

In the last chapter I proposed an analysis of interrogatives that does not involve verb movement to C. This conclusion relied on the idea that subjects in Spanish are in a topic-like position. In this chapter I would like to further motivate this assumption. I will concentrate in Spanish, but the results evidently apply to Italian and Catalan as well.

It has been assumed that in Romance preverbal subjects such as those in (1) occupy a functional projection Spec of IP, in which case and Agreement are satisfied (Rizzi 1990, Motapayane 1988, Cardinaletti 1996, Belletti 1990). On the

* This chapter is based on work in conjunction with Esthela Treviño (see Ordóñez & Treviño 1997).

other hand, preverbal objects in (2) and (3) are taken to occupy a more external position corresponding to that of a topic.

- (1) Juan le dio las llaves a Pedro.
 Juan cl gave the keys to Pedro.
- (2) Las llaves se las dio Juan a Pedro.
 The keys cl-cl gave Juan to Pedro.
- (3) A Pedro le dio Juan las llaves.
 To Pedro cl gave Juan the keys.

Thus, sentences with preverbal subjects receive the analysis in (4) in which subjects are in Spec of IP,¹¹³ while preverbal DOs and IOs receive a different analysis as in (5). Here, the IP projection is always present either occupied by pro as indicated in (5a) or by a lexical DP subject as indicated in (5b).

- (4) [IP Juan le dio las llaves]
- (5) a. XPDO/IO [IP pro V (subject)]
 Las llaves / a Pedro [pro le dio (Juan)]
 The keys / to Pedro cl gave Juan
- b. XPDO/IO [IP [subject] V]
 Las llaves / a Pedro Juan le dio.
 The keys / to Pedro Juan cl gave.

The standard analysis therefore leads to a dual characterization depending on whether preverbal subjects or preverbal objects are involved. The evidence to be introduced in this final chapter challenges this dual analysis in two important ways. On the one hand, the

¹¹³ Given an articulated theory of inflectional projections as Pollock (1989), this projection would be denominated AgrS. See Belletti (1990). In most of the chapter I will continue using the term IP except when the denomination AgrS becomes relevant.

assumption that there is a null *pro* in Spec IP with a preverbal DO or IO in (5b) conflicts with some facts of ellipsis and extraction of quantificational elements (e.g. negative quantifiers and *wh*-expressions as we saw in Chapter 4). The conclusion that *pro* cannot be postulated in the preverbal subject position leads naturally, in turn, to the elimination of the idea that there is a preverbal Spec projection exclusive for subjects altogether. The second kind of evidence in favor of our hypothesis comes from the fact that overt preverbal subjects share certain important similarities with preverbal DOs and IOs regarding constraints on quantificational interpretation. These similarities call for a uniform analysis for all preverbal arguments.

These admittedly radical reconceptualizations require certain fundamental theoretical changes. For example, I propose the elimination of Spec IP as a projection exclusive for subjects. Instead, I analyse preverbal DOs, IOs, and subjects as occupying the same topic position as in (6):

(6) [_{Top} XP(subject/DO/IO) Top] V.

Also, as a consequence of this analysis, the theoretical status of preverbal arguments must be revised. With regards to subjects, the main question to be addressed is how case and agreement properties are satisfied. In view of the fact that subjects may appear in other positions, as

examples in (7) and (8) illustrate, I also sketch an alternative characterization to the so-called pro-drop instances like those in (9).

- (7) **Le dio las llaves tu hermano.**
Cl gave the keys your brother
'Your brother gave him/her the keys'
- (8) **Le dio tu hermano las llaves.**
Cl gave your brother the keys
- (9) **Le entregó las llaves a Pedro.**
Cl gave the keys to Pedro.

The chapter is organized as follows. In section 5.2, I describe the empirical data that support the conclusion that preverbal overt subjects and objects have the same syntactic distribution. Given such evidence, I reconsider the theoretical status of preverbal subjects in Section 5.3 and revise some of the alternatives proposed in the literature by other researchers. In Section 5.4 I reject the idea that there is such an inflectional projection called AgrS in which case and agreement are satisfied for subjects in a preverbal position. Instead, I adopt Taraldsen's (1992) position that agreement, specifically person agreement, should be considered a clitic and an argument of the verb. Evidence that Agr is a clitic is given by the striking similarities between the relation of doubling XPs and clitics, on the one hand and agreements and subjects, on the other, with respect to certain mismatches in person specification. Evidence that Agr is an argument is given by the fact that it is crucial for the

computation of A binding in these cases of mismatches. Some interesting morphological evidence is discussed at the end in section 5.4.1.

5.2 Empirical evidence

5.2.1 Ellipsis

Spanish exhibits ellipsis phenomena which differ in several ways from English VP ellipsis. Brucart (1987) shows that certain discourse polarity particles such as *sí* ('yes'), *no* ('not'), *también* ('too'), and *tampoco* ('neither') license ellipsis. The elements that can stand as remnants of this kind of ellipsis include not only preverbal subjects as in (10), but also preverbal direct and indirect objects, as in (11) and (12).¹¹⁴

- (10) **Él le dio unos libros a Pía y Pepe también [le dio unos libros a Pía]**
He cl gave some books to Pía and Pepe too [cl gave some books to Pía]
- (11) **Unos libros le dio Juan a Pía y unos cuadros también [le dio Juan a Pía]**
Some books cl gave Juan to Pía and some paintings too [cl gave Juan to Pía]
- (12) **A Pía le dio Juan unos libros y a Sara también [le dio Juan unos libros]**
To Pía cl gave Juan some books and to Sara too [cl gave Juan some books]

Furthermore, all the remnants of this type of ellipsis can be easily subordinated, as shown in (13) and (14):

- (13) **Juan le dio unos libros a Pía y me parece que Pepe también [le dio unos libros a Pía]**
Juan cl gave some books to Pía and cl seems that Pepe too [cl gave some books to Pía]
- (14) **A Pía le dio Juan unos libros y me parece que a Sara también [le dio Juan unos libros]**
To Pía cl gave Juan some books and it cl seems that to Sara too [gave Juan some books]

¹¹⁴ The elided material is indicated in bold face enclosed in square brackets.

The possibility of subordinating these remnants indicates that ellipsis of this sort involves a copy of the inflectional projection that follows the discourse polarity items. Thus, an analysis involving the movement of the correlate, for example, as proposed in Reinhart (1991) for bare argument ellipsis, or in Larson (1990) for cases of gapping, is immediately excluded since those two types of constructions do not allow subordination of the remnant.

The parallelism between DO, IO, and subject remnants remains even in those cases in which ellipsis is licensed in island contexts. Examples include extraposed clauses such as (15) and (16)—instances of a weak island contexts—and relative clauses—strong islands—as in (17) and (18):

- (15) **María no sabe ruso pero es posible que Luis sí [sepa ruso] (Brucart 1987)**
 María not knows Russian but it is possible that Luis yes [knows Russian]
 'María doesn't know Russian, but it is possible that Luis does'
- (16) **A ti te admitirán en Harvard pero es probable que a tu amiga no [la admitirán en Harvard]**
 To you cl will admit in Harvard but is probable that to your friend not [cl will admit in Harvard]
 'You will be admitted to Harvard, but it is probable that your friend will not'
- (17) **Luis no sabe traducir pero yo conozco a una alumna que sí [sabe traducir]**
 Luis not knows to translate but I know a student that yes [knows to translate]
 'Luis doesn't know how to translate, but I know a student who does'
- (18) **Hay gente a la que le puedes decir bromas y hay gente a la que no [le puedes decir bromas]**
 There is people to whom cl can tell jokes and there is people to whom not [cl can tell jokes]
 'There are people who you can tell jokes to, and there are people who you cannot'

Under the dual hypothesis represented in (5), in which preverbal subjects occupy a more internal position than preverbal DOs and IOs, it would not be easy to capture the

parallelism shown by all remnants in the former examples. From that perspective, two different types of remnants must be postulated, as shown in (19). Thus, there would be one constituent remnant with preverbal subjects, the subject itself (19a), and a two constituent remnants for preverbal objects and pro (19b).¹¹⁵

- (19) a. [SU no/también/tampoco/sí]
 b. [DO/IO [pro no/también/tampoco/sí]]

Assuming an analysis such as (19b), we would make the prediction that it could be possible to substitute pro in Spec IP, for an overt subject. Nevertheless, (20b) below, which could be derived from (20a) by assuming that the projection in bold is subject to ellipsis, shows that this prediction is incorrect. It is clear that remnants containing a preverbal IO do not admit a preverbal overt subject.¹¹⁶

- (20) a. **A ti los policías te van a detener, pero me parece que a María el detective no la va a detener.**
 To you the police cl will detain, but it seems that to María the detective no.

