1. Introduction

The purpose of this dissertation is to investigate some of the grammatical properties that lead to word order variation in Spanish, and to argue that these properties are inherently related to markedness restrictions on syntactic structure. In this first chapter I introduce the problems that will be addressed in the chapters that follow and the theoretical assumptions that I will adopt for their analysis. I first present an overview of recent analyses of word order and the data from Mexican Spanish that renders these analyses problematic. Then I discuss the OT framework that I adopt throughout this dissertation. I conclude by laying out some of my general assumptions about the syntax of Spanish and by characterizing the variety of Mexican Spanish that provides the data for this dissertation.

1.1 The study of word order

1.1.1 General overview

Costa (1998), one of the most influential works on word order variation developed in recent years, summarizes the fundamental issue that needs to be addressed when studying word order phenomena. As noted by Costa, the study of word order variation provides two different, but presumably closely related areas of investigation. The first one is cross-linguistic word order variation, the study of why constructions with the same interpretive properties and discourse status can differ with respect to word order across different languages. The second one is language-internal word order variation, that is, the study of why, in any particular language, constructions

with different interpretive and discourse properties can show differences with respect to word order. Although most of the research that follows will concentrate on the latter issue, it is worth noting that the proposal that I will develop here stems from what I believe are two serious limitations of most cross-linguistic analyses of word order.

In order to characterize what these two problems are, consider the analysis in Alexiadou & Anagnostopoulou (1998), another very influential work on word order variation. Simplifying somewhat, this analysis takes as its starting point the observation that there are strict SVO languages, strict VSO languages, and languages that show an SVO/VSO alternation with respect to unmarked word order. English would correspond to the first group, Welsh to the second, and Greek and some varieties of Spanish to the third group.

(1) ENGLISH
John bought the newspaper. SVO

(2) WELSH
Gwelodd y bechgyn y draig VSO
saw the boys the dragon
'The boys saw the dragon.' (Costa 1998: 1)

(3) GREEK
a. O Petros pandrefitke tin Ilektra. SVO
Peter married Ilektra

b. pandrefitke o Petros tin Ilektra. VSO
married Peter Ilektra
(Alexiadou & Anagnostopoulou 1998:492[1])

[1] No free translations of these examples are provided in the original.

On a first approximation it looks like these word order differences can be accounted for by appealing to the interaction of a number of different parameters, set to different values in the languages under consideration. This is precisely the proposal developed in Alexiadou & Anagnostopoulou (1998). The first parameter they propose has to do with the satisfaction of the Extended Projection Principle (EPP) of Chomsky (1981, 1982). Alexiadou & Anagnostopoulou argue that VSO and SVO/VSO languages without expletives satisfy the EPP via verb raising because they have verbal agreement morphology with the categorial status of a pronominal element.[2] From this it follows that (i) preverbal subjects in SVO/VSO languages are not in an A-position, and (ii) VSO orders never involve a covert expletive. Concretely, Alexiadou & Anagnostopoulou propose, following work by Taraldsen (1978) and Rizzi (1982), that in these languages verbal morphology agreement includes a nominal element ([+D, +interpretable phi-features, potentially +Case], so V-raising in these languages checks the EPP feature in the same way that XP-movement does in non-pro-drop languages. Consequently, it is not necessary for the subject DP to move to satisfy the EPP in null subject languages and the VSO order that these languages can display follows automatically. On the other hand, this parameter is set to the opposite value in languages like English. Accordingly, in the absence of expletive insertion, movement of the subject XP to [Spec, AgrS] is the only option available to satisfy the EPP. This explains the strict SVO order attested in

[2] See also Contreras (1991) and Ordóñez & Treviño (1999).

these languages.

The second parameter has to do with whether or not [Spec, T], TP being the phrase immediately subjacent to AgrSP, is projected for Case-theoretic reasons. Alexiadou & Anagnostopolou propose that [Spec, T] is projected in Welsh and other Celtic languages. Following the analysis of Irish in McCloskey (1996), the VSO order in these languages is then derived by movement of V through T, ultimately to land in AgrS, and by movement of the subject DP to [Spec,T] to satisfy Case requirements. Consequently, the subject has a fixed position in these languages (the strict VSO order). In comparison, this parameter is set to a negative value in Greek and Spanish: [Spec, T] is not projected in this case, and so the subject does not need to move from its VP-internal position to satisfy Case requirements. Given verb raising, it does not need to move to satisfy the EPP either, and so the SVO/VSO alternation can now be understood as an instance of optionality, presumably related to discourse considerations. The essentials of Alexiadou & Anagnostopoulou's proposal can be summarized as follows:

(4) a. ENGLISH: No verb raising: EPP satisfied by XP movement.
$[_{AgrSP}\ [_{DP}$ Subj $]_i$ ... $[_{VP}\ t_i$ V]] **Strict SVO**

b. WELSH: Verb raising satisfies the EPP, subject DP moves to [Spec, T] for Case-theoretic reasons.
$[_{AgrSP}\ V_j\ [_{TP}\ [_{DP}$ Subj $]_i\ t_j\ [_{VP}\ t_i\ t_j\ ]]]$ **Strict VSO**

c. GREEK/SPANISH: Verb raising satisfies the EPP, [Spec, T] is not projected. Subject DP can remain in [Spec, V] or move to [Spec, AgrS].
$[_{AgrSP}\ V_j\ [\ ...\ [_{VP}\ t_j\ ]]]$ **SVO/VSO**

Impressive as this proposal is, it faces two major challenges that result from broader empirical considerations. On a first approximation it is not evident why a parametrical account of word order variation should be inherently problematic. But this is the result of the fact that too narrow a set of phenomena is being considered in the first place, namely, active sentences with transitive predicates. When we expand this narrowly defined set, a completely different picture emerges, since it is not unusual that in any particular language, the relative order of the arguments of a predicate may be different depending on the specific class of verbs to which the predicate belongs.[3] The relevant facts are well-known from the descriptive literature on word order (see for example Arnaiz (1998) for Romance languages and Holmberg & Rijkhoff (1998) for Germanic languages), and Spanish is precisely a case in point. Following the standard assumption that unmarked word order is displayed by sentences that can be felicitous answers to questions like *what's happening?*, in (5) a clear asymmetry can be observed when transitive, psych, and unaccusative predicates are all taken into account.[4]

(5) MEXICAN SPANISH:
Qué pasa/pasó?
what happens/happened
'What's been happening/what happened.'

[3] This criticism holds not only of Alexiadou & Anagnostopoulou's analysis, but of many other analyses that directly or indirectly deal with word order facts. Some exceptions are Contreras (1976) and Fant (1984) for Spanish, and Belletti & Rizzi (1988) for Italian.

