In the preceding chapter I introduced the notion of the Pole as a relevant notion for understanding a number of phenomena in Spanish. Building on this chapter, I relate this notion to the word order facts observed in Mexican Spanish in the unmarked case. The guiding idea I develop in this chapter is that syntactic structure in Spanish is subject to markedness considerations in a way that is not unlike the markedness considerations that govern syllable structure in prosodic phonology. I begin by suggesting that clauses with a Pole are more marked than those which lack a Pole, because of Economy of Structure. Economy of Structure is thus in direct conflict with the EPP as defined in the previous chapter, which requires clauses to have a Pole. However, I will argue that just as in prosodic phonology, markedness is not necessarily simply a contrast between a marked structure and an unmarked one. Rather, different structures can show different degrees of markedness. I will then show how Optimality Theory provides an ideal theoretical framework for understanding why the Pole, the existence of different structures in the Pole position, and the economy of different hierarchical structures of different constituents in the Pole position represent a challenge for previous analyses of word order, both transformational and Optimality-theoretic.

### 3.1 Unmarked word order

In characterizing the unmarked word order for different kinds of clauses in Spanish, I follow the standard diagnostic that this is the order that is felicitous in a sentence-focus context, which is the word order attested in sentences that felicitously answer questions such as 'What happened?' and 'What's been happening?'.

Let us briefly recapitulate now why the unmarked word order data from Mexican Spanish and other varieties of this language represents a challenge for previous analyses of word order, both transformational and Optimality-theoretic. Consider transitive clauses first. As first discussed in §1, transitive clauses show an SVO order in the unmarked case. I also noted there that the main reason to suspect that the EPP is a crucial factor for deriving the unmarked word order is that transitive (and also psych sentences) with an empty preverbal position are extremely marked in Mexican Spanish (e.g., in (1) and (2)).

\[ (1) \text{The boy} \rightarrow \text{ran} \rightarrow \text{the house} \]

\[ (2) \text{The boy} \rightarrow \text{the house} \rightarrow \text{ran} \]

As far as I have been able to determine from the literature, this is the unmarked word order that transitive sentences show in most varieties of Spanish. Costa (1998, 2001), however, reports a variety of Peninsular Spanish where VSO can also function as the unmarked word order. I refer the reader to Gutiérrez-Bravo (2000a) for a possible analysis of such varieties.
these examples have in common the unmarked order of subject

In their analysis, the unacceptability of (2) goes unaccounted for, because the verb has risen to I

2

Consider now examples of word order, the two known manners of word

While Mexican Spanish displays all the characteristics of languages in which the EPP is satisfied through verb raising in Alexiadou & Anagnostopoulou’s analysis, namely, null subjects, lack of expletives, and lack of definiteness restrictions on post-verbal subjects, there are the crucial observations of word order in OT-GB and the one developed in Costa (1998, 2001) and Costa & Ladd (2002). In the examples 1-3, the exchange arguments, multi-place, lack of expletives, and lack of definiteness restrictions on post-verbal subjects, there are the crucial observations of word order in OT-GB and the one developed in Costa (1998, 2001) and Costa & Ladd (2002).

In their analysis, the unacceptability of (2) goes unaccounted for, because the verb has risen to I0, carrying the [+D] feature that characterizes verbal agreement morphology in null subject languages, so EPP checking should have taken place successfully. More importantly, as I have been suggesting up to this point, the evidence points to the conclusion that the EPP, although clearly active in Spanish, cannot be taken to be an all-or-nothing requirement. This is because a great number of constructions do not accept pre-verbal position for the subject. I also pointed out in §1 that any analysis of this data needs to be compatible with the fact that Mexican Spanish still displays all the characteristics of languages in which the EPP is satisfied through verb raising in Alexiadou & Anagnostopoulou’s analysis, namely, null subjects, lack of expletives, and lack of definiteness restrictions on post-verbal subjects. These are the crucial observations of word order in (1-3) and their exchange arguments, multi-place, lack of expletives, and lack of definiteness restrictions on post-verbal subjects, there are the crucial observations of word order in (1-3).
in SVO sentences is the result of a well-formedness condition that the subject can only satisfy in the preverbal field. Costa's analysis is arguably the most influential analysis of word order typology in OT, so I begin the discussion by reviewing it. This analysis relies on the idea that fronting of the subject in the unmarked case in SVO languages is directly related to Case theory, such that it satisfies the following constraint (Costa 1998, 2001).

(4) 

\[ \text{Subjects are Case-licensed in Spec-IP.} \]

This constraint crucially interacts with the \( S_TAY \) constraint of Grimshaw (1997), which penalizes the presence of traces in the representation (see §1.2 for discussion).

(5) 

\[ \text{Trace is not allowed.} \]

In a nutshell, Costa's analysis for languages where the subject surfaces in the preverbal position in the unmarked case, such as English, Italian, Portuguese and most varieties of Spanish is as follows. Independently of the ranking of other constraints, these are all languages where \( S_{UBJ} \) outranks \( S_{TAY} \). Consequently it is better to have the subject DP in [Spec-IP] with a trace in the representation than to leave the subject in its VP-internal position, where it would not receive Nominative case. This is exemplified for English in the tableau in (6).

(6) 

\[
\begin{array}{c|c}
\text{S} & \text{UBJ} \\
\hline
\text{S} & \text{CASE} \\
\hline
\text{S} & \text{TAY} \\
\end{array}
\]

Costa (1998) argues convincingly that Case plays a crucial role in determining word order effects in numerous languages, particularly so for direct objects. This kind of analysis, however, cannot straightforwardly account for the unmarked word order observed in different kinds of clauses in Mexican Spanish. Consider psych clauses with dative experiencers first. As shown in (7), in these clauses it is the dative IO experiencer and not the subject that occupies the preverbal position in the unmarked case.