¹¹⁵This is especially clear for the case of the polarity item "no". Observe that overt subjects obligatorily precede "no" as shown in the contrast in (i) and (ii). Therefore if pro has the same distribution as an overt subject, it will always have to appear be preverbally with the polarity item "no" with all DO and IO remnants.

- (i) * No Juan vino.
 not Juan came.
 (ii) Juan no vino
 Juan not came

¹¹⁶ There is clear contrasts between (20b) and (ii) below:

- (i) A ti los policías te van a detener, pero me parece que a María no.
 To you, the policement they will arrest, but it looks lite to María no.

- b. ??A ti los policías te van a detener, pero me parece que a María el detective no [la va detener]
To you the police cl will detain, but it looks like to María the detective no.

Additional cases with other discourse polarity items like *también*, as in (21), confirm this fact.

- (21) a. *?A María, los niños le dieron un libro y a Pía, Pedro también [le dieron un libro].
To María, the kids cl gave a book and to Pía, Pedro too.
- b. *?A María, Juan le dio un libro y me han dicho que a Tomás, Tito también [le dio un libro].
To María, Juan cl gave a book and cl have told that to Tomás, Tito too

Therefore, we must conclude that at least the assumption that pro and overt subjects have the same distribution is untenable. By the same token, the behavior of all cases presented thus far can be only accounted for if overt preverbal subjects, DOs, and IOs occupy the same syntactic position. From this perspective, all of the examples (10)-(18), represent instances of one constituent remnant, unlike (20a), (21a), and (21b) which constitute cases of two constituent remnants.

Interestingly, examples such as these fall into the same category as those studied by Williams (1977) and Sag (1976) where a more external XP binds into the elided material predicated of a subject. Some examples include the following:¹¹⁷

- (22) * The police, I called yesterday but the firefighters, you didn't.
- (23) *What did Harry take a picture of? *What did Bill ? (from Sag 1976)
- (24) *John, who Bill saw, and who Bob did too. (from Williams 1977)

¹¹⁷ Judgements vary in this respect. Contrary to Sag's or William's judgement some speakers find some of these sentences not that deviant.

The degraded nature of the two constituent remnants can be explained, in part, by the fact that no predication or binding relation from an external element can be established into an ellided constituent. Williams and Sag have accounted for these cases by a condition of identity of predication on the copied material.

5.2.2 Quantifier extraction.

5.2.2.1 Negative quantifiers.

In Spanish, negative quantifiers can appear in preverbal position. Example (25) shows a subject negative quantifier, and (26) and (27) show a DO and an IO negative quantifier respectively.

- (25) *Nadie le debe la renta a María.*
Nobody (S) owe-3p.s the rent to María
- (26) *Nada le debe Juan a sus amigos.*
Nothing (DO) cl owe-3ps Juan (S) to his friends (IO)
- (27) *A nadie le debe Juan la renta.*
To nobody (IO) cl ow-2p.s Juan (S) the rent.

Following the hypothesis illustrated in (5), it could be argued that while a subject negative quantifier surfaces in Spec IP, DO and IO ones arise in a more peripheral position; one likely to be identified as a focus site.¹¹⁸ If this is correct, the representation of (26) and (27) is that in (28) and (29):

- (28) *A nadie [IP pro (le) debe (Juan) la renta]*

¹¹⁸ As we will see later on, it is not necessary for preverbal IOs with doubling to be focused when they appear preverbally (see footnote 121). However, this issue is irrelevant for the main point of section.

(29) *Nada* [IP pro le debe (Juan) a sus amigos]

Again, from this analysis we may infer that *pro* may be substituted by an overt subject without inducing a deviant outcome. Yet, this is plainly wrong as sentences like (30) and (31) demonstrate.

(30) **Nada Juan le debe a sus amigos.*
Nothing (DO) Juan (S) cl owe-3ps to his friends

(31) **A nadie Juan le debe la renta.*
To nobody (IO) Juan (S) cl owe-3ps the rent

A similar contrast is observed in contexts with nonnegative quantifiers:

(32) a. *?*A cualquiera tu madre pone contento.*
To anybody (DO) your mother (S) make-3ps happy

b. *A cualquiera pones contento.*
To anybody (IO) make-2ps happy

(33) a. ?*A todo el mundo la prensa ha aceptado*
To everybody (IO) the press (S) have-3ps accepted

b. *A todo el mundo ha aceptado la prensa.*
To everybody have-3ps accepted the press

Contrary to what we assumed in describing (28) and (29), Laka (1990) contends that the contrast between (25) to (27) and (30) to (31), shows that the verb has to move above Spec IP. She argues this is necessary so that a Spec-head relationship with the negative quantifier can be established. Nonetheless, certain types of evidence lead us to question the appropriateness of such an approach. For example, Spanish, unlike Italian and French, allows frequency adverbs to precede the verb in declarative clauses, as it is shown in (34):

(34) *Juan siempre me engaña.*
Juan always cl cheat-3ps

If, in fact, the verb moves higher up in contexts with preverbal negative quantifiers, we would expect frequency adverbs to follow the verb in these contexts. Examples (35)-(37) indicate that such an expectation is not met; a preverbal negative quantifier and a negative preverbal frequency adverb render a grammatical outcome:

- (35) *Nadie nunca te vio tan triste*
 Nobody ever cl saw-3ps so sad
 'Nobody ever saw you so sad'
- (36) *A nadie nunca le das las gracias.*
 To nobody ever say-2ps thank you
 'You never say thank you to anybody'
- (37) *A nadie ya saludas por las mañanas.*
 To nobody you greet in the morning.

In addition, the verb movement approach is incompatible with the idea that Romance clitics cannot be head-adjoined to the verb or the inflectional projection where the verb is located as proposed in Kayne (1994). I discussed evidence in favor of this prohibition in Chapter 4. If clitics always precede the verb but are not adjoined to it, there is no possibility for a Spec-head relation to obtain between the verb and the preverbal negative quantifier in (38).

- (38) *A nadie le debe la renta.*
 To nobody owe-3ps the rent.
 To nobody, he owes the rent.

If, as I argue, the verb movement hypothesis is not viable, some other mechanism must be at play in order to explain the apparent blocking effect exerted by preverbal overt subjects, DOs, IOs. Otherwise the contrast between

cases like (30) and (31) versus those like (25) to (27) remains unaccounted for. Observe that the contrast is especially problematic if *pro* occupies the same structural position of overt subject as proposed in (5).

The conclusion I draw from the preceding evidence is that the position preverbal subjects surface in is not exclusive of subjects. Instead that position is parallel to a typical left dislocation. In fact, the ungrammaticality of (30) and (31), repeated below as (39a and b), can be explained in terms of A' relativized minimality.

(39) a. *A nadie [Juan [le debe la renta.

b. *Nadie [a Juan [le debe la renta..

We take the subject *Juan* in (39a), and the IO *a Juan* in (39b) to be in an A' position. Thus, movement of the negative quantifier produces a blocking effect when it moves over it. This situation does not arise in (26) and (27) since, under our view, no intruding material, overt or covert, intervenes when a negative quantifier is preposed.

5.2.2.2 *Extraction of wh-elements.*

As we saw in Chapter 4, the distribution of *wh*-elements and the availability preverbal subjects seem to support the conclusion that overt subjects do not have the same distribution as nonovert ones. As we saw before, the obligatory inversion exhibited in contexts like (40) has led linguists to two different conclusions.

(40) a. *¿Qué Pedro compró en el mercado?
What Pedro bought in the market?

b. *¿A quién Susana le dio el paraguas?
To whom Susana cl gave the umbrella?

For example Lema (1989) and Goodall (1991) argue that the subject cannot occupy Spec IP because the wh-trace already occupies that position. Alternatively, Rizzi (1991) proposes that V must move to a higher position (higher than IP), such as C, to enter into a checking relation.