[4] Fant (1984) reports the same word order facts in (5) for Peninsular Spanish, but Zubizarreta (1998) reports a SV order for unaccusatives in an out-of-the-blue (sentence focus) context. The varieties of Spanish described in Contreras (1976) and Arnaiz (1998), show the same pattern as Mexican Spanish.

Unmarked word order

a. Una muchacha compró los discos. S V O
a girl bought the records
'A girl bought the records.'

b. A Juan le gustan los chocolates. IO V S
to Juan DAT-CL *like.*3p *the chocolates*
'Juan likes chocolates.'

c. Llegó tu hermano. VS
arrived your brother
'Your brother arrived.'

Clearly, any analysis of word order that takes into account only transitive sentences and derives the movement of the subject to a preverbal position as a consequence of a property that the subject must satisfy there, will not derive the right result, since the subject DP does not occupy the same position in different classes of predicates. Whatever condition is met by fronting the subject to a preverbal position in transitive constructions is clearly not being met in unaccusative constructions like (5c), where the subject remains in a post-verbal position and the preverbal position remains empty. Similar complications arise with Psych predicates. Even if we assume that the preverbal oblique *experiencer*[5] of a construction like (5b) satisfies the same condition that the transitive subject does in (5a), it is not clear why it is the oblique *experiencer*, and not the grammatical subject, that is fronted to this position.

This observation is particularly troublesome for analyses of word order in transitive constructions where the subject undergoes movement to the preverbal

[5] From here onwards, specific semantic roles will be signaled in italics.

position in order to satisfy a condition specifically defined with respect to the argument of the verb that bears the subject grammatical relation, such as transformational analyses of Spanish where Case is assigned in the preverbal position. It also represents a serious problem for Optimality-theoretic analyses where the subject moves to this position to satisfy a structural subject condition (typically the SUBJECT constraint of Grimshaw 1997) as in Samek-Lodovici (1996), Grimshaw & Samek-Lodovici (1998), and/or a structural Case requirement (Costa 1998).[6]

It is not immediately evident how this criticism applies to the proposal in Alexiadou & Anagnostopolou (1998), though, where fronting of the subject in transitive constructions is an optional operation. It could be argued that this option is taken in (5a), but not in (5b) or (5c). In either case, no syntactic condition is satisfied by fronting of the subject, so it comes as no surprise that the absence of this fronting operation has no effect on the grammaticality of the relevant examples.

Although Alexiadou & Anagnostopolou's analysis fares better than Subject-condition analyses (either transformational or Optimality-theoretic), it still raises two important issues. First, if fronting is entirely optional in Spanish, it is not obvious why speakers have such clear intuitions about unmarked word order (i.e. IO V S for Psych predicates instead of S V IO, for example). And second, if fronting is entirely optional, this means that for every sentence in Spanish where a constituent is fronted there should be an alternative option, where the preverbal position is empty.

[6] All these analyses will be discussed in detail in chapter 3 of this dissertation.

This second issue leads us to the second problem faced by parametrical accounts. Such accounts are based on the assumption that once some parameter is set for a given language, the language will show a fairly uniform set of grammatical properties that are related to the parameter in question. For example, a language is either *pro*-drop or it is not, and a number of (sometimes mutually exclusive) properties follow from this setting of the parameter. In other words, parameters represent an all-or-nothing approach to the characterization of grammar and grammatical constraints. However, as research in Optimality-theoretic syntax has pointed out since its earliest days (see for example Costa 1998; Sells et.al. 1996; Grimshaw 1997; Samek-Lodovici 1996; Grimshaw & Samek-Lodovici 1998) there is considerable empirical evidence that the all-or-nothing approach to word order cannot be entirely correct.

In relation to the parametrical analysis of the satisfaction of the EPP in Alexiadou & Anagnostopolou (1998), Mexican Spanish is particularly illuminating. Mexican Spanish, like any other variety of Spanish, displays all characteristics of languages where the EPP is satisfied through verb raising; null subjects, lack of expletives, lack of definiteness restrictions on post-verbal subjects. Initially, the data in (5) would appear to further provide evidence in favor of this analysis: since the EPP has been satisfied through verb raising, it is not surprising that the presence or absence of a preverbal XP in the examples in (5) has no effect on grammaticality. But, once again, an entirely different picture emerges as soon as we expand the range of constructions in which we expect to find these same effects. In particular, all the examples from

Mexican Spanish below, where the preverbal position is empty, are extremely marked, if not downright ungrammatical:[7]

(6) MEXICAN SPANISH
a. ??Compró Juan el periódico. V S O
bought Juan the newspaper
'Juan bought the newspaper.'

b. ??Le regaló Juan un disco a María. V S O IO
DAT-CL *gave Juan a record to María*
'Juan gave a record to Mary.'

c. ??Le gustan a Juan los chocolates. V IO S
DAT-CL *like.*3p *to Juan the chocolates*
'Juan likes chocolates (lit. chocolates appeal to Juan).'

Example (6a) is particularly important, since it shows that the SVO/VSO alternation is absent in Mexican Spanish,[8] but all the examples pose the same problem for Alexiadou & Anagnostopolou's proposal. In their analysis, the unacceptability of the data in (6) goes unaccounted for. The verb has raised to I^0 in all cases, carrying the [+D] feature that characterizes verbal agreement morphology in null subject

[7] Other varieties of Spanish do not necessarily behave in this way. For example, constructions like (6a), and (6b) have been reported to be fine in the varieties discussed in Gross & Bok-Bennema (1986), Contreras (1991) and Zubizarreta (1998), amongst others. I will not attempt to account for these cross-dialectal differences in this dissertation, since this would require data which is unavailable to me at this point. In chapter 4, however, I will briefly comment on a potential analysis to accommodate them.

[8] The speakers of Mexican Spanish consulted judge VSO sentences as either strongly deviant or ungrammatical. My own judgments are that they are strongly deviant in most cases, but they become clearly ungrammatical if other elements such as adverbs also appear in the post-verbal field. The absence of the SVO/VSO alternation is not unique to Mexican Spanish. The deviant nature of VSO constructions with an empty preverbal position has also been reported in the varieties of Spanish described in Suñer (1994) and Zagona (2002), and for matrix (though not subordinate) clauses in the variety of Spanish described in Contreras (1991). Even for some varieties that allow VSO with an empty preverbal position, Niño (1993a) and Zubizarreta (1998:100-102) report that the typical pattern is one where a topic occupies the preverbal position.

languages, so EPP checking should have taken place successfully. By contrast, all the examples in (7), where the subject appears in preverbal position, are fine[9]:

(7) a. Juan compró el periódico. S V O
Juan bought the newspaper
'Juan bought the newspaper.'

b. Juan le regaló un disco a María. S V O IO
Juan DAT-CL *gave a record to María*
'Juan gave a record to María.'

c. Los chocolates le gustan a Juan. S V IO
the chocolates DAT-CL *like.*3p *to Juan*
'Juan likes chocolates.'