(7) 

\[
\begin{array}{c|c}
\text{S} & \text{UBJ} \\
\hline
\text{S} & \text{CASE} \\
\hline
\text{S} & \text{TAY} \\
\end{array}
\]

This contrast could interact with the rank condition of Grimshaw (1997),

(8) 

\[ \text{Subject case is ranked in Spec-IP.} \]

The glosses and free translations of (7a-b) are my own. Similar word order facts are attested in Italian (Belletti & Rizzi 1988),
(7) a. A Carlos le gusta Pilar.
  to Carlos  DAT-CL  likes Pilar  'Carlos has a crush on Pilar.' (Fant 1984:111)

b. A Marcos le interesa la danza moderna.
  to Marcos  DAT-CL  interest the dance modern  'Marcos is interested in modern dance' (Masullo 1993:304)

c. A Juan le encantan las películas de David Lynch.
  to Juan  DAT-CL  charm the films of David Lynch  'Juan loves David Lynch's movies.'

The SBJ analysis instead predicts that the subject should be the argument that surfaces in the preverbal position. This is shown in the tableau in (8), where 6 signals the candidate wrongly selected as the winner.

(8) Spanish: Sentence-focus context

a. [a Juan 1i le gustan 3p VP t los chocolates].

b. [los chocolates 1i le gustan 3p VP a Juan t].

This data from Spanish presents a further conceptual complication for an analysis based on SBJ. In both transitive and psych clauses an argument of the verb appears in the preverbal position. However, if a unified analysis of both two cases is correct, then Case considerations are apparently not involved here at all. Under standard assumptions the experiencer DP in Psych clauses is independently assigned Case by the preposition a 'to'. Accordingly, since there is at least one instance where a non-subject argument appears in the preverbal position in the unmarked case, it is much less obvious that the agent DP in transitive clauses undergoes fronting in order to be assigned [NOMINATIVE] Case.

Similar observations hold of the analyses in Grimshaw (1997) and Grimshaw & Samek-Lodovici (1998), which are similar, but not identical, to Costa's. These analyses rely on the SUBJECT constraint, which interacts with STAY in the same way as in Costa's analysis. As noted in Grimshaw (1997), there are two alternative formulations of the SUBJECT constraint, listed in (9a) and (9b).

(9) a. The highest A-specifier in an extended projection must be filled.

b. The specifier of the highest I-related head must be filled, where I-related includes V, T, Agr, Neg, etc.

Grimshaw notes that SUBJECT corresponds essentially to the EPP of Chomsky (1981), this appears to be true only for the formulation in (9a). Under this formulation of the SUBJECT constraint, it is not possible to account for the ordered movement of arguments in transitive clauses, unless it is assumed that the DP in the preverbal position is not the subject of the intransitive clause. The proposal I will develop later in this chapter will provide a unified analysis of these two cases, though. Accordingly, it captures a generalization that is lost in the alternative where these two cases are analyzed separately.
formulation, SUBJECT is violated by clauses without a grammatical subject in the canonical position, as in the analysis in Grimshaw & Samek-Lodovici (1998). The second formulation of SUBJECT is more closely related to the numerous works cited in §2.2.2, where the EPP is taken to be a structural condition that requires a given specifier position to be filled by some XP, which can, but need not be, the grammatical subject. If my interpretation of Grimshaw (1997) is correct, (9b) would be independent of whether the highest I-related specifier is an A or an A-Bar position, and she further notes that it is conceivable that it can be satisfied by constituents other than the subject, although this does not play a role in her analysis.

With these observations in mind, consider now an analysis of the data from Mexican Spanish in terms of SUBJECT and STAY. This is because the formulation specifically targets an A and the DP that bears the subject grammatical relation (since the subject is the argument that has one of its A-properties, i.e. Case, licensed in this specifier position; hence the name of the constraint itself) so it would also predict that the subjects of psych clauses should appear in the preverbal position. The second formulation of SUBJECT fares somewhat better, but still cannot account for the data. In this formulation, fronting to [Spec, I] is not related to the satisfaction of some A-property of the fronted XP, so forming the constituent in a preverbal clause would still not satisfy the condition on the subject. This means that the candidate where the subject theme is fronted also satisfies this constraint, as can be seen in the same tableau, so the unmarked IO-V-S order cannot be derived by these two constraints alone.

(A) Spanish: Sentence-Focus Context

- A Juan le gustan los chocolates.
- to Juan like the chocolates

\[ \text{Juan likes chocolates.} \]

\(10)\) Spanish: Sentence-Focus Context

a. [IP a Juan le gustan [VP los chocolates]]. IOVS
b. [IP los chocolates le gustan [VP a Juan]]. SVIO
In fact, when further constraints are taken into account, this analysis incorrectly selects (10b) as the winner. This is because a Case requirement on DP's is also present in Grimshaw's analysis, in the form of the CASE constraint in (11).

(11) CASE

DPs must be Case marked. Grimshaw (1997: 374)

If my interpretation of Grimshaw (1997) is correct, there are at least two positions where CASE can be satisfied by subject DPs, [spec, V] and [Spec, I], but [spec, V] is only a Case position when no IP is projected. Accordingly, in all of the examples considered here the only Case position for subjects would be [Spec, I]. Now notice that as a result of this, even if CASE was a very low ranked constraint in Spanish, it would still get to decide the outcome (all else being equal), wrongly selecting as the winner the candidate where the subject surfaces in the preverbal position, which satisfies CASE. This is shown in tableau (12).

(12) Spanish: Sentence Focus Context

a. Los chocolates le gustan a Juan. [VP t le gustan [IP a Juan t]].

b. Los chocolates le gustan a Juan. [VP t le gustan [IP a Juan t]].