Yet as we also saw in Chapter 4, the contrasts offered by examples (41a) versus (41b), (42a) versus (42b), and (43a) versus (43b) below, show that an obligatory inversion effect is not always forced:

- (41) a. ¿Qué tipo de literatura Octavio Paz nos sugiere que debemos leer?
What type of literature Octavio Paz cl suggests that we should read?
b. *¿Qué Octavio Paz nos sugiere que debemos leer?
What Octavio Paz cl suggests that we should read?
- (42) a. ¿Qué tipo de libros a nosotros nos sugiere Paz que debemos leer?
What type of books to us cl suggests Paz that we should read?
b. *¿Qué a nosotros nos sugiere Paz que debemos leer?
What to us cl suggests Paz that we should read?
- (43) a. A ver, ¿de qué manera a ti te podrían criticar tus enemigos?
See, in what way to you could criticize your enemies?
See, in what way could your enemies criticize you
b. *A ver, ¿cómo a ti te podrían criticar tus enemigos?
See, how to you could criticize your enemies?
See, how could your enemies criticize you.

The conclusion given there was that the inversion effect vanishes when the wh-constituent is a complex one, such as *Qué tipo de literatura*, ('what type of literature'), and *De qué manera*, ('in what way'), but it surfaces when faced with a bare wh-constituent like *qué* ('what'), or *cómo*,

('how'). Interestingly, when inversion is not required, subjects, DOs, and IOs pattern equally with respect to the possibility of appearing between the verb and the Wh-element as shown in (42b) and (43b).

Again as discussed in Chapter 4, another context where no obligatory inversion is required, even when a bare wh- is involved, is found in Spanish in cases of long wh-extraction:

- (44) a. ¿Qué te dijo Martina que el abogado no le había dado a tiempo?
What cl said Martina that the lawyer not cl had given on time?
- b. ¿Qué dijiste que tus padres te iban a regalar?
What you said that your parent were going to give you
- (45) a. ¿A quién te dijo Martina que el citatorio ya se lo habían dado?
To whom cl said Martina that the subpoena already cl they had given?
- b. ¿Qué pensabas que a ti te iban a regalar?
What you said that for you they were going to give you?

In the examples in (44), the wh-element has been extracted over a subordinate preverbal subject, and in (45) it has been extracted over a preverbal object. What we concluded from these data was that the obligatory inversion effects must crucially depend on the syntactic nature of the moved wh-element. When this effect is controlled, we observe that preverbal subjects, DOs, and IOs do pattern the same; they are all allowed between the wh-word and the verb.

Finally, as in the case of negative quantifiers, Suñer (1994) has pointed out the possibility of insertion of

adverbials between the wh-word and the verb as in (46) and (47):¹¹⁹

- (46) ¿Con quién nunca piensas tú hablar? (From Sufer 1994)
 With who never think-2ps you to speak
 Who don't you ever think to speak
- (47) ¿A quién siempre le dices tus secretos?
 to whom always ci-say-2ps your secrets.
 Who do you always tell your secrets

These facts again, show that a V-to-C is not adequate for the inversion effect in Spanish. Nevertheless, it is not clear why pro should have a different behavior than overt subjects given the hypothesis illustrated in (5). Thus, we seem to run into the same paradox for the cases of questions as we did for negative quantifiers as the contrast in (48) shows:

- (48) a. *¿Qué Pedro compró en el mercado?
 What Pedro bought-3p.s in the market.
- b. ¿Qué pro compró en el mercado?
 What pro bought in he market.

In conclusion, the internal structure of wh questions in Spanish also leads to unexpected asymmetries—as in (48)—if pro and preverbal overt subjects have the same distribution. We have seen when no inversion is required, preverbal DOs, IOs, and subjects can appear between the Wh-element and the verb as in (41a), (42a), and (43a). If more structure is involved with preverbal DOs and IOs than with preverbal subjects, as proposed in (5), one might

¹¹⁹ See also the same point with quantifiers in the previous section.

expect some contrasts depending on whether subjects or DOs and IOs intervene.

5.2.3 The scope of quantifiers in preverbal position

In the previous section the kind of evidence introduced argued against the idea that there is more structure with a preverbal DO or IO than with a preverbal subject. It also showed that given the postulation of subject *pro*, overt subjects and *pro* must have a different distribution. These two conclusions indicate that the standard hypothesis represented in (5) is inadequate. Thus, until now I have shown that *pro* and lexically realized subjects have different distributions. In this section, I demonstrate that lexically realized subjects and IOs share the same distribution. In this way I provide more evidence for the uniform hypothesis showing that the restrictions on quantificational interpretation of preverbal DOs and IOs is parallel to that one of preverbal subjects.

The special properties of subject quantifiers in preverbal position have been taken as evidence for the appearance of these elements in Spec IP, a nonproperly governed position. For example, Rizzi (1982)—following Kayne (1984a)—reports that elements like *nessuno* cannot be licensed as NPI by a negation in the matrix when they appear in the preverbal subject position of a finite embedded clause. They thus cannot have clause wide scope

interpretation. They can only be licensed as an NPI with respect to the matrix negation when they appear postverbally as shown in the following contrast:

- (49) *Non credo che sia arrestato nessuno.*
 I do not think that he arrested nobody
 I don't think anybody will be arrested
- (50) *Non credo che nessuno sia arrestato.*
 * I don't think that nobody will be arrested (NPI)
 I think that nobody will be arrested.

Rizzi (1982) gives an explanation for this contrast in terms of the ECP. He assumes that there is movement of the NPI to target the licensing negation at LF. Consequently, the movement of the preverbal subject *nessuno* at LF would not be possible in (49) because Spec IP is not a properly governed position. However, the movement would be perfectly licensed from the postverbal position in (50) where the NPI *nessuno* is governed by the inflection.¹²⁰

¹²⁰The adaptation of the *nessuno* facts into Spanish is rather controversial. Not all speakers reject the wide scope interpretation in (i). For those speakers there is no contrast between (i) and (ii).

- (i) *No creo que nadie llegó.*
 I don't think that nobody came
- (ii) *No creo que llegó nadie.*
 I think that came nobody.

Interestingly, the speakers that do not allow wide scope interpretation for (i) do not allow it either for other preverbal IO negative elements. For those speakers, wide scope interpretation is easier with the b) cases than with the a) cases in iii) and iv) respectively.

- (iii) a. *No creo que le gustó a nadie.*
 I do not think that cl-liked to nobody
 I do not think that anybody liked it.
- b. *No creo que a nadie le gustó.*
 I do not think that to nobody cl -liked
 I do not think that anybody liked it

Jaeggli (1987) adopts this hypothesis for Spanish and observes that the same contrast holds in the distribution of wh-elements in situ. Compare (51) with (52):

- (51) a. ***Qué dijiste que quién compró el otro día?**
 What did you say that who bought the other day.
 b. **Qué dijiste que compró quién el otro día?**
 Who did you say that bought who the other day
- (52) a. ***Quien piensa que quién lo ganó?**
 Who thinks that who won it
 b. **Quién piensa que lo ganó quién?**
 Who thinks that won it who

The contrast between (51) and (52) is parallel to the one shown for Italian; the subject wh-element cannot appear in the Spec IP. Jaeggli (1985) suggests that the ungrammaticality of (51a) and (52a) has to be related to the inability of the subject wh-word to move at LF from a nonproperly-governed position like Spec IP. However, similar contrasts hold for other preverbal wh-elements like IOs or DOs. Observe the following contrasts when the IO is preverbal or postverbal as in (53a and b). As shown in (53c), a non-wh-IO can appear preverbally in the embedded clause, minimally contrasting with (53b).

- (53) a. **¿Quién crees que va a saludar a quién?**
 Who do you think will greet who
 b. ***Quién crees que a quién va a saludar?**
 Who do you think that to whom will greet

-
- (iv) a. **No creo que se lo enviase a nadie.**
 I do not think that cl-cl sent to nobody
 I do not think that they sent it to anybody
 b. **no creo que a nadie se lo enviase**
 I do not think that to nobody cl-cl sent
 I do not think that they sent it to anybody

- c. **¿Quién crees que a ti te va a saludar?**
who do you think that to you will greet

We believe that the explanation provided for the pairs (51) and (52) should be the same as the one given for (53) with preverbal IOs. Thus, an explanation in terms of the ECP and the crucial idea that Spec IP is a non properly governed position falls short of giving a complete understanding of the entire paradigm.