Interestingly, the relevant fact in (7) is *not* that the subject appears in preverbal position. As shown in (8), what improves the examples in (6) is that there is *some* maximal projection in the preverbal position. It can be an adverbial, as in (8a), the direct object, as in (8b), or the indirect object, as in (8c-d). In this respect Mexican Spanish displays a pattern strikingly similar to the verb-second behavior described for Yiddish in Diesing (1990).

(8) a. Ayer compró Juan el periódico. Adv V S O
yesterday bought Juan the newspaper
'Yesterday Juan bought the newspaper.'

[9] One should note from the start, though, that not all of the examples in (7) are discourse-equivalent. Examples (7a) and (7b) are felicitous in an out-of-the blue context, while (7c) is not, as noted originally in Fant (1984). Example (7c), has a reading where either the subject is a topic, or where the experiencer IO is in focus (or both). Similarly, not all of the constructions in (8) are discourse-equivalent. I will return to this issue in chapter 4.

b. El periódico lo compró Juan. O V S
the newspaper ACC-CL *bought Juan*
'John bought the newspaper.'

c. A Juan le gustan los chocolates. IO V S
to Juan DAT-CL *like.*3p *the chocolates*
'Juan likes chocolates.'

d. A María le regaló Juan un disco. IO V S O
to María DAT-CL *gave Juan a record*
'Juan gave a record to Mary.'

These data point to the conclusion that Mexican Spanish has an active EPP requirement that is independent of: (i) the pro-drop character of this language and: (ii) the requirement that the subject occupy the preverbal position.[10] It is crucial to note at this point that the contrasts observed above cannot be analyzed as the result of Mexican Spanish being set to a strict parameter that requires satisfaction of the EPP through XP movement. This is because Mexican Spanish, like any other dialect of Spanish, ordinarily tolerates certain constructions with an empty preverbal position. We have already seen that this is what is observed in unaccusative constructions like (5c), repeated here as (9a). Other constructions that follow this pattern are pro-dropped constructions (9b) and impersonal passives (9c):

[10] Although more research is needed, there is some evidence that this property is not unique to Mexican Spanish. In her study of different kinds of VS constructions, based on data from numerous varieties of Spanish, Hatcher (1956) had already noticed the unusually high frequency with which the verb in these constructions is preceded by an adverbial XP. Luis Casillas (p.c.) further reports similar judgements for Caribbean Spanish (except with respect to *wh*-interrogatives, to be dealt with in chapter 5).

(9) a. Llegó tu hermano.
arrived your brother
'Your brother arrived.'

b. Compraron el periódico.
*bought.*3p *the newspaper*
'(They) bought the newspaper.'

c. Se vendió la casa.
CL *sold.*3s *the house*
'The house was sold.'

Intuitively, Mexican Spanish appears to have an active EPP requirement, which has to be satisfied by XP movement, and that can be overridden in cases like (9), but not in cases like (6). Clearly enough, this state of affairs is problematic for parametrical accounts, where grammaticality is related to the satisfaction of some condition, and ungrammaticality to the failure to satisfy it. This is the fundamental observation that will later justify an Optimality-theoretic account of these facts.

To summarize the discussion so far, I have argued for the following two points: (i) any analysis of word order must take into consideration the fact that in some languages, the relative order of the verb with respect to its arguments can be different for different classes of verbs, and; (ii) there is empirical evidence that the fundamental well-formedness conditions that govern word order and word order variation are not all-or-nothing conditions. With these two considerations in mind, I turn now to the second major issue concerning the study of word order, namely, language-internal word order variation.

1.1.2 Language-internal word order variation

As described in detail in Costa (1998), language-internal word order variation corresponds to those instances where the canonical word order attested in a language is perturbed by some syntactic operation. Fronting operations, for example, can change the word order observed in the unmarked case. *Wh*-movement and topicalization in Spanish and many other languages are such operations. Some examples are provided below.

(10) [Los discos]$_{Top}$ los compró una muchacha. O V S
the records ACC-CL *bought a girl*
'The records, a girl bought them.'[11]

(11) Qué compró Juan? O V S
what bought Juan
'What did Juan buy?'

When considered in isolation, the word order facts in (10) and (11) do not appear to be particularly problematic (or even interesting). Fronting of interrogative *wh*-operators and topicalization can be straightforwardly analyzed as operations that displace constituents from the position where they are generated in order to comply with some principle or parameter of the language in question (the *Wh*-Criterion of Rizzi (1996), for example). From this perspective, the importance of the resulting word order issues is understandably much less than the importance of defining such

[11] Example (10) can also have a reading where the post-verbal subject DP is in focus (i.e. *a GIRL bought the records*). Again, I will return to this issue in Chapter 4.

principles or parameters, on the one hand, and of characterizing the conditions under which displacement operations can take place (island contexts, accessibility, the ECP, etc.), on the other.

However, since the late 1980's it has become increasingly clear that the language-internal word order facts resulting from displacement operations are not only much more complex than previously thought, but they can actually provide fundamental insights for understanding the nature of the principles that trigger such displacements in the first place. Consider, for instance, the impact that object shift has had on the theoretical architecture of the Minimalist Program. It is easy to lose sight of the complexity of language-internal word order variation when looking at a single displacement operation. But when several displacement operations are taking place simultaneously in the same sentence, and when the behavior of these operations is compared across different types of sentences, the enormous complexity of word order variation becomes evident.

Consider in this respect the analysis of Italian in Rizzi (1997), one of the most influential works on left-peripheral word order facts. Rizzi argues that the relative word order of fronted XPs and of different types of complementizers on the left periphery in Italian is not amenable to an analysis where there is a single functional projection (i.e. CP) above IP. His observations are based on an extensive amount of data, of which I reproduce just an illustrative sample here. In Italian, fronted topics necessarily precede fronted *wh*-operators, as shown in (12).

(12) a. [Il premio Nobel, [a chi lo daranno]]?
'The Nobel prize, to whom will they give it?'

b. *[A chi, [il premio Nobel, lo daranno]]?

Fronted topics, however, do not seem to be located in Spec-CP (in the traditional sense), since they follow *che*, the complementizer that introduces a finite subordinate clause.

(13) a. Credo [che [il tuo libro, loro lo apprezzerebbero molto]].
'I believe that your book, they would appreciate it a lot.'

b. *Credo [il tuo libro, [che loro lo apprezzerebbero molto]].