Consider now unaccusative predicates. As previously mentioned, the unmarked word order of unaccusative clauses in Mexican Spanish is VS (see Contreras 1976, Fant 1984, and Arnaiz 1998 for other varieties that show this word order; see also H. Kahane & R. Kahane 1950 and Hatcher 1956). Some examples are presented in (13).

(13) a. Está cayendo granizo.

b. Empezó la resistencia.

c. Estallaron dos bombas en la universidad de Navarra.

This data is also problematic for the OT analyses discussed above. In Costa's analysis, the ranking $\text{SUBJ} \gg \text{CASE} \gg \text{STAY}$ again predicts that the subject should surface in the preverbal position. This is shown in tableau (14).

(14) Spanish: Sentence Focus Context

Costa (1998: 348-352) notes that this is also a problem for unaccusative clauses in Portuguese, which allow both VS and SV orders in the unmarked case. I refer the reader to Costa's work for a tentative solution to this problem.
3.2 Markedness and syntactic structure

As a first step in developing an analysis of unmarked word order in Mexican Spanish, I suggest that the notion of markedness, which has been most successfully developed in terms of Economy of Structure (Chomsky 1993, 1995; Grimshaw 1993, 2001), also extends to certain aspects of syntactic structure, and in particular to the Pole as defined in the previous chapter. Recall that the Pole is part of the higher Projection (i.e., the higher Inflectional Projection) of the highest [Spec, I]. An analysis of unmarked word order in Mexican Spanish, which has been most successfully developed in terms of Economy of Structure (Chomsky 1993, 1995; Grimshaw 1993, 2001), also extends to certain aspects of syntactic structure, and in particular to the Pole as defined in the previous chapter. Recall that the Pole is part of the higher Projection (i.e., the higher Inflectional Projection) of the highest [Spec, I].

The analyses in Grimshaw (1997) and Grimshaw & Samek-Lodovici (1998) face the same problem. In this case, as the reader can verify, under either definition of Subject in (9), the ranking Subject >> Stage predicts that the subject of unaccusative clauses will surface in [Spec, I].

Before proceeding to develop an alternative OT proposal of these facts, it is worth highlighting what the more general problem of these two previous OT proposals is. In order to account for word order, these analyses rely on constraints that target either the subject grammatical relation or some property of the subject DP, such as the subject agreement relation or some property of the subject DP, such as the subject agreement relation or some property of the subject DP. Yet the evidence from Spanish suggests that grammatical relations and Case considerations do not play a role in determining word order in this language. Taking this observation as a starting point, in the following section I develop an analysis in which the unmarked word order in Mexican Spanish is dependent instead on the EPP as defined in §2, but where the satisfaction of the EPP crucially interacts with the semantic roles of the arguments of the verb and with the dependency structure on the EPP as defined in §2, but where the satisfaction of the EPP crucially interacts with the dependency structure on the EPP.
Intuitively, it is fairly straightforward why this should be so. (15a) has an extra layer of structure that (15b) lacks altogether. This is consistent with numerous intuitions on Economy of Structure developed in both transformational and optimality-theoretic research. Broadly, the intuition is that structure is only projected when necessary (i.e., as a "last resort"). However, the EPP is clearly in direct conflict with Economy of Structure, since the EPP requires clauses to have a Pole. In other words, the EPP favors the structure that is more marked with respect to Economy of Structure. This is another fact that motivates the OT analysis that follows, since Optimality Theory is designed to deal with conflicting grammatical requirements. My proposal, though, is that Spanish provides evidence that the resolution of the conflict between the EPP and Economy of Structure is not just an issue of prioritizing either requirement over the other. Rather, what is crucial for understanding the word order facts discussed in the previous section is that the Pole and the thematic hierarchy are crucial.

3.2.1 The Pole and the thematic hierarchy

The relevant word order contrasts discussed in the previous section are reproduced in (16).

(16) Spanish:

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

Although this can indeed be the case when only binary contrast are involved.

In general, the relative degree of markedness of the canonical word order for different classes of sentences.

It is a well known fact that markedness is not necessarily just a contrast between a marked structure and an unmarked one. In prosodic phonology, for example, syllables that are more marked than others are prosodically more prominent. For example, if a syllable is more marked than others, it is more likely to receive a prominence accent.

Intuitively, it is fairly straightforward why this should be so. (16a) has an extra layer of structure that is more marked than (16b).
A Juan le gustan los chocolates. 'Juan likes chocolates.'

Your brother arrived.

Recall from the previous chapter that evidence from ellipsis, negation and the licensing of negative XPs indicates that the subject in (16a) and the oblique experiencer in (16b) occupy the same structural position, a proposal first developed in Masullo (1993). In terms of my proposal, they both correspond to the Pole of the clause, in this case [Spec, I]. Accordingly, I analyze the structural representation of these examples as in (17).

My proposal is that the Pole is a position that is sensitive to the semantic role of the constituent that occupies it, and that this relates directly to markedness. I previously argued that clauses with a Pole are more marked with respect to Economy of Structure than those without a Pole. However, the word order facts from Spanish in (17) show that markedness is not all-or-nothing. Rather, these facts are amenable to an interpretation where there are different degrees of markedness in accordance with the Economy of Structure. The structures in (17a) and (17b), where the Pole of the sentence is an agent and an experiencer, respectively, show that the projection of an agent or experiencer is lower in Economy of Structure than that of a verb.

As in the previous chapters, throughout I assume V-to-I movement and movement of the constituent in [Spec, I] from its base position inside the VP. Following Suñer (1988), I further assume that clitics in Spanish are instances of morphological agreement.