By contrast, Uribe-Etxebarria (1992) provides the basis for such a uniform explanation. She observes that the interpretation of preverbal universal quantifier subjects is more restricted than that of postverbal universal quantifier subjects in Spanish. For example, preverbal subject quantifiers in an embedded clause cannot take wide scope over an extracted wh-object. Thus, in (54) the reading in which *cada senador* loves a different person is not possible. The most salient reading is the one in which *cada senador* loves the same person (narrow scope of the universal quantifier).

- (54) **¿A quién dices que cada senador amaba?**
Who did you say that every senator loved?

However, when the subject quantifier is in a postverbal position, the ambiguity reappears. Sentence (55) can have both a wide scope and a narrow scope reading.

- (55) **¿A quién dices que amaba cada senador?**
Who did you say that loved every senator
Who did you say that every senator loved

On this point, English significantly differs from Spanish. May (1985) claims that a preverbal quantifier can take wide scope over an extracted wh-element:

(56) What do you think everyone bought? (from May 1985)

From this contrast, it can be concluded that the nature of the position occupied by the subject in Spanish has to be characterized in a rather different way from English.

Uribe-Etxebarria (1992) proposes that the mismatches can be understood if subjects are in an A' position in Spanish.¹²¹ She makes the interesting parallel between this

¹²¹ The idea that preverbal subjects like preverbal DOs and IOs are dislocated to an A' position is usually challenged by the following contrast from Rizzi (1986b):

- (i) *Nessuno, l'ho visto.
Nobody, I have seen him.
- (ii) Nessuno è venuto
Nobody came.

Rizzi (1986b) takes (ii) to show that negative quantifiers cannot be left dislocated in an A' position. Thus, if subjects are in an A' position in (i) it is hard to understand the contrast in grammaticality between the two examples. We take this contrast just to mean that object negative quantifiers are incompatible with the accusative clitic. Thus, the contrast in (i) and (ii) is reminiscent of the ban on the doubling object negative quantifiers with accusative clitic (see Dobrovie Sorin 1990 for Rumanian and Suñer 1988 for Rioplatense Spanish). Observe that an IO negative quantifier in preverbal position, which requires doubling in all dialects of Spanish, behaves similarly to a preverbal subject negative quantifier. For instance, it does not need to be focused in order to appear preverbally as shown in the parallelism between (iii) and (iv).

- (iii) Dicen que a nadie le tienes miedo.
they said that to nobody you fear
They said that you don't fear anybody.
- (iv) Dicen que nadie se atrevió
they said that nobody dared

position and the topicalization position of English. For example, a wide scope interpretation of a topicalized quantifier in English is not possible as shown in the contrast in (57a) and (57b). Similarly, no wh-element seems to be allowed when it is topicalized as shown by the ungrammaticality of (58b).

- (57) a. Someone thinks that every problem, Mary solved. (from Lasnik and Uriagereka, 1988).
 b. Someone thinks that Mary solved every problem
- (58) a. Who thinks that I like who?
 b. *Who thinks that who, I like

Therefore, this type of approach leads to the treatment of preverbal subjects as having the same quantificational constraints of a topic-like element. This is feasible if the preverbal DOs and IOs, on the one hand, and preverbal subjects, on the other, are characterized in the same fashion.

The conclusion arrived at from these facts is that no further movement is licensed when a quantifier has been already moved to an A' peripheral position before Spell Out. The facts are subsumed under the Unambiguous Binding approach of Müller and Sternefeld (1993). Namely, subjects in a left dislocated position (one type of A' movement) are

There is a difference between the former cases and the one with direct object negative quantifiers, which cannot be doubled. The DO must be necessarily focused to appear preverbally.

- (iv) *Dicen que NADA compraste en la tienda*
 They said that nothing you bought in the store.

followed by movement of the quantifier at LF (another type of A' movement). This yields a violation of the principle of Unambiguous Binding in (51) of Section 2.4.2.¹²²

In conclusion, it has been shown that preverbal subject quantifiers in Spanish behave in many cases in a similar fashion to preverbal object quantifiers. This similarity can be seen in the fact that we find the same contrasts with direct objects in wh-questions such as in (51) and (52) and with preverbal IOs as in (53). It has also been shown that Spanish preverbal subjects differ from their English counterparts with respect to wide scope interpretations of a quantifier. This cross-linguistic difference confirms our suspicions regarding the assumption that the preverbal subject occupies the Spec IP in Spanish.

5.3 Dislocated subjects. Previous accounts.

If, as we have been showing, preverbal subjects parallel preverbal objects in their behavior, we have to give an answer as to what prevents subjects from appearing in Spec IP. We will see that the answer is crucially related to a

¹²² Epstein (1992) gives a theoretical motivation for this ban in terms of economy of derivation. For a quantifier in a topic position to have wide scope, it is necessary to move further at LF in a second step. This derivation in two steps is blocked by a derivation in one step where the quantifier and wh-element are not moved to the topic position before Spell Out, but are moved in one swoop at LF from a postverbal position. For advantages of an Unambiguous Binding Approach see Müller & Sternefeld (1995).

broad question of what allows Spanish to have the V S O as well as the V O S orders.

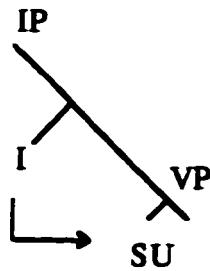
There are two lines of inquiry that have attempted give an answer to these questions. In this section I review them and point out some of their shortcomings. I propose a solution which in some respects combines some important conclusions from these two approaches.

5.3.1 Non Polysynthetic Approaches.

One type of answer to the question posed above is the idea that case and agreement are satisfied postverbally, and therefore movement to a preverbal position is triggered by discourse reasons as in any left dislocation. This kind of approach has been proposed by Contreras (1991) and Zubizarreta (1994).

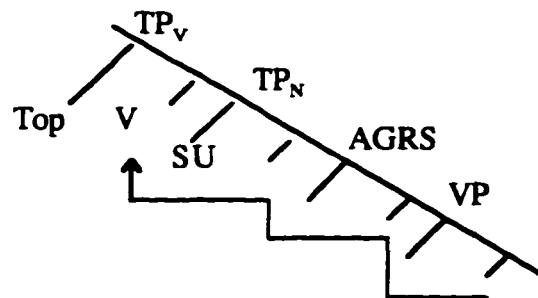
Contreras (1991), for example, suggests that economy principles prevent IP from projecting a specifier position. In his analysis, subjects in Spanish are assigned case and agreement under C-command by inflection, which is taken to be lexical and, as such, is able to L-mark a postverbal (C-commanded) subject. Given this perspective, there is no justification for the projection of a specifier position of IP. Preverbal subjects are generated as adjuncts, and case and agreement are presumably assigned postverbally to a null pro when no overt subject appears.

(60)



Similarly, Zubizarreta (1994), assuming a richer system of inflectional projections, proposed that subjects are assigned case and agreement prior to the movement of the verb to the highest inflectional projection. The highest Spec of the projection where the verb ends up is a position related to what she calls 'neutral topics' and movement of the subject to that position is purely optional.

(61)



In important respects, these approaches claim that Spanish is the mirror image of English. While in English, subject NPs satisfy their agreement and case properties in a Spec position above the position of the verb, in Spanish subject NPs satisfy these properties in Spec positions before the final target movement of the verb at Spell Out. In this respect, Spanish is thought to share important commonalities with V S O languages like Irish or Arabic.

However, there are many aspects of Spanish that do not seem to fit into this perspective. From a discursive point of view, the Spanish V S O order has special pragmatic properties that do not seem to occur in Irish or Arabic. From a syntactic point of view, there seem to exist quite important differences between standard V S O languages and Spanish. For instance, it is typical of this type of language for there to be adjacency requirements between the verb and the subject that follows. However, such constraints does not seem to apply in a language like Spanish, which, for example, also allows the V O S order as we have shown in Chapters 2 and 3.¹²³

- (62) Ayer compró el libro Juan.
Yesterday bought the book Juan.