Furthermore, the relative order of topics and *wh*-operators in embedded interrogatives can be reversed, resulting in sentences like (14b), where the *wh*-operator precedes the topic.

(14) a. Mi domando, [il premio Nobel, [a chi lo pottrebbero dare]].
'I wonder, the Nobel Prize, to whom they could give it.'

b. ?Mi domando [a chi, [il premio Nobel, lo pottrebbero dare]].

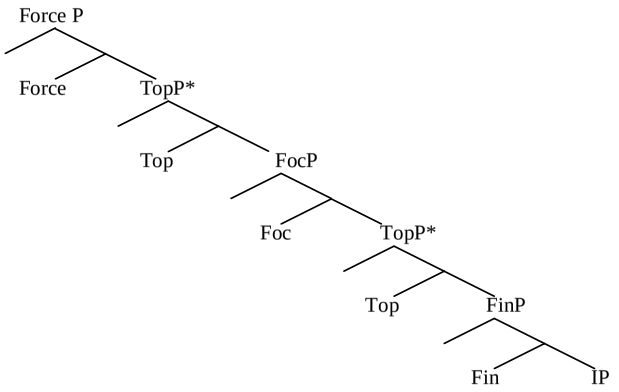
Finally, relative clauses are something like the mirror image of matrix interrogatives. In this case, the relative operator must precede a fronted topic.

(15) a. Un uomo [a cui, [il premio Nobel, lo daranno senz'altro]].
'A man to whom, the Nobel Prize, they will give it undoubtedly.'

b. *Un uomo [il premio Nobel, [a cui lo daranno senz'altro]].

To account for these and other facts, Rizzi (1997) proposes the exploded-CP structure reproduced in (16).

(16)



Under this proposal, the word order facts presented in (12-15) are accounted for roughly as follows. Interrogative operators move to the specifier of a unique Focus Phrase (FocP). They can be preceded by topics, as in (12a), because a Topic Phrase (TopP), which hosts topics in its specifier, is the phrase that immediately dominates FocP. However, there is the possibility of also having a TopP below FocP[12], which

[12] In Rizzi's proposal, Focus and Topic phrases are only projected when there are topics or foci that need to be fronted. Notice that once this possibility is allowed, the resulting analysis begins to look more like a restatement of the facts.

accommodates those cases where the interrogative operator precedes a fronted topic, i.e., example (14b). Complementizers that take a finite IP (*che*), are generated in the head of the Force Phrase, the highest phrase in the structure. This is why they always precede fronted topics. Finally, relative pronouns move to [Spec, Force], and this explains why they always precede fronted topics as well.

In a proposal like Rizzi's, the complexity of word order variation is accounted for by suggesting that the set of functional projections of a sentence is much more complex than would appear at first sight, an idea that originates in Pollock's (1989) work on the structure of IP. To account for the word order facts, this kind of analysis capitalizes on the larger number of head and specifier positions which it provides. Henceforth, I will refer to this general approach as the 'Functional Phrase Approach' to explaining word order variation.

It seems fair to point out that this kind of proposal comes at a high price, though. The proliferation of functional phrases in the C-system is unappealing in any theoretical framework, for no other reason than Economy of Structure. But additionally, it seems to me that the specific form of Rizzi's (1997) proposal is almost determined *a priori* by the assumptions that Rizzi starts out with. If we assume, as Rizzi does, that different types of sentences have essentially the same template of functional projections, that movement of interrogative and relative operators is *necessarily* movement to a position in the CP system, and if we further assume that fronting of these elements and others, such as topics and fronted foci, *necessarily*

involves movement into a specifier position, then it is hard to see how any account of the Italian facts above would not end up looking a lot like Rizzi's.

The crucial point, of course, is that none of these assumptions is as innocent as it looks. The first is a theory-specific assumption characteristic of most transformational frameworks, but one that is not shared by other theories like LFG or OT-syntax. The second assumption, in contrast, is more standard, but may not be as well-founded as it appears to be. A fair number of recent analyses of *wh*-movement in Spanish, for instance, have concluded that [Spec, I] plays a crucial role in this phenomenon, either because the *wh*-operator moves through this specifier position on the way to its ultimate landing site (Goodall 1991a, 1991b) or because it corresponds to its ultimate landing site (Fontana 1994, Zubizarreta 1998). Diesing (1990) also argues that [Spec, I] is the ultimate landing site of *wh*-operators in Yiddish, and even in those languages like English where the correlation between *wh*-movement and the CP system is solidly founded, issues remain. Consider for instance the debate as to whether or not there is movement of the *wh*-operator to [Spec, C] when the operator corresponds to the subject (Grimshaw 1997, *inter alia*). The third assumption, that all fronting operations necessarily involve movement into a specifier position, is even more controversial. At the very least, there is considerable evidence pointing to the conclusion that topicalization can involve adjunction, as discussed in Baltin (1982), Rochemont (1989), Saito (1989), Lasnik & Saito (1992), McCloskey (1992) and Vallduví (1992). Similarly, *wh*-movement has been argued to involve adjunction in some cases, as in Déprez (1991) and Rudin (1988).

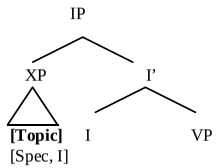
If we start out with a different set of assumptions, a very different picture emerges. For example, in her work on the nature of sentential structure (the Extended Projection analysis), Grimshaw (1993, 1994, 1997, 2000) argues that sentential projections and many of the operations that take place in them are subject to well-formedness conditions that are defined in relation to the structure of the sentence as a whole and *not* in relation to some particular specifier or head position. Well-formedness conditions defined in this way can be satisfied in different ways in sentences with different structures. For the sake of illustration, assume that topicalization is triggered by a well-formedness condition that requires topics to appear in the sentence-initial position. Costa (1998), following work in the functionalist tradition, provides an informal definition of such a well-formedness condition, reproduced here in (17).

(17) TOPIC-FIRST: Topics are sentence-initial.

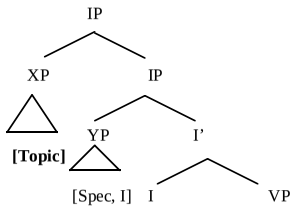
Crucially, topicalization satisfies this condition in all the structures in (18), even when the topic XP is in a different position in each one. In any given language, other considerations might ultimately rule out some of these options over the others,[13] but, in principle, they could all be attested in one and the same language.

[13] For example, a strict requirement on subjects to appear in [Spec, I] would rule out (18a) as a possible topicalization structure when the topic is not the subject. Notice that even in this case there would still presumably be at least two ways of satisfying the well-formedness requirements of TOPIC-FIRST, one for subjects and one for non-subjects.