The question that needs to be addressed at this point is why transitive and psych clauses display a constituent functioning as the Pole (and thus comply with the EPP), but unaccusative clauses do not. My proposal is that the Pole is a position that is sensitive to the semantic role of the constituent that occupies it, and that this relates directly to markedness. I previously argued that clauses with a Pole are more marked with respect to Economy of Structure than those without a Pole. However, the word order facts from Spanish in (17) show that markedness is not all-or-nothing: rather, these facts are amenable to an interpretation where there are different degrees of markedness. The reasoning goes as follows. As previously discussed, there is an inherent conflict between the requirements of the EPP, which requires that the specifier of the highest \( \Pi \)-Projection be filled, and Economy of Structure, which requires that the projection of structure be kept to a minimum. The structures in (17a) and (17b), where the Pole of the sentence is an agent and an experiencer, respectively, are both marked with respect to Economy of Structure, since Spec-IP is projected. Their particular degree of markedness, however, is not high enough to warrant a violation of the EPP. In other words, it is better to have a marked syntactic structure than to leave the requirements of the EPP unfulfilled. Here, the EPP overrides structural markedness.

Crucially, in the case of the unaccusative construction in (17c), the unique argument of the verb, the theme, stays in its VP-internal position and does not move to Spec-IP. My proposal is that the Pole of the sentence is a position that is sensitive to the semantic role of the constituent that occupies it, and that this relates directly to markedness. I previously argued that clauses with a Pole are more marked with respect to Economy of Structure than those without a Pole. However, the word order facts from Spanish in (17) show that markedness is not all-or-nothing: rather, these facts are amenable to an interpretation where there are different degrees of markedness. The reasoning goes as follows. As previously discussed, there is an inherent conflict between the requirements of the EPP, which requires that the specifier of the highest \( \Pi \)-Projection be filled, and Economy of Structure, which requires that the projection of structure be kept to a minimum. The structures in (17a) and (17b), where the Pole of the sentence is an agent and an experiencer, respectively, are both marked with respect to Economy of Structure, since Spec-IP is projected. Their particular degree of markedness, however, is not high enough to warrant a violation of the EPP. In other words, it is better to have a marked syntactic structure than to leave the requirements of the EPP unfulfilled. Here, the EPP overrides structural markedness.

In conclusion, I argue that the syntactic representation of Spanish verb movement is determined by a combination of Economy of Structure and the EPP. In cases where the subject or object is unaccusative, the EPP is more important than Economy of Structure. In cases where the subject or object is accusative, the subject or object is moved to Spec-IP, which is a position that is sensitive to Economy of Structure.
The pole has a degree of markedness high enough that it is preferable to violate the EPP. In this case, structural markedness overrides the EPP.

These observations correlate directly with much work done on the Thematic Hierarchy. The works that postulate the existence of the Thematic Hierarchy all suggest that what are described traditionally as semantic roles are not only different because of their semantic properties or entailments. Semantic roles are further organized in a hierarchical relation where some roles are more prominent than others, and this hierarchical relation has an effect on numerous grammatical properties (the mapping into argument structure (Grimshaw 1990), case marking, morphological cross-reference, etc.).

There have been a number of proposals regarding the precise characterization of the Thematic Hierarchy, and I cannot provide a complete overview of them and their differences here. For the purposes of the analysis that follows, I assume a characterization of the Thematic Hierarchy based on the proposals in Larson (1988), Speas (1990) and Bakovic (1998), which are shown below (in Bakovic's proposal, ARGUMENT encapsulates agent and theme).

(18) a. Larson (1988: 382)
AGENT > THEME > GOAL > OBLIQUES (manner, location, time, ... )

b. Speas (1990: 16)
AGENT > EXPERIENCER > THEME > GOAL/SOURCE/LOCATION > MANNER/TIME

ARGUMENT > LOCATION > MANNER > REASON

The hierarchical relations AGENT > EXPERIENCER and EXPERIENCER > THEME are mostly uncontroversial in the literature on the Thematic Hierarchy (see also Pesetsky 1995). The three proposals in (18) have a further property in common, namely, that they consider a theme to be higher than locative, temporal, manner and reason. This is a fairly controversial issue, since a number of characterizations of the Thematic Hierarchy in the literature have the theme semantic role at or near the bottom of the hierarchy (see for example Grimshaw 1990). Setting this particular issue aside for the scope of this dissertation, though, and so I end simple assume the proposals laid out in (18).

Bringing together the proposals in (18), I assume the characterization of the thematic hierarchy in (19), which brings together different elements from the hierarchies in (18a-c) (while respecting the basic hierarchical relations they have in common) and which brings together different elements from the thematic hierarchy in (19), which brings together different elements from the thematic hierarchy in (18).

For our immediate purposes, the crucial hierarchical relations represented in (19) are:

(i) agents are more prominent than experiencers and themes, and;
(ii) experiencers are more prominent than themes.

It is worth pointing out, however, that to the extent that one accepts the proposal that wh-extraction from certain contexts is only possible for constituents which bear roles from the higher end of the Thematic Hierarchy (Rizzi 1990, Cinque 1990), it is problematic for proposals where the theme ranks low in the hierarchy to explain why direct objects, for example, can typically undergo extraction from such contexts, whereas other more adjunct-like wh-operators do not. This same pattern is arguably also observed cross-linguistically in relative clause formation, as in work on the Accessibility Hierarchy (Keenan & Comrie 1977). Lastly, Torrego (1984), Suñer (1994) and Bakovic (1998) provide evidence from wh-movement in Spanish that themes are thematically more salient than oblique arguments and adjuncts.
We can now return to the analysis of unmarked word order in Mexican Spanish and its relation to markedness. I have suggested that the degree of markedness is the factor that settles the conflicting requirements of the EPP and Economy of Structure. My proposal was that clauses with an agent or an experiencer as the Pole are not marked enough to warrant a violation of the EPP, but clauses with a theme as the Pole are. Accordingly, in the latter case we get a VS and not an SV sentence. Simply stated as such, at first sight there is no obvious reason why this should be so. But once we see that this correlates directly to numerous proposals about the structure of the Thematic Hierarchy in the literature, then these descriptive observations can be grouped together in a broader generalization, namely that the degree of structural markedness of the Pole is inversely proportional to its relative prominence in the Thematic Hierarchy. In other words, the more prominent the semantic role of the constituent in the Pole, the lower the Pole's structural markedness.