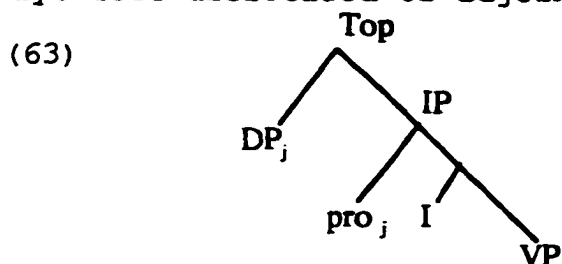
2.3.2 Polysynthetic approaches

Another type of approach claims that Spanish is nonconfigurational or polysynthetic with respect to the distribution of subjects. This seems to be corroborated by the existence of a rich inflectional paradigm, the possibility of pro-drop, and the different possible positions of the subject (free word order).

This intuition has been put to work in different ways by various linguists (see Jelinek, 1984). Baker (1996), in his study of polysynthetic languages claims that lexical DP

¹²³ A detailed explanation of the syntactic differences between Spanish and V S O languages goes well beyond the scope of this chapter.

arguments are always associated with *pro*. In his view, *pro*'s are the real argument and lexical DPs are adjoined to a more peripheral position as in (62). This proposal is adopted by Barbosa (1996) in her study of the distribution of preverbal subjects in European Portuguese. A *pro* would be in a Spec IP position, while preverbal subjects are always left dislocated or adjoined.



There are two important questions that arise from adopting this proposal: (1) Why could a lexical DP not occupy the argumental position? (2) What kind of syntactic relation is established between *pro* and the corresponding lexical DP?

Question 1 is related to the fact that *pro* and lexical DPs do not seem to have the same distribution as we have seen in Section 1. The idea that lexical subjects and *pro* must have different distributions has been also argued by Rigau (1988) for Catalan and Cardinaletti (1996) for Italian (see also Bonet 1988 and Solà 1992). For example, Rigau shows that in Catalan the behavior of *pro* parallels that of clitics and not that of strong pronouns. She proposes that *pro* appears in Spec IP, and a strong pronoun

appears adjoined to IP. A similar intuition is found in Cardinaletti who suggests that in Italian the behavior of *pro* runs on a par with some lexical pronouns but not with others. Italian seems to have strong pronouns like *lui* ('he') and *loro* ('they') and weak pronouns like *egli* ('he'), and *esso* ('it'), and *pro* seemingly behaves like weak pronouns. Cardinaletti's conclusion is that *pro* must move to the specifier of a functional projection Agr2, whereas lexical subjects may only appear in the specifier of a higher Agr1. If these arguments are correct, they would build a strong case against considering lexical DP's and *pro* as exhibiting the same distributional properties.

The question not yet answered by these approaches is why *pro* and a lexical subject must have a different distribution. Baker (1996) proposes an answer based on the idea that rich inflections absorbs case:

(64) An agreement morpheme adjoined to a head X receives that head's case at S-structure/PF. (From Baker 1995, page 86)

Thus, the reason why lexical DPs cannot occupy the argumental position is due to the lack of case. This reasoning, however, crucially implies that *pro* does not have case previous to Spell Out. Therefore, the case filter has to formulate as a condition on S-structure that applies only to lexical XPs:

(65) The Case Filter

* NP without case if NP has phonetic features and is in an argument position.

However, a formulation of the case filter in these terms is dubious given the visibility condition, which requires an XP to be in a case position in order to be visible for theta role assignment (see Lasnik & Uriagereka 1988 and Chomsky 1995, chapter 1). On the other hand, Rizzi (1982 Chapter 4, 1986a) has also shown that *pro* is licensed only if it is in the context of assignment of case. This is especially crucial for the instances of *pro* in the so-called Aux-to-Comp constructions in which Rizzi argues that expletive *pro* is licensed by the auxiliary in C, which exceptionally assigns nominative case to it:

(66) *Ritengo esser pro nevicato anche sotto I mille metri.*
I believed [to have snowed even below 1000 meters]

Following these reasonings, new premises need to be added to case theory. One must assume that even if *pro* does not get morphological case at PF because it is absorbed by the agreement, it must still receive it at LF. Thus Baker (1996) adopts a conjoined theory of the case filter that applies to lexical XPs at PF and applies to *pro* at LF. In this way, agreements are deleted at LF and case is assigned to *pro* at that level. Notice, that it still difficult to understand how the lexical DP associated with *pro* gets its morphologic case before Spell Out, given that case has been absorbed by the corresponding agreement.

This issue is particularly problematic if the DP and pro form a chain as is claimed by Baker (1996) (see below).

The second question that a polysynthesis type approach has to confront is how to define the syntactic relation established between pro and a lexical DP. It is obvious that the relation cannot be pure binding because that would lead to a principle B violation since pro would be bound by the lexical DP related to it:

(67) Juan_i pro_i vino.

Baker assumes that the XP and pro are connected by a chain of the type proposed for CLLD by Cinque. This kind of chain, however, has a rather special status. It is not derived by movement, but it is computed representationally.¹²⁴ There must be a matching of indexes between the adjoined XP elements and pro.¹²⁵ Baker (1996) formulates the chain condition in the following way:

(68) The chain condition

X and Y may constitute a chain only if:

(i) X C-commands Y.

(ii) X and Y are co-indexed.

(iii) There is no barrier containing Y but not X

(iv) X and Y are not distinct in morphosyntactic features (i.e. category, person, number, gender, case, etc..)

¹²⁴ If it were derived by movement, there would be no reason for the existence of pro in argumental position in the first place. The chain has to be always computed representationally.

¹²⁵ The nature of the algorithm that determines how this matching of indexes takes place is not explicitly discussed by Cinque (1990) nor by Baker (1996).

As the chain condition is formulated, it leaves open the possibility that the two elements involved could be either a pronominal and a lexical XP or two lexical XPs with the same index. As we mentioned earlier, binding plays no role in the computation of this kind of chain. However, as proposed by Baker, the only two elements involved in this kind of chain are a lexical XP in an adjoined position and a empty pronominal in the argument position. Why should this be so? It remains unclear why the existence of this special kind of chain (lexical XP, pro) relies on the already stipulated property that pro can only occupy argumental positions. There does not seem to be any obvious answer. Thus, Baker (1996) proposes the adjunct licensing condition below:

(69) The adjunct Licensing Condition (from Baker 1995)

An argument-type phrase XP generated in adjoined position is licensed if and only if it forms a chain with a unique null pronominal in an argument position.

In conclusion, we have seen that there are two possible alternatives to account for why preverbal subjects are dislocated. The first type of approach relies on the idea that subjects satisfy case and agreement before the verb moves to a higher inflectional projection in a similar fashion as has been described for V S O languages. This proposal encounters problems in that Spanish does not seem to fit very well into the class of verb-initial languages from either a discursive or a syntactic point of view. The second alternative, adopts the idea that Spanish shares the

property of being polysynthetic with respect to the syntactic distribution of subjects. In this respect, Baker's polysynthesis proposal, which requires *pro*'s to be in the argumental position and any other XP to be adjoined, seems promising. However, if we adopt this hypothesis we have to adopt nonobvious assumptions like a conjoined formulation of the case filter. Even in this case, it is unclear how an adjoined lexical DP receives case. On the contrary, we saw that the chain relation between the dislocated XP and *pro* had a special status. The chain is not the product of movement but takes place by a mechanism of co-indexing. Finally, it is unclear why the existence of this special type of chain is contingent on the fact that an empty pronominal is in an argumental position.

5.4 Person Agreement as a clitic

The reason preverbal subjects behave like preverbal DOs and IOs is, it would seem, related to the fact that the language allows free variation with respect to the position of the subject. By the same token, it has to be also related to the possibility of *pro*-drop. In this respect it is feasible to group Spanish with the polysynthetic languages.

However, the best way to derive these properties is different from Baker's polysynthesis parameter. Instead,

it makes sense to adopt the proposal made by Taraldsen (1992) that agreement is a clitic and, as such, it not only absorbs case, but it also receives theta role assigned to the subject.¹²⁶

The idea that Agr is an argument of the verb seems confirmed by how binding is crucially determined by it. Hurtado (n.d.), Jelinek (1984), Olarrea (1994) and Torrego (1996) notice that Spanish allows certain plural DPs to agree with 1p, 2p, as well as 3p in the plural verbal paradigm.