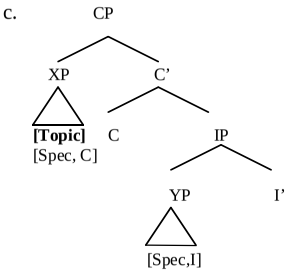
(18) a.



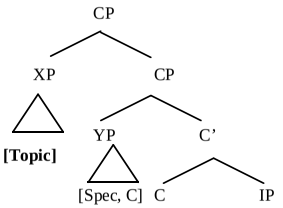
b.



c.



d.



However, it is clear enough that postulating simple well-formedness conditions like TOPIC-FIRST is problematic, since they are almost always trivially falsified by the data. In the Italian examples (14b) and (15) the topic is not the clause-initial constituent, for example. In order to keep simple well-formedness conditions like (17), we require a theoretical framework that can specify with precision the conditions under which they can be overridden. Optimality Theory offers such a possibility.

1.2 Optimality Theory

1.2.1 The architecture of OT

Optimality Theory (Prince & Smolensky 1993) is a theory of constraint interaction in generative grammar. In OT, Universal Grammar (UG) is conceived as a set of constraints on linguistic representation, CON, that is present in every language. Crucially, these constraints are interpreted as violable, and the architecture of OT is such that every grammatical construction in a language will still violate a considerable number of constraints. The postulation of violable constraints comes from the observation that many of the well-formedness requirements in any given language seem to be in conflict with one another, but: a) different languages prioritize the satisfaction of different well-formedness requirements, and: b) given a conflict between well-formedness requirements *A* and *B*, prioritizing the satisfaction of *A* over *B* does not necessarily result in a state of affairs such that the effects of *B* are no longer observed elsewhere in the language.

OT accounts for this fact by postulating that constraints are violable, but also that they are hierarchically ranked with respect to one another. This amounts to saying that languages differ with respect to how constraints are prioritized when there is such a potential conflict. Accordingly, in OT the grammar of a particular language is a particular ranking of universal constraints. Constraint rankings are represented as in (19). The connective >> means *dominates* (or *outranks*).

(19) LANGUAGE A: $\mathbf{C}_\alpha$ >> $\mathbf{C}_\beta$ >> $\mathbf{C}_\gamma$ ...
LANGUAGE B: $\mathbf{C}_\alpha$ >> $\mathbf{C}_\gamma$ >> $\mathbf{C}_\beta$ ...
LANGUAGE C: $\mathbf{C}_\beta$ >> $\mathbf{C}_\gamma$ >> $\mathbf{C}_\alpha$ ...

In this way, OT provides a simple mechanism for accounting for cross- linguistic diversity while still deriving it from a universal set of well-formedness conditions. Here it is worth clarifying an important point. As such, Optimality Theory is not a theory about natural language, but rather a theory about constraint interaction. The theoretical constructs about linguistic structure that are adopted in an OT analysis are expressed solely in the constraints in CON, and, strictly speaking, nothing about the architecture of the OT framework needs to be reflected in the characterization of these constraints. In this respect OT can be conceived as a framework under which different theories about natural language can be understood.

Returning to the architecture of OT, in this framework the grammar of a particular language is a function that maps a linguistic *input* into its "surface" structural description or *output*. The precise characterization of the input (especially in syntax) depends on what linguistic theory we adopt for our OT analysis. For the time being we can think of it as an abstract representation of the lexical, interpretive and feature specifications that correspond to the (non-structural) properties of the surface representation.[14] The "surface" form of an input (i.e. its output) is arrived at through

[14] Despite differences across theories, the majority of syntactic analyses in OT agree that the input does not contain any form of phrase-structural representation.

two different processes. In the first process, a universal function GEN (for Generator) takes the input and generates a set of possible outputs or parses (the *candidate set*) for that input. Once again the precise characterization of the candidates generated by GEN depends on the linguistic theory we adopt, but for the time being we can think of them as some form of surface structure.[15]

In the second process, one of the candidates in the candidate set is selected as the optimal output for the input under consideration by evaluating how it fares with respect to the ranking of constraints that constitutes the grammar of the language. The winning candidate is the candidate that is most harmonic with respect to the constraint ranking. This selection process is carried out by the function EVAL, which takes the candidate set and returns it as a partial order, with its most harmonic member at the top (McCarthy 2002). EVAL does not select the most harmonic candidate based on the number of constraints that it violates, but rather on the relative ranking of the constraints it violates. Given a specific ranking, an optimal candidate is the candidate that satisfies the highest ranked constraint on which competing candidates conflict (Grimshaw 1993). It is of no importance if the optimal candidate fares worse than losing candidates with respect to lower-ranked constraints, as long as it abides by the highest ranked constraint that other candidates fail to satisfy.

The mapping of an input into an output can be represented in a tableau like the one in (20). The input is typically represented in the top left-hand corner of

[15] I will lay out my specific assumptions about the nature of the input and the candidates in the candidate set in the section that follows.

the tableau. The constraint ranking of the language is represented to the right of the input. Solid lines dividing the columns for each constraint symbolize a strict ranking, dotted lines symbolize an undetermined ranking.[16] The candidates generated by GEN are represented in the cells in the column below the input. When a candidate incurs a violation of a constraint, the violation is represented by an asterisk in the cell where the row that corresponds to the candidate and the column that corresponds to the constraint intersect.

(20)

< INPUT >	$\mathbf{C}_\alpha$	$\mathbf{C}_\beta$	$\mathbf{C}_\gamma$	$\mathbf{C}_\delta$
☞C ANDIDATE A			*	*
CANDIDATE B		*!		*
CANDIDATE C	*!			

Informally, evaluation of the candidates in the candidate set proceeds as follows.[17] First, all candidates are evaluated with respect to $\mathbf{C}_\alpha$, the highest-ranked constraint.

[16] Strictly speaking, OT requires a strict ranking for every constraint in the grammar. It is very often the case, however, that the relative ranking between two or more constraints cannot be determined solely on the basis of the data that one is analyzing. It is in these cases that a dotted line is used. It has also been suggested extensively in the OT literature that constraints may be "tied" in some cases. Tied constraints will not be crucial for the analysis to be developed in what follows, and so I will not go into details about their formalization.