The cut-off point at which the degree of markedness is high enough to warrant a violation of the EPP in Mexican Spanish is found between the experiencer and the theme roles in the scale in (19).

To the best of my knowledge, the observation that a scale like (19) defines the possibility of a constituent occupying a peripheral position in Spanish was first made in Contreras (1976) with respect to the right periphery. I address Contreras' analysis in the following chapter.

It is now necessary to characterize the state of affairs above in a meaningful way that will derive clear, falsifiable predictions and consequences that can be tested in other areas of the syntax of Spanish. Furthermore, given the interpretation of the data proposed above, there are two crucial issues that any analysis of the facts needs to account for. The first one is that the inherent conflict between the EPP and structural markedness is not resolved in such a way that the EPP always overrides structural markedness or vice versa. The second one is that structural markedness does not reflect an absolute value, but rather, there are different degrees of markedness that appear to correlate with different semantic roles. The question at this point is how to formalize this in a way that the EPP allows for various degrees of markedness and in a way that the EPP properly respects the information in the data.

3.2.2 Harmonic Alignment

The idea developed in the previous section is that Poles that bear a semantic role that ranks high in the Thematic Hierarchy are less marked than Poles whose semantic roles rank low in this same dimension. The question at this point is how to formalize this in a way that the EPP allows for various degrees of markedness and in a way that the EPP properly respects the information in the data.
In essence, Harmonic Alignment is a formalism (Prince & Smolensky 1993: 139) for expressing a hierarchy of constraints on feature alignment. For example, suppose we have a hierarchy of features:  

\[ \frac{A}{a} \gg \frac{B}{b} \gg \frac{C}{c} \]

which stands for the constraint hierarchy:  

\[ A \gg B \gg C \]

This constraint hierarchy represents the idea that feature A is more prominent than B, which is more prominent than C. In Harmonic Alignment, we can express this hierarchy as a pair of constraint hierarchies:  

\[ H_x: X/a \gg X/b \gg X/c \]
\[ H_y: Y/a \gg Y/b \gg Y/c \]

where \( H_x \) and \( H_y \) are the harmonic scales corresponding to dimensions \( X \) and \( Y \), respectively. The constraint alignment is the translation of these scales into two hierarchies of markedness constraints. In the original proposal in Prince & Smolensky (1993), this alignment is used to formalize a number of universal properties on syllable structure.
This also relates to the fact that, for example, even when a less prominent element (like $z$) in the more prominent position constitutes a marked representation, this same element in the less prominent position constitutes an unmarked representation (see also Aissen 1999a). This situation is characterized in the literature on markedness as Markedness Reversal (Aissen 1999a; Battistella 1990, 1996; Croft 1996).

Harmonic Alignment was originally developed to account for phenomena in the domain of prosodic phonology, but has recently been expanded into the domain of syntax and morphosyntax in Aissen (1999a, 2000).

Here I will illustrate Aissen's application of Harmonic Alignment to syntax with her analysis of markedness and subject choice (Aissen 1999a). Aissen's analysis begins with the observation widely attested in the descriptive and the functional literature that different languages are sensitive to different prominence scales when determining which of the arguments of a predicate will be realized as the grammatical subject. Aissen suggests that the formalization of these facts can be achieved by aligning a binary scale of grammatical relations (for example, Subject > Object), with different prominence scales, such as a scale of semantic roles, a scale for different grammatical persons, and a scale of discourse prominence.

This results in a number of different hierarchies of markedness constraints, each of which targets the relative markedness of subjects and objects with respect to a specific prominence scale. For example, given the two scales in (21), Harmonic Alignment derives the harmony scales and constraint hierarchies in (22) and (23), respectively.

(21)

<table>
<thead>
<tr>
<th>$\text{Subject} \rightarrow \text{Object}$</th>
<th>$\text{Agent/Patient}$</th>
<th>$\text{Object/Patient}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\text{Su/Ag} \rightarrow \text{Su/Pat}$</td>
<td>$\text{O/Pat} \rightarrow \text{O/Agt}$</td>
<td></td>
</tr>
</tbody>
</table>

(22)

| $\text{Su/Pat} \gg \text{Su/Agt}$ | $\text{Obj/Agt} \gg \text{Obj/Pat}$ |

The effect of the constraints in (22), for example, will be the following. When the input of a representation includes both an agent and a patient, the agent will be mapped as the subject and the patient as the object, all else being equal. This is shown in the tableau in (24).

(24) Subject choice based on semantic role

INPUT: $\langle V (x, y), x=\text{agent}, y=\text{patient} \rangle$

<table>
<thead>
<tr>
<th>$\text{Agent/Subject} \rightarrow \text{Patient/Object}$</th>
<th>$\text{Patient/Subject} \rightarrow \text{Agent/Object}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\text{Su/Ag} \rightarrow \text{Su/Pat}$</td>
<td>$\text{O/Pat} \rightarrow \text{O/Agt}$</td>
</tr>
</tbody>
</table>

Following Aissen's fundamental insights about the application of Harmonic Alignment in syntax, and Prince & Smolensky's original idea that the binary opposition of input vs. output is reversed in a number of different prominence scales, Aissen's analysis of subject choice (1999a) is based on the following principle: when two prominence scales are aligned with each other, the alignment of the input will select the prominence scale of the output. In other words, the prominence scale of the input will correspond to the prominence scale of the output, and the alignment of the input will select the prominence scale of the output. This is shown in the diagram in (25).