- (70) a. Los estudiantes tenemos mala memoria.
The students have-1pp bad memory.
- b. Los estudiantes tenéis mala memoria.
The students have-2pp bad memory.
- c. Los estudiantes tienen mala memoria.
The students have-3pp bad memory.

Crucially, there is a change in patterns with respect to binding depending on whether the plural DP is associated or not with such agreeing elements. For instance, a plural DP object such as *los estudiantes*, not associated with any agreement or clitic, cannot be coindexed with either the 1pp pronoun in the adjunct clause in either (71a) and (71b). The DP *los estudiantes* takes the default 3pp pronoun or an agreement feature as shown in (72):

- (71) a. *Acusaron [a los estudiantes]_i después de que se peleasen con nosotros.
They accused [the students]_i after they fought with us.

¹²⁶ The theory outlined here differs from Taraldsen's in several respects. For example, Spanish agreement does not head an independent functional projection, but it is a pure argument which enters into Spec-head agreement with a doubling XP.

- b. * Hablaron de [los estudiantes]_i después de que se peleasen con nosotros.
They talked about [the students]_i after they fought with us.
- (72) a. Acusaron [a los estudiantes]_i después de que se peleasen con ellos.
They accused [the students]_i after they fought with them.
- b. Hablaron de [los estudiantes]_i después de que se peleasen con ellos.
They talked about the students_i after they fought with them.

These facts show that a plural DP binds a 3pp pronoun or agreement by default. However, Olarrea (1994) points out that when the plural DP is associated with 1pp or 2pp subject agreement, the binding effects are the opposite. The plural DP associated with 1pp subject agreement can only be bound with 1pp in the adjunct clause as in (73b), but not with a 3pp as in (73a).

- (73) a. *[Los estudiantes]_i salimos de la reunión después de que los_i acusaran.
The students_i leave-1p.ers pl. the meeting after they accused them_i.
- b. [Los estudiantes]_i salimos de la reunión después de que nos_i acusaran.
The students leave-1p.ers pl the meeting after they accused us_i.

Therefore, the examples above point to the conclusion that the appearance of agreement on the verb is crucial in evaluating what the possible antecedent for a pronoun can be. This could only be shown in a language that allows different agreement possibilities for the same DP as shown above. When the DP appears not to be associated with any agreement element, it can only bind a default 3p pronoun. When the DP is associated with an agreement morpheme it can only bind a pronoun whose person specification matches the agreement associated with the DP binder.¹²⁷

¹²⁷ The conclusion is rather puzzling for those theories that claim that pro and subject DPs might have partially the same distribution (eg Chomsky 1982 and Rizzi 1986a). From that perspective, it is harder to express how the

The same kind of paradigm can be observed in the domain of standard clitic doubling. A non doubled DP cannot be the binder of a 1pp or 2 pp pronoun in an adjunct clause. It can only be coindexed with a 3pp pronoun in (72b). However, when the DP is doubled by a 1pp pronoun, the judgments reverse, and co-indexing can only take place with a 1pp pronoun. We obtain the following minimal pair in (74), which parallel the case we have seen for the the subject agreement paradigm in (73).

- (74) a. *Acusaron [a los estudiantes]_i después de que hablasen de nosotros,
They accused [the students]_i after they talked about us,
b. Nos acusaron [a los estudiantes]_i después de que hablasen de nosotros,
cl -1p. pl accused [the students]_i after they talked about us,

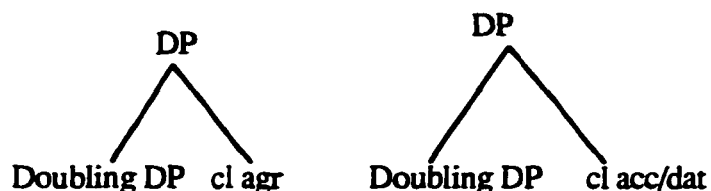
The facts point to the same conclusion with respect to the paradigm of clitic doubling. The presence of the clitic crucially determines the coreference possibilities of the DP associated with it. All these data raises two questions: (i) How can we express the parallelism between clitic doubling and subject agreement with respect to their co-reference patterns? and (ii) How can we integrate a DP and Agr or clitic to explain why they are crucial in determining coreference with any other pronoun in the sentence?

We might start answering the first question by taking seriously the idea that person agreement is a clitic. The facts discussed above not only showed that there was a

different agreement changes affect the binding possibilities of these DP.

parallelism between clitic doubling and agreement; but also that agreement was crucial in the determination of A-binding. Such a result leads us to think that person agreement itself should be considered an argument. We propose that the relation between the Agr and the DP is the same kind of relation established between a DP and a clitic as we saw above: they are both instances of "clitic doubling".¹²⁸ In doing so, we adopt a specific proposal about clitic doubling made by Torrego (in progress) Uriagereka (1995a). Torrego has proposed that the clitics (and in our proposal, Agr) head a DP in the spirit of Postal (1974). This DP is also integrated by the doubling DP, which merges with the head to form what we can call a big DP.¹²⁹

(75)



¹²⁸ There is an obvious question to be answered. If person agreement is a clitic, why should it be obligatory present on the verb. We think that part of the answer has to be encoded in the parameter that determines non configurationality with respect to the subject argument (see Jelinek (1984) and the discussion below). Observe, that the same obligatoriness of the presence of the clitic is obtained with IO in certain Spanish dialects. I will not touch here on the interesting question of why this is not the case for DO.

¹²⁹ The analysis is not exactly the ones proposed in Torrego or Uriagereka (1994). They propose that there is a complement pro of the D. Observe, that given antisymmetry, the clitic agreement projects to an intermediate X' which the DP attaches to in order to be a specifier.

The virtue of this proposal is that it integrates the relation between the doubling element and the clitic (or Agr) into a core notion such as Spec-head relation.¹³⁰ In this way the big DP would inherit the phi-features of the both elements that integrate it: the clitic and the DP. that doubles it.¹³¹ Thus, gender is determined by the DP as shown in the following example:

- (76) *Las estudiantes creemos que nosotras/*nosotros tenemos razón.*
 The students-fem believe-1pp that we-fem/we-mas are right.

The Big DP occupies the corresponding subject argumental position for cl Agr, as the DO doubled element occupies the corresponding argument position for object clitic.

In this way, we obtain a way to express why agreement is crucial in the determination of the binding possibilities when associated with plural DPs in Spanish. The clitic Agr will be the head of the Big DP, and therefore it will determine the person specification on the index of the big DP. This is the element that enters in the computation for binding purposes. The Big DP will be only able to be co-indexed with another element that shares the same person specification already determined by the agreement clitic as

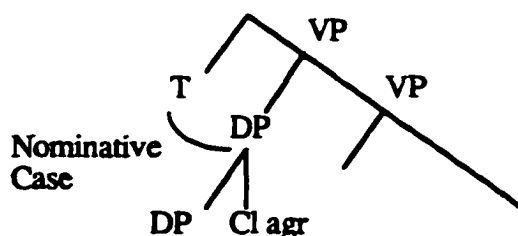
¹³⁰ Sportiche also claims that the relation of the doubling DP and the clitic is one of Spec-head at LF. Earlier theories of doubling either treated the relation of the doubled and the clitic as one of representational chain Jaeggli (1982), Borer (1983). Baker's proposals follow the second way of reasoning in dealing with the problem of polysynthesis. Some of the problems with that second type of approach have been pointed out in the previous section.

¹³¹ We assume with Harris (1995) and Torrego (1996) that there is no 3 person feature.

the paradigm in (73) showed. When the DP is not doubled by any clitic, no person specification is explicit in the reference of the DP. The DP would only be able to be co-indexed with a 3 person by default as shown in the contrast in (71) and (72).