[17] There are different ways in which candidate evaluation can be formally understood. One is the method of *Mark Cancellation* (Prince & Smolensky 1993). In this method, which can only be applied when a tableau compares two candidates, those violations that the two candidates share can be cancelled, after which the winning candidate is the one that satisfies the highest ranked constraint on which the two candidates conflict. Another method is developed in Samek-Lodovici & Prince (1999), where constraints are functions from sets of candidates to sets of candidates, such that a constraint

Candidates A and B satisfy this constraint, but candidate C violates it. Since this is the highest ranked constraint, candidate C is immediately ruled out of the competition: it incurs a fatal violation (represented as *!) which necessarily makes it sub-optimal (i.e. less harmonious) vis-a-vis the other two candidates, which do satisfy $\mathbf{C}_{\alpha}$. Notice that in fact candidate C violates less constraints than either of the two other candidates, but this is inconsequential, since satisfaction of constraints is evaluated hierarchically and not quantitatively. The candidate set is now reduced to candidates A and B, and they are evaluated against the next highest ranked constraint, $\mathbf{C}_{\beta}$. Since candidate B violates $\mathbf{C}_{\beta}$ but candidate A does not, candidate B's violation of $\mathbf{C}_{\beta}$ is fatal and it is dropped out of the competition. With this we have exhausted the candidate set, and so candidate A is selected as the winner, which is represented by the symbol ☞. The procedure outlined here helps to clarify what is meant in OT when we say that an attested surface representation (i.e., the output) is simply optimal. In a state of affairs where every potential output is going to violate a certain number of constraints, the attested output corresponds to the one possibility that best satisfies the hierarchical ranking of constraints that corresponds to the grammar.

OT considers two basic types of constraints, faithfulness constraints and markedness constraints. Faithfulness constraints govern the identity relations between the input and the candidates generated by GEN. In contrast, markedness constraints

takes a set of candidates and returns the subset of those candidates that best satisfy that constraint. Since a lower ranked constraint in turn takes the subset given by the higher ranked constraint, EVAL can then be understood in terms of function composition. See McCarthy (2002) for further discussion.

evaluate the form (i.e. the structural configuration) of these candidates. An important note on terminology is necessary here. Markedness as a technical term for grouping certain kinds of constraints in OT is *not* equivalent to the descriptive or typological definition of markedness (see McCarthy (2002: 13-17) for discussion). It is important to keep this distinction in mind throughout this dissertation because my proposal concerns both markedness in the descriptive sense (i.e. clause *A* is more marked than clause *B*) and markedness constraints, most of which (but not all) are directly related to markedness as understood descriptively. To avoid this terminological confusion as much as possible, in what follows I use the term *structural markedness* to refer to markedness in the descriptive sense, and *markedness constraint* to refer only to those constraints directly related to *structural markedness*.

Before laying out the more specific assumptions that I will adopt in the OT analysis to be developed here, it is worth discussing a number of fairly wide-spread misconceptions that have given raise to criticism of this framework. One of the most common misconceptions about OT is that it is simply a mechanism of interpreting constraints that allows us to account for patterns that do not conform to these constraints. Yet this is far from the case. As noted in Grimshaw (1997), the fact that conditions on representation are understood as "soft" constraints in OT allows very simple definitions of these conditions. In other words, OT is a theory where the constraints on linguistic structure are very simple, and the vast complexity of attested linguistic structures is accounted for instead by the interaction between these constraints. This stands in sharp contrast with all-or-nothing representational models

like GB, where the definition of conditions on representation has to be, in comparison, fairly complex. Otherwise, the range of empirical facts accounted for by these conditions would be minimal.

Furthermore, the predictive power of these simple, violable constraints is considerable indeed. Even though OT allows for the possibility of constraints to be violated, it is crucial to remember that in OT the grammar of a particular language is considered to be a particular ranking of universal constraints. As a result, for every constraint postulated to be part of UG, in principle it should be the case that such a constraint appears at the top of the constraint ranking in some particular language. This means that in such a language, the conditions determined by the constraint are met without exception, because the constraint is undominated. In other words, we still expect "soft" constraints to display the behavior of "strong" principles or parameters in some cases. This is a powerful and concrete prediction that results from the specific architecture of OT, and it is also a fundamental guideline when trying to determine the nature and form of the constraints in UG. Concretely, the violable nature of constraints in OT does not allow us to simply postulate any kind of constraint on linguistic structure, since in principle there will be languages where this constraint will not ever be violated. Summing up, interpreting a constraint on linguistic structure as a violable constraint in OT does not make this constraint empirically vacuous.

1.2.2 Optimality Theoretic Syntax

As previously mentioned, OT is not a linguistic theory, but rather a theory of constraint interaction. Accordingly, research in Optimality-theoretic syntax has been undertaken in a variety of theoretical frameworks, including functional-typological syntax (Legendre et. al. 1993; Aissen 1999a, 2000), Lexical-Functional Grammar (Bresnan 2000a, 2000b; Choi 1999; Sells 2001, *inter alia*) and Minimalist-derivational syntax (Pesetsky 1998; Broekhuis 2000; Heck & Müller 2000). The analysis in this dissertation is developed in the OT representational framework that has stemmed from the work in Grimshaw (1993, 1997), Legendre et. al. (1995, 1998), Samek-Lodovici (1996), Costa (1998), Grimshaw & Samek-Lodovici (1998), among many others. The theoretical constructs of this framework share some assumptions with Government and Binding Theory (Chomsky 1980, 1981), but strictly speaking they constitute as a whole a very different linguistic theory, whose characteristics have been shaped to a considerable extent by the specific architecture of OT. The basic assumptions that I adopt from this framework are outlined below.

With respect to the characterization of inputs, I follow Grimshaw (1993, 1997), Legendre et. al (1995, 1998), Samek-Lodovici (1996), Grimshaw & Samek-Lodovici (1998) and others in assuming that inputs are predicate-argument structures, consisting of a lexical head and its argument structure, an assignment of lexical heads to its arguments, and also tense and aspect specifications. I assume that adjuncts are also specified in the input (Bresnan 1996, Legendre et. al. 1998, and Choi 1999). Following the notation in Legendre et. al. (1998), arguments are kept apart from

adjuncts by a semi-colon ";". I further assume, following Legendre et. al. (1998), that arguments and adjuncts in the input are specified with syntactically-relevant features like [wh], [+/- referential], etc.[18] Accordingly, a sentence like (21a) would have the input illustrated in (21b).

(21) a. John bought the newspaper in Brussels.
b. <buy (x, y; z), Past, x=John, y=the newspaper; z=in Brussels>

Following Legendre et. al. (1998), I also assume that the scope of certain operators and other scope-taking elements is specified in the input. The input of a sentence showing sentential negation, for example, would be represented as in (22b).

(22) a. John didn't sleep.
b. < ¬ (sleep (x)), Past, x=John >

However, in contrast with Legendre et. al. (1998) I do not assume that the scope of topics and *wh*-operators is specified in the input. This is an issue that will be addressed in detail in Chapters 4 and 5 of this dissertation.