(25) Application of Harmonic Alignment to subject choice

Harmonic Alignment was originally developed to account for phenomena in the domain of prosodic phonology (Aissen 1999a, 2000). The situation is characterized in the literature as Markedness Reversal. This also relates to the fact that, for example, even when a less prominent element constitutes a marked representation...
dimension (D) that undergoes alignment corresponds to a structural prominence dimension, I will now develop a Harmonic Alignment analysis of the word order facts in Spanish that crucially relies on the notion of the Pole developed in the preceding chapter.

3.2.3 The Pole Hierarchy

Returning now to word order in Mexican Spanish, the analysis I will develop follows the idea developed in §3.2.1 that Poles that bear a semantic role that ranks high in the Thematic Hierarchy are less marked than Poles whose semantic roles rank low in this same dimension. To formalize this state of affairs by Harmonic Alignment, I will make use of the structural prominence scale in (25), where Non-Pole is a term that encapsulates every complement and specifier position in the lexical layer of the extended projection (VP or a VP shell for our purposes).

(25) Pole > Non-Pole

Appealing to a dimension of structural prominence (as opposed to, for example, relational prominence) is consistent with the discussion developed so far. Briefly, we have seen in the preceding chapter that there is evidence for the existence of a particular specifier position in the functional layer of the sentence, and that the grammatical properties associated with this position do not depend on the grammatical relation of the constituent that occupies it. Furthermore, I have suggested in this chapter that the presence vs. the absence of this specifier position is closely related to Economy of Structure considerations. Lastly, I have also argued that the word order observed in different kinds of clauses in the unmarked case is directly related to the semantic role of the constituent that occupies this structural position, and not by its grammatical relation. What unifies these observations is a specific structural position, the Pole, and so it is appropriate to postulate a structural prominence dimension based on it.

Following the assumption from the preceding chapter that matrix clauses are minimally constituted by an IP, the scale in (25) is intended to reflect the fact that the Pole is more prominent than any other constituent in the extended projection, all else being equal. Structurally, this is because the Pole c-commands every other constituent except the IP itself (see §2.2.2). Once we have this binary structural scale, it can be aligned with the Thematic Hierarchy assumed here. The result of the alignment is given in (27) (repeated in 28). The alignment of these two scales is consistent with the discussion developed so far, which will be developed in §3.2.4. This will provide further evidence for the existence of a structural prominence dimension that is closely related to Economy of Structure considerations.

(26) AGENT > EXPERIENCER > THEME > LOCATION > MANNER/TIME > REASON

(27) a. Pole/Agent f Pole/Experiencer f Pole/Theme f Pole/Location f Pole/Manner-Time f Pole/Reason.

b. Non-Pole/Reason f Non-Pole/Manner-Time f Non-Pole/Location f Non-Pole/Theme f Non-Pole/Experiencer f Non-Pole/Agent.

(28) a. *Pole/Reason >> *Pole/Manner-Time >> *Pole/Location >> Pole/Theme >> Pole/Experiencer >> Pole/Agent.
The harmony scale in (27a) expresses the fact that the least marked instance of a Pole is one filled by the agent, whereas a Pole filled by a reason adverb corresponds to the most marked instance. Inversely, the harmony scale in (27b) expresses the fact that a VP-internal agent corresponds to the most marked instance of a VP-internal argument or adjunct, whereas a reason adverb corresponds to the least marked instance of a VP-internal argument or adjunct.

As mentioned before, these harmony scales are in turn translated into the hierarchies of markedness constraints in (28). The constraints in the hierarchy in (28a) target the relative markedness of a constituent with the specified semantic role when it appears as the Pole of the clause. The most severe violation is incurred when the Pole is filled by a reason expression, whereas the least severe violation is incurred when an agent functions as the Pole. The hierarchy in (28b), by contrast, targets the relative markedness of a constituent with the specified semantic role when it surfaces in its VP-internal position. In this case, the most severe violation of the hierarchy in (28b) is incurred when an agent is found in a VP-internal position, whereas the least severe violation is incurred when a reason expression occupies a VP-internal position. Crucially, I further assume that adjoined positions (both in the lexical and in the functional layer) are never targeted by the constraints in these hierarchies.

Throughout the remainder of this dissertation, I will concentrate on the constraint hierarchy in (28a), which I will refer to as the Pole Hierarchy. The role that the constraints in (28b) play in the syntax of Spanish and other languages is an issue that I will leave for future research.

3.3 An OT analysis based on markedness

3.3.1 Structural markedness and unmarked word order

At this point we need only one more constraint in order to provide an analysis of unmarked word order in Mexican Spanish. Since the EPP is central to our discussion, and since there are languages where the EPP is satisfied by expletive insertion, we need to account for the fact that Spanish lacks expletives altogether. For this purpose, we have to assume that expressions with a reason semantic role display an irregular behavior in this respect though. For instance, when the reason expression is an adverbial clause it is typically the sentence-final constituent. This is consistent with the Harmony scale in (27b), in that the adverbial clause can be taken to be the most deeply embedded constituent in a VP shell (Larson 1988). However, other reason expressions (such as for some reason) typically appear in the left periphery instead. It may be the case that some independent factor (such as scope) is responsible for the displacement of the reason adverb in these cases. This is an issue I will leave open for future investigation.