As we mentioned before, the agreement in features between the doubled DP and the clitic agreement is resolved internal to the big DP, which is in an argumental position in D-structures. Since the clitic is the head of the DP, it will be also the element to absorb the nominative case from the tense specification. They will then be transmitted by Spec-head to the doubled DP. Following Alexiadou and Anagnostopoulou (1996) we could also say that clitic agreement gets case by incorporating to T^0 . Tense assigns its case to the big DP by being in a very local relation with the upper Spec of the VP in which the subject argument is situated.¹³²

(77)



Clitic agreement would move to a functional projection external to T as it has been proposed for any kinds of

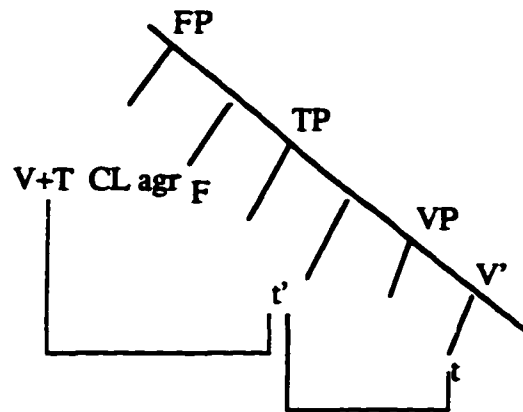
¹³²For proposals that nominative case is assigned in this configuration see Koopman and Sportiche (1991) and Kitagawa (1986).

clitics.¹³³ For example, Uriagereka (1995) proposes an F position unrelated to tense to which clitics adjoin in Galician and Portuguese. Here we will adopt the proposals made by Kayne (1994) in this respect and assume that agreement clitics like other clitics in tensed clauses adjoin to an abstract functional head devoid of features (see also Taraldsen 1992).¹³⁴ Subsequent to the adjunction of the agreement clitic to the abstract functional head we call F, the verb with tense would adjoin to it as has been already proposed for other cases of enclisis with imperatives and infinitives as proposed by Kayne (1994), and Benincà and Cinque (1990)

¹³³From our perspective, person agreement is not functional projection in the language, contrary to tense. (see Chomsky 1995 and Rouveret 1991 for a discussion of the special status of Agr in the collection of inflectional projections)

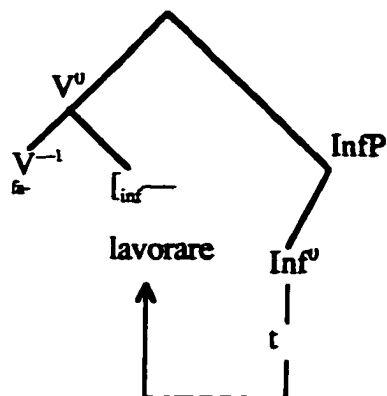
¹³⁴As we have discussed before The reasons that drive Kayne to this conclusion are two: In the first place if clitic was able to adjoin to a head with features as tense and the verb subsequently adjoined to tense, a case of multiple adjunction to the same head. Secondly, if the verb adjoined to the clitic, already adjoined to tense, the sequence V CL Tense would be obtained. Kayne (1994) point out that pronouns never appear within words. It is feasible to extend his idea to this case and propose that the sequence V CL Tense is a case of a pronoun within a word. By treating person agreement as a pronomial clitic, we therefore offer a formal explanation of why the sequence Verb-agreement-tense is not attested in the Spanish verbal paradigm. Observe that such a conclusion is not immediately available if agreement is treated as a functional projection as in Pollock (1989) and Belletti (1990).

(78)



The motivation for this last incorporation of the verb into the clitic could be understood under Guasti (1994) and Rizzi and Roberts's (1989) extension of morphological subcategorization into the syntax. For instance, Guasti (1994) in her discussion of causative verbs extends proposals of Selkirk about subcategorization in morphology. Causative verbs as *fare* come with a morphological subcategorization frame that indicates that they require the incorporation of an infinitive as shown in (79):

(79)



Let us assume that clitic agreement has a morphological subcategorization frame requiring a verbal host as in (80):

(80) $Cl_{agr} [-V]$

This requirement would immediately explain why verbs appear incorporated to the left of the clitic agreement. From this perspective, there is a crucial distinction between clitic agreement and object clitics: the latter lack a subcategorization for verbs.¹³⁵

Now that we have laid out our hypothesis, we can revisit some of the major conclusions with respect to the empirical data discussed in section 5.2. The data showed, on the one

¹³⁵ This perspective of agreement as a clitic poses the question of what the status of subject clitics are. I propose that subject clitics are like clitic agreement, but they lack a verbal subcategorization frame and therefore do not need a verbal host. Thus, we predict that there is a complementary distribution between agreement (clitic agreement in this study) and subject clitics. This complementary nature is obtained in some Northern Italian dialects (see Poletto 1993). However, what happens with cases in which both agreement and subject clitics co-appear? I am lead to think these are cases of clitic "tripling" with a structure as in (i). I leave for futher research what the consequences of this possibility are. I would assume that French falls in this category :

(i) $[[NP cl_{subj}] cl_{agr}]$

hand, that perverbal subjects and preverbal objects have similar syntactic behavior, and, on the other, that the distribution of lexical subjects seems to differ from the distribution of pro and silent subjects.

With respect to the first issue, I take the position that the clitic is the only element that can satisfy θ -role assignment and case for the subject argument. Thus, we follow line of thought established by Jelinek (1984) that in some languages the real arguments are the agreement, which she also takes to be clitics. This defining property is encoded in the parameter which distinguishes non polysynthetic languages from polysynthetic ones.¹³⁶ As mentioned before, there are good reasons to think that Spanish can be classified into the first group with respect to the subject argument. Thus, we start to understand why Spanish does not pattern like a canonical S V O (English) or V S O (Irish and Arabic) as implied by Contreras (1991) and Zubizarreta's (1994) approach.

From our perspective the DP is the doubling element of a clitic argument, and it is completely optional. Its presence or absence is immaterial to the discharge of the theta role or the assignment of nominative case to subjects. Lexical DPs are licensed by being in a Spec-head

¹³⁶ Baker (1996) encodes the parameter in a different fashion. He proposes that arguments in these languages have to be co-indexed to a morpheme (see his 1996 Morphological Visibility Condition p. 17), even though the morpheme is not the real argument.

relation with the clitic agreement inside the big DP, and they will inherit all their properties in that way. The position of the doubled DP is motivated purely by pragmatic reasons since it plays no role for case. In Spanish subjects would have the option of moving to NeutP or to FocP as proposed in Chapter 3.¹³⁷

We are assuming that there is no inflectional projection Agr and that verbs in Spanish move beyond T⁰ in order to incorporate to the subject clitic agreement. So any movement of the doubling DP SU past the V+T+Cl_{agr} must be driven by considerations of semantic-discourse interpretation such as is typical for the case of left dislocations of DOs and IOs. Thus, we are able to understand why preverbal subjects and preverbal DOs and IOs behave in the same fashion. Parallel to the analysis of preverbal subjects, DOs and IOs are also associated with a clitic, which in the same fashion is responsible for the satisfaction of case and theta role assignment.¹³⁸

Our data also showed that sentences with silent subjects pattern differently from sentences in which a preverbal overt subject appears. Given the postulation of pro as a subject argument, the conclusion was that pro must have a different distribution from overt subjects. However, from

¹³⁷ This leads to the conclusion that subjects are always moved out of the VP.

¹³⁸ Thus, our perspective leads us to think that CLLD of DO and IO are instances of clitic doubling as has been suggested by Kayne (1995).

our perspective there is never any *pro* argument in the Spec of an inflectional projection¹³⁹. The subject argument is always the agreement clitic that appears enclitic on the verb. Obviously, sentences with a preposed doubling DP subject differ from sentences in which no doubled DP is preposed, just as sentences with a dislocated object differ from sentences in which the object is not left dislocated. Specifically, the preposing adds a new layer of structure in preverbal position: a topic phrase. In this sense, we adopt Rizzi's (1995) proposals that left dislocated elements must involve a topic head as in (81a). When no preposing takes place, no TopP appears preverbally as in (81b):

- (81) a. Top P[SU/DO/IO Top] V+T+CLagr_i [[t_i t_i]
 b. V+T+Cl agr_i [VP DP t_i...