I further assume that elements in the input are specified with features relevant to information structure, such as [topic] and [focus] (see Samek-Lodovici 1996, Costa

[18] As noted in Legendre et. al. (1998), arguments and adjuncts in the input are probably best viewed as nothing more than a lexical head plus a bundle of features, but providing such a representation will not be crucial for the discussion that follows.

1998, Grimshaw & Samek-Lodovici 1998, Choi 1999). An instance of subject focus like (23a) would have (23b) as its input.

(23) a. JOHN bought the newspaper.
b. <buy (x, y), Past, x=John, x=[focus], y=the newspaper>

Lastly, I assume that the semantic role of the arguments of a predicate is specified in the argument structure that is part of the input, as illustrated by (24).[19] In this I depart from the characterization of argument structure in Grimshaw (1990), where arguments are represented by variables that do not bear any semantic role labels.

(24) a. John bought the newspaper.
b. <buy (x, y), Past, x=John, x=*agent*, y=the newspaper, y=*theme*>

Including semantic role labels as in (24) is in a sense redundant, since such information is already part of the lexical entry of a predicate. However, since reference to such semantic roles will be crucial in the analysis that follows, it will be useful to specify them in each tableau for expository purposes.

My assumptions with respect to GEN are the following. I assume that the candidates generated by GEN are annotated S-structures which, roughly, combine both surface syntax and LF information (see Williams 1986, Brody 1995, Legendre et. al.

[19] The semantic role labels to be used in what follows are just labels that encapsulate finer semantic distinctions, such as those in Dowty (1991). Except for the discussion in §3.4, these finer distinctions will not be crucial for the analysis, and so I will use the standard semantic role labels for convenience.

1995, 1998), and the prosodic structure of the sentences in question (Truckenbrodt 1999, Gutiérrez-Bravo 2000a, Büring 2001, Büring & Gutiérrez-Bravo 2001, Szendröi 2001). Since this dissertation does not concentrate on the interpretive or prosodic properties of the annotated S-structures generated by GEN, I will only lay out my assumptions with respect to their syntax.

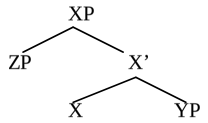
I adopt the following assumptions about the syntactic trees generated by GEN. I will assume throughout that GEN generates all and only those structures that conform to X-bar theory (Grimshaw 1997). In other words, a minimal X-bar theory is part of GEN, such that structures like those in (25) are never elements of the candidate set.

(25) a. [X^0 [X^0 X] [YP Y]]].
b. [YP [XP X]].

Example (25a) is a structure where a maximal projection is a sister to a head, but where the node dominating both constituents is a zero-level node. Example (25b) is a structure where a maximal projection without a head node is projected on top of another projection. Likewise, I assume that GEN does not generate tree structures that violate other formal restrictions on trees such as the Single Root Condition, the Exclusivity Condition and the Nontangling Condition (see Partee et. al. (1987) for relevant definitions). On the other hand, I assume that directionality (the relative order of a head with respects to its complements and its specifier) and the possibility of having multiple specifiers (Chomsky 1995) are regulated by independent violable constraints, whose precise formulation will not be dealt with here (see Grimshaw

(2001) for a recent proposal). However, I do assume that the constraints that require complements to be generated to the right of their head and specifiers to the left are undominated in Spanish, as is the constraint that militates against multiple specifiers. For the sake of simplicity I also assume that a constraint requiring strict binary branching is also undominated in Spanish, although this assumption will not be crucial for the analysis in any way. Accordingly, the only candidates considered in what follows are those whose maximal projections correspond to the schema in (26), which can be further modified by either left or right-adjunction.

(26)



Lastly, I assume that the annotated S-structures that constitute the candidate set can be different from the input in their feature content and interpretive properties (i.e. that they can be unfaithful to the input with respect to these properties). There is considerable debate in OT-syntax as to whether GEN can generate candidates whose interpretive properties and feature content is different from the one specified in the input. Kuhn (2001) rejects this possibility, based on arguments from efficiency of computation. However, as noted in McCarthy (2002), OT shares with most other generative frameworks a commitment to *well-definition* and not to *efficiency of computation*. As in other generative frameworks, *efficiency of computation* is an issue

of performance, not of linguistic competence. In this respect, allowing candidates to be unfaithful to the input is crucial for *well-definition*. Legendre et. al. (1998) and McCarthy (2002) note that serious problems arise if this possibility is not allowed, such as ineffability and problems with characterizing ungrammaticality in a meaningful way.[20]

With respect to Thematic Theory, I assume that the locality of θ-marking is regulated by the constraint in (27), from Grimshaw (1997: 374).

(27) LOCAL θ-MARKING (θ-MARK)
Lexical heads θ-mark within their lexical projections.

I assume that this constraint is undominated in Spanish, which amounts to saying that all of the arguments of a verb must be θ-marked within the VP. In relation to this, I also assume that candidates that omit any of the arguments specified in the input are ruled out by the PARSE constraint (Prince & Smolensky 1993, Grimshaw & Samek-Lodovici 1998), which requires all elements specified in the input to be realized in the output.

When an argument surfaces in a position outside the VP, θ-MARK is satisfied by establishing a chain between an argument displaced outside the VP and a VP-internal trace, as in (28).

[20] I refer the reader to McCarthy (2002) for further details on these issues, including discussion of computational models of OT that do not face the problems of efficiency of computation that have given rise to this debate.

(28) $John_i$ might [$_{VP}$ t_i buy the newspaper].

This does not imply that the chain <$John_i$, t_i> in (28) is derived by movement. In the OT-syntax framework adopted here it is taken to be a purely representational chain in the sense of Brody (1995), which means that chains are syntactic objects inserted as such in the structures in order to express relations between discontinuous positions (see Grimshaw 1993, 1997; Legendre et. al. 1995, 1998; Costa 1998). In Optimality-theoretic terms this means that GEN can generate S-structures like (28) directly.[21] Chain formation, however is penalized by the constraint STAY (Grimshaw 1997:374; see also Legendre et. al. 1995, 1998), which is violated once for every trace that is part of the chain.

(29) STAY
Trace is not allowed.