It is worth pointing out here that there is some evidence in literature that the most severe violation of the hierarchy in (28a) is incurred when an agent is found in a VP-internal position. The reader may also wonder if postulating the existence of the Non-Pole constraints does not inevitably lead to some bizarre typological predictions. For example, ranking all of the Non-Pole constraints above STAY derives a language where it is better to move every argument and adjunct out of the VP than to have them surface in their base position. Yet the analyses of polysynthetic languages in Jelinek (1984) and Baker (1995), where lexical arguments are always adjoined to more peripheral positions, do not appear to be very different from this situation. Testing the full typological predictions that are derived from my proposal is of course an important issue, but one that lies beyond the scope of this dissertation.
I will incorporate into the analysis the FULL-INTERPRETATION constraint of Grimshaw (1997) and Grimshaw & Samek-Lodovici (1998), which is the constraint that penalizes DEPendency violations (McCarthy & Prince 1995) in syntax.

(29) FULL-INTERPRETATION
Parse lexical conceptual structure.
Failed by expletives and auxiliary do.


This constraint is violated when there is a lexical item in the output that has no corresponding element in the input (this is the way of understanding in OT the fact that expletives and auxiliary do are devoid of meaning). Specifically for the analysis that follows, it will be violated by insertion of an expletive, as in Grimshaw & Samek-Lodovici (1998). With these constraints set up, we can now provide an analysis of Mexican Spanish. This language is characterized by the constraint ranking in (30), where, crucially, the EPP is interpolated into the Pole Hierarchy between *Pole/Theme and *Pole/Experiencer. Furthermore, the undominated FULL-INTERPRETATION prevents an expletive from being inserted in the Pole to satisfy the EPP.

(30) FULL-INTERPRETATION >> *Pole/Reason >> *Pole/Manner-Time >> *Pole/Location >> *Pole/Theme >> EPP >> *Pole/Experiencer >> *Pole/Agent

2 3

2 3

Furthermore, it must also be the case that EPP outranks STAY, otherwise movement into the Pole position would be disallowed altogether. STAY does not play a crucial role in the evaluation of the candidates for the set of data under consideration, for ease of exposition I will leave this constraint and the traces it penalizes out of the tableaux that follow.

Consider now how the ranking in (30) derives the word orders of different kinds of clauses. The first case, illustrated in (31), corresponds to a transitive construction.

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

b. INPUT: <buy (x, y), x=a girl (Ag), y=the records (Th)>

Fa. [IP una muchacha compró [VP los discos]]

b. [IP compró [VP una muchacha los discos]]

OVS

*b!

c. [IP los discos los compró [VP una muchacha]]

OVS

*b!

d. [IP exp compró [VP una muchacha los discos]]

OVS

*b!

Let us go through the losing candidates in (31) one by one. Candidate (31b), which corresponds to example (2) in §3.1, leaves the Pole position empty, and thus loses to (31a) because of its violation of the EPP constraint. Candidate (31c) satisfies EPP because the direct object occupies Spec-IP, but by doing so incurs in a fatal violation of *Pole/Theme. Finally, the exp-VSO candidate (31d) also satisfies EPP by insertion of an expletive (exp), but loses because of its violation of FULL-INTERPRETATION, in a way analogous to what is argued for Italian subject inversion in Grimshaw & Samek-Lodovici (1998). Candidate (31a), which incurs only in a violation of the low ranked markedness constraint *Pole/Agent, thus emerges as the winner. I am not claiming by this analysis that all losing candidates...
are unattested or ungrammatical sentences in Mexican Spanish, though. Once the constraints related to information structure are introduced in the following chapter, it will become clear how candidate (31c) can emerge as the winner over the candidate that displays the unmarked word order in this tableau.

In the case of Psych clauses, the ranking in (30) ensures that it will not be the subject that emerges in the preverbal position, but rather the IO, since given the Pole Hierarchy in (28a) it is better to have an *experiencer* than a *theme* as the Pole of the extended projection. The analysis is presented in (32).

(32) 

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In (32) the candidate that leaves the Pole position empty, candidate (32b), loses because of its violation of EPP, while (32d) loses because of its violation of *Pole/Theme.

Just as in the case of (31), the candidate that leaves the Pole position empty, candidate (32b), loses because of its violation of EPP, while (32d) loses because of its violation of *Pole/Theme.

The same is true of some of the losing candidates in tableaux (32) and (33). Concretely, (32a) and (33a) are just infelicitous in a sentence-focus context. The distinction between infelicity and ungrammaticality in my analysis is dealt with in the following chapter. See also §1.2.2.

Lastly, consider unaccusative constructions. What is crucial in this case is that under the ranking in (30), it is better to leave the Pole position empty than to have a *theme* occupying it, because the degree of markedness of a clause with a *theme* as the Pole is higher than the degree of markedness of a clause that lacks a Pole altogether. Consequently, as opposed to the previous two cases, a verb-initial construction emerges as the output. The most harmonic candidate (33c) is the one that violates the low-ranked *Pole/Experiencer* constraint and thus emerges as the winner. The analysis presented in (31-33) represents the core of this proposal, and it has three crucial properties. First of all, it accounts for the fact that for different verb classes different arguments occupy the preverbal position in the unmarked cases.
Secondly, by embedding the EPP constraint in the subhierarchy in (28a) we explain why the preverbal position needs to be occupied in some cases but not in others, a result that cannot be achieved straightforwardly in frameworks where satisfaction of the EPP is an all-or-nothing requirement. Lastly, by introducing the notion of Pole it is possible to achieve this result without the need to invoke specific grammatical relations when determining which argument of the verb occupies the preverbal position. This will be the most fundamental part of the analysis as a whole, and for Spanish it cannot be replaced by a constraint hierarchy that targets specific grammatical relations instead, as the discussion of previous analyses in §3.1 shows.

3.3.2 Alternative analyses

To end this section, I comment briefly on two alternatives to my proposal, one based on null expletives and the other one based on null locative topics (Pinto 1994, Zubizarreta 1998, Goodall 2001).