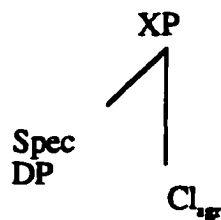
Finally, our proposal compares in interesting ways with Baker's polysynthesis proposal. Baker proposes that three important elements are involved in explaining the property of polysynthesis: *pro*, lexical DPs, and agreement. The element *pro* is licensed by being in Spec-head with agreement. The lexical DP is licensed by being in a chain relation with *pro*. Thus, the polysynthesis parameter relies on the important idea that rich agreement absorbs case. This leaves *pro* being the only possible element to

¹³⁹ Uriagereka (forthcoming, b) proposes also the elimination of *pro* in favor of feature checking in Basque. His proposal also predicts that when no lexical DP appears preverbally no specifier of IP is involved.

appear in argumental position, given the assumption that *pro* does not require case. Thus, case is the factor that explains the different distribution of lexical XPs and *pro*'s.

From our perspective there are two elements involved in explaining non-configurationality: the Agr itself and the doubling DP. The parameter in question also involves the special properties of agreement. Agreement morphemes not only absorb case, but they can also bear a θ -role and are, therefore, the real argument of the verb. This fact can be expressed if agreement is thought to be a pronominal clitic. The question of the different distribution of Agr and lexical DPs is understood since they have different X' status: the Agr is a head and must end up in a head position by Spell Out, while the lexical DP is a maximal projection and must always be in an specifier position. Since there is no *pro* licensed by an inflectional projection, the question of the different distributions does not arise.

(82)



Finally, in the Polysynthesis Hypothesis, the lexical DP is licensed by being co-indexed to pro given the postulation of a chain with the following properties:

- a) X C-command Y (from Baker 1995)
- b) X and y are co-indexed
- c) There is no barrier con-containing Y but not X

Also, a condition should be added that postulates that lexical DP can only be licensed by being co-indexed to a pro (see the adjunct condition above).

Given Torrego's account of clitic doubling, the DP is licensed by being in a Spec-head relation with the agreement clitic as shown above. Thus conditions a) b) c) of the chain condition in the polysynthesis parameter reduce to the standard notion of Spec-head agreement under our doubling hypothesis. On the other hand, we assume doubling can only take place when two elements with the same referential index differ in X' status: one is a head and the other element is an XP in Spec. Therefore, an XP will be only able to be related to a referential head element, in our case a clitic pronoun.

5.4.1 Morphological evidence

In this section, I will give some interesting evidence that points to the fact that subject agreement has the same morphological structure of an object clitic. This evidence

can be observed by examining -mos, a 1pp agreement morpheme, as in (83):

- (83) hablamos
we speak

hablábamos
we spoke

Harris (1995) in his discussion of object clitics in the framework of Distributive Morphology proposes that clitics share the same internal morphological structure of nominals. It is interesting to point out *-mos* shares some properties with those object clitics.

- (84) *m-o-s*

The *m-* of *m-o-s* is arguably the same root that we see in other 1pp pronoun clitics as *me*. Thus, *m-* is taken to be an indicator of 1 person clitic:

- (85) *m-e*
lps

Harris, claims that the object pronouns *nos*, *os*, and *los* belong to the same word class many ordinary words ending in *o*, such as *palo*, *ajo*, *lado*, etc. The morpheme *o* is the default word marker of what he calls the I class nominals:

- (86) *n-o-s* *o-s* *l-o-s*
1pp 2p 3pp ACC

- (87) *pal-o*

It is natural to assume that the *o* of *mos* is also the default word marker of class I nominals:

Finally, the *-s* is the same marker for plurality we find in the nominal/clitic system. Evidence that *-s* is plural, and not an arbitrary consonant for AgrS, comes from

sentences such as (88a) in which the *-s* of *mos* disappears when it amalgamates with the object pronoun *nos*. There is no phonological explanation for this phenomenon as shown by the contrast between (88b) and (89). The phonological structure of *los* and *nos* is the same is the same, however *-s* only must disappear with *nos*:

- (88) a. Va-mo(*s)-nos
Go- 1 p.p. SU- 1 p p OB
Let's go
- b. Llevémo(*s)-nos este libro
take-1pp this book
Let's take this book
- (89) Llevémo*(s)-los
Let's take them
- Llevemos dos

I think that the apparent anomaly of (88a) can be taken as a case in which the pronominal roots *mo* and *no* form a clitic cluster, and *-s* is directly adjoined to the whole as in (90)¹⁴⁰.

- (90) Va- [[MO][NO]s]
root- [[1 p SU]- [1 p OB]-Plural]

Harris (1995) has proposed this kind of analysis for many dialects of Spanish in which the plurality marker *-s* is used. He proposes that certain anomalies on the distribution of the *-s* in clitic cluster can be understood if plural *-s* adjoins as a whole to the cluster. For example, in varieties of Caribbean Spanish the *-s*, which

¹⁴⁰ Some further morphological condition must explain why this double adjunction is possible when the two clitics agree in person specification. However, as we saw in (89), this is not possible with combination 1pp and 3pp in Standard Peninsular Spanish.

clearly indicates the plurality of *nos* appears following the singular object clitic *lo*. Harris (1995) takes the fact to indicate that *s* adjoins to the whole cluster as in (91). A similar phenomenon appears in Mexican Spanish with the combination of double objects. In Spanish the combination of double object clitic in 3 person yields reflexive/impersonal *se* instead of *le*, for the dative. However, *se*, contrary to *le*, cannot indicate plurality. Nevertheless, in Mexican Spanish a plurality marker for the dative is added to the whole cluster when *se* combines with the object clitic. Harris proposes the analysis in (92). He calls the cases of (91) and (92) "parasitic plurals". It is plausible to think that the same mechanism is involved in (90) with the MO-NO sequences.

- (91) ¿Que si NOS leyó el cuento? Sí, [[NO] [LO] S] leyó (from Harris 1995)
Did he read us-DAT the story-ACC? Yes, he read it ACC
- (92) El sombrero [[SE] [LO] S] quité a los hombres (from Harris 1995)
I took the men's-Dat hat-ACC off (them)

Finally, in certain Andalusian dialects and in Judeo-Spanish, the 1pp object clitic is identical to that of subject agreement, as in (93). While, it is not natural to have imperatives with 1 plural in these varieties, speakers still found that *mos* subject and *mos* object in combination in imperatives are inconceivable as in (95). However, this is not the case with other clitics as in (96). The impossibility of (95) recalls the typical ban against sequences of the same clitic in combination (Bonet 1991).

- (93) mos vamos (Andalusian, Judeo-Spanish)
 lpp go-lpp
 we go
- (95) *Vamo(s)mos (Andalusian, Judeo-S)
 go l ppS-lppO.
- (96) ?Comamosio
 Eat-lpp-3ps.
 Let's eat

5.5 Conclusion

In this chapter, I have shown that there is no exclusive position for preverbal subjects in finite clauses in Spanish. Evidence against such a position was drawn from data on ellipsis, extraction of quantifiers, wh-questions, and finally the restrictions on quantifier interpretation in this position. The facts either showed that we could not assume the existence of pro in preverbal position or that there were striking similarities between preverbal subjects, DOs, and IOs with respect to quantificational interpretation. Thus, the standard hypothesis in (5) was rejected.

To solve these puzzles, I have proposed the elimination of AgrS as a functional projection. Rather, we have proposed that person agreement should be considered an argument of the verb. Thus, we adopted the position that AgrS is a clitic, which absorbs theta role and case (see Jelinek 1984 and Taraldsen 1992). Independent evidence for such a position comes from the similarities between clitic

doubling constructions and agreement. We saw that person agreement, like a clitic in a doubling construction, crucially determines the binding possibilities. This could be shown in those cases in which different person agreements can be associated with the same plural DP. It also leads to the proposal that the relation between DP and agreement is one of clitic doubling.

As a consequence of this analysis, we eliminate the notion that *pro* is an argument of the verb in favor of thinking that person agreement is the real argument. Thus the empirical argument that *pro* seems to show a different distribution from overt DPs reduces to the fact that a clitic has a different distribution from a DP. Under Torrego's analysis of doubling, we can accommodate the different distribution of both elements since one of them is a head (the clitic agreement) and the other is an XP. Finally, we have shown there is some morphological evidence to think that subject agreement has the same morphological structure of an object clitic. This was mainly illustrated with the lpp clitic *mos*.

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