The precise interpretation of this constraint depends on whether one adopts a representational or a derivational model for the OT analysis as a whole. In a derivational model, STAY is violated once for every movement operation. In a representational model, STAY is instead an Economy condition on chains; a chain with a head and one trace violates STAY once, a chain with two traces violates STAY

[21] Of course, GEN can also generate an S-structure like (28) without a trace as part of the candidate set. Such a candidate, however, would violate θ-MARK because there would be no link between the subject DP and the lexical projection of the verb that assigns it its semantic role. Since I assume that θ-MARK is undominated in Spanish, I will not consider such candidates, though.

twice, etc. The important point is that there is no movement in this case. GEN can generate chains of any size to represent syntactic displacement, and strictly speaking, every constituent is generated in the same position where it appears in the annotated S-structure that corresponds to the output. Since both my analysis and the OT analyses under discussion here are strictly representational, I will henceforth adopt the latter interpretation of this constraint.[22]

The STAY constraint guarantees that displacement will only take place when required to satisfy a higher ranking constraint. In other words, candidates displaying gratuitous displacement chains will lose to candidates that do not because of their unjustified violations of STAY. In this respect, STAY is the OT equivalent of Economy of Movement in transformational frameworks. For the most part, STAY does not play a crucial role in my analysis, though, and for simplicity I will mostly leave it out of the tableaux and the evaluation of candidates in the following chapters.

With respect to surface grammatical relations, I assume that they are determined by constraints that map the thematic properties of the arguments of a verb into such relations, as in Aissen (1999a) and Asudeh (2001). However, my analysis is equally

[22] Although there is considerable murkiness about this issue in the literature, it is worth pointing out that these interpretations of STAY are not necessarily equivalent. Consider the case of Clitic left-dislocation (CLLD) in Romance languages, which according to Cinque (1990) corresponds to an instance of base-generation (**ec** stands for *empty category*).

(i) $[XP_i \quad [_{VP} \quad \mathbf{ec}_i \quad]]$

In a derivational model, (i) never violates STAY, since there is no movement involved. In a representational model, however the evaluation of (i) depends on how we define a chain. For example, if we define a chain as a syntactic object that has any null category (whether a trace, *pro*, or PRO) as its foot, then (i) would indeed violate STAY. This is the definition of chains that I will assume

compatible with frameworks where grammatical relations are instead primitives, as in Relational Grammar.

A final issue concerns ungrammaticality. In a framework like Principles and Parameters, violation of a principle or the value setting of a parameter leads to ungrammaticality. Clearly enough, this is not possible in OT, since every optimal output will still violate a considerable number of constraints. The solution that is often offered to solve this problem is that ungrammatical constructions are losing candidates (given a specific input) and that grammaticality is a property solely of the winning candidate (see for example Samek-Lodovici (1996) and Müller (1999) for discussion). This is, however, a somewhat problematic solution. In OT syntax, any given set of candidates will include a number of losing candidates that will correspond to ungrammatical constructions (in the traditional sense), but there will also be a number of losing candidates which we can clearly identify as grammatical sentences. These losing candidates, while still grammatical, do not have the interpretive or information structure properties that make the winning candidate the optimal one.

To accommodate this situation, it has been suggested (in Grimshaw & Samek-Lodovici 1998, for example), that grammaticality is context-dependent (and accordingly input-dependent, to the extent that the discourse context can define some of the features of the elements in the input). For example, a sentence that can be

throughout this dissertation, and consequently, I take all instances of CLLD to violate STAY. This assumption is not crucial to the analysis in any way.

pragmatically infelicitous in some instances is taken to be ungrammatical in those contexts where it is perceived to be ill-formed by native speakers, but grammatical otherwise.

Still, one cannot help but have the strong intuition that there is a fundamental difference between sentences that have been labeled "ungrammatical" in traditional terms and sentences that just happen to be semantically ill-formed or infelicitous under certain pragmatic conditions. Accordingly, throughout this dissertation I will adopt the characterization of ungrammaticality proposed in Gutiérrez-Bravo (2000b), where an ungrammatical sentence is a sentence that, given a specific ranking of constraints, will never surface as an optimal candidate, no matter what the input is. In other words, an ungrammatical sentence is a candidate that is suboptimal for every input.[23] An unfelicitous sentence, in contrast, is a sentence that for a certain number of inputs may not emerge as the optimal candidate, but there will be at least one input for which this sentence will be the optimal output (and thus correspond to a felicitous utterance). This distinction will be further clarified and discussed in the chapters that follow, and plays a crucial part in the analysis in chapter 4.

1.3 Spanish

1.3.1 Basic Assumptions

My basic assumptions about Spanish sentential structure are fairly standard, and

[23] This is also the characterization of ungrammaticality in McCarthy (2002).

are mostly based on the analysis in Suñer (1994). I assume that all arguments and adjuncts of a verb are generated in a VP shell, such that adjuncts and adverbials are the most deeply embedded constituents of the VP (Larson 1988), and that the external argument is generated in [Spec, V]. I also assume that V raises to I in all tensed clauses (Pollock 1989, Contreras 1991, Suñer 1994, *inter alia*). Following these assumptions, the SVO order results from movement of the subject to [Spec, I], whereas in the VSO order the subject remains in its base position (Suñer 1994). Following Suñer (1988), I further assume that accusative and dative clitics in Spanish are instances of morphological agreement. More detailed assumptions about sentential structure in Spanish will be introduced as they become relevant for the discussion.

As mentioned in the previous section, I assume following Dowty (1991) and much previous and subsequent work (especially Grimshaw 1990, Aissen 1999a, and Asudeh 2001), that the grammatical relations of the arguments of a predicate are determined by the semantic properties of the predicate and not by the structural position that these arguments occupy at some level of representation. In this respect, I assume that Case and subject-verb agreement in Spanish are governed by well-formedness conditions that target the subject as defined by these semantic properties or entailments, instead of being associated with specific structural positions. The reason for adopting these assumptions will become clear in the chapters that follow.

1.3.2 A note about the data

Unless otherwise noted, the data used throughout this dissertation corresponds to Mexican Spanish, the variety of Spanish with the largest number of speakers (approximately 90 million). The literature on Spanish syntax usually makes reference to "standard Spanish", under the assumption that this corresponds to some dialect or register of Spanish that is mostly homogeneous across different Spanish speaking countries. I depart altogether from this assumption, and will make reference to different varieties of Spanish according to the geographical area where they are spoken. To the best of my knowledge, the differences between Mexican Spanish and other varieties of Spanish with respect to the word order phenomena that will be the focus of this dissertation have not been previously reported.

The speakers of Mexican Spanish consulted are all from several states in central and western Mexico (Mexico City, Aguascalientes, Jalisco, and Nayarit). No claim is made that the syntax of this variety of Mexican Spanish is different from varieties spoken in northern, southern and south-east Mexico. These other varieties, however, are clearly perceived as distinct by native speakers of the "central-west" variety, and so only speakers from this geographical area were consulted, in order to prevent any interference from potential dialectal variation. Most of the speakers consulted were professionals with college education interviewed in a non-colloquial register, so perhaps the best way to characterize the variety of Spanish under study in this dissertation would be "Standard Mexican Spanish". Again no claim is made at this

point as to whether or not the syntax of the colloquial register in this geographical area is any different.