Consider an analysis where, just as in my analysis, transitive subjects and dative experiencers satisfy the EPP in the unmarked case, but where the VS order of unaccusatives is the result of an inviolable EPP being satisfied by a null expletive in [Spec, I], as in the representation in (34), where (exp) represents a null expletive.

There are two other possible alternatives to the analysis of word order I have developed, one based on the notion of default topic and the other one based on Alignment constraints. Since the data that more strongly corroborate the adequacy of my analysis vs. these alternatives comes from topicalization, I delay their discussion until the next chapter.

Independently of whether or not this is a viable proposal, the VS order of unaccusatives is the result of an inviolable EPP being satisfied by a null expletive in [Spec, I], as in the representation in (34), where (exp) represents a null expletive. This will be the most fundamental part of the proposal, and for Spanish it cannot be replaced by a constraint hierarchy that targets specific grammatical relations instead of my proposal in §3.1. However, it cannot be replaced by a constraint hierarchy that targets specific grammatical relations because no operation of deletion can predictably affect the order of elements in output.

Independently of this, the proposal in (34) is not a possible representation of a null expletive [Spec, T] in the representation in (34a), where (exp) represents a null expletive. This is because the VS order of unaccusatives is the result of an inviolable EPP being satisfied by a null expletive in [Spec, I].

Consider an analysis where, just as in my analysis, transitive subjects and dative experiencers satisfy the EPP in the unmarked case, but where the VS order of unaccusatives is the result of an inviolable EPP being satisfied by a null expletive in [Spec, I], as in the representation in (34), where (exp) represents a null expletive. This will be the most fundamental part of the proposal, and for Spanish it cannot be replaced by a constraint hierarchy that targets specific grammatical relations instead of my proposal in §3.1. However, it cannot be replaced by a constraint hierarchy that targets specific grammatical relations because no operation of deletion can predictably affect the order of elements in output.

Independently of this, the proposal in (34) is not a possible representation of a null expletive [Spec, T] in the representation in (34a), where (exp) represents a null expletive.

Secondly, by embedding the EPP constraint in the subhierarchy in (28a) we explain...
These authors point out that it is very implausible that a null expletive satisfies the EPP in a construction like (34) since the fundamental characteristic of expletives is that they induce a definiteness effect which is not observed in unaccusative or other types of VS sentences in Spanish and other pro-drop languages. Now one could consider the possibility that null expletives in some languages do not induce a definiteness effect, and that precisely this would appear to be the case in Spanish. But this carries with it the consequence that the null expletive hypothesis then becomes unfalsifiable. To the extent that we assume the existence of null expletives whose properties are not those of overt expletives, we cannot test for their presence in any way. Consequently, such an alternative should be abandoned on methodological grounds and does not constitute a viable alternative to my proposal.

Another alternative analysis, proposed in Pinto (1994) for Italian and further developed in Zubizarreta (1998) and Goodall (2001) for Spanish, relies on the idea that in VS sentences the preverbal position is occupied by a null topical locative or temporal adverb. There are two facts that disconfirm this alternative. Fronted topics create islands for extraction, as is well known (see Rochemont 1989, Rizzi 1990, Müller & Sternefeld 1993, inter alia) and this is clearly attested for left-peripheral locatives and temporal adverbs in Spanish, as shown in (35).

(35) a. ¿Qué dices [que ayer compró Juan]? what you-say that yesterday bought Juan ('What are you saying that yesterday Juan bought ?')
   b. *Cuántas personas decidieron [que en Mérida van a entrevistar]? how-many persons you-PL-decided that in Mérida you-PL-go to interview?

Wh-extraction from complement VS clauses, however, is not subject to any such effects, as shown in (36).

(36) Cómo dices [que llegó tu hermano]? how you-say that arrived your brother

If, in order to sidestep the contrast between (35) and (36), we suggest that null locatives and temporal adverbs do not have the same properties as overt topics, then in order to describe the contrast between (35) and (36) we need a null hypothesis. However, this hypothesis faces a serious problem when transitive sentences are considered. We have seen that VSO and V-IO-S sentences with an empty preverbal position are not tolerated in Mexican Spanish. But if a null locative/temporal can satisfy the EPP in unaccusative VS sentences, then it is unclear why such an option cannot rescue the VSO sentence in (2), for instance.
3.4 Other constructions

Before concluding this chapter, I discuss how a number of constructions different from the ones discussed so far fit in the analysis developed here. The constructions I will look at are pro-drop constructions, impersonal passives, other kinds of psych clauses and impersonal active constructions.

Much work remains to be done in terms of characterizing the precise behavior of some of these constructions, and so for the time being I will only suggest a tentative analysis for them.

Impersonal passives and pro-drop constructions, exemplified in (37a) and (37b) respectively, are straightforwardly analyzed in the proposal developed so far.

(37)a. Se vendió la casa.
   'The house was sold.'

An issue that I leave open for future research is the word order of clauses with morphologically derived predicates, such as periphrastic passives, exemplified in (i).

(i) Los delincuentes fueron capturados (por las autoridades).
   'The criminals were captured by the authorities.'

In (i), the theme subject surfaces as the Pole, and the oblique agent appears in the post-verbal field, contrary to what would be expected in my analysis. Furthermore, the reverse order is not possible at all. One possible solution for this problem relies on information structure considerations. It has long been observed in the functional literature that the passive in English is chosen over the active when the patient is more discourse-prominent than the agent (Tomlin 1985, Thompson 1987). Discourse prominence is conditioned by several factors (empathy, topicality, discourse coherence) which are grouped together in Aissen (1999a) under the label Thematic Prominence (not to be confused with prominence along the Thematic role Hierarchy). Now it is also a well known fact that the preverbal position in Spanish is typically a topic position, as I will discuss in detail in the following chapter, and so it may be possible that it is also a position for discourse-prominent arguments. Consequently, if as argued in Aissen (1999a) active and passive sentences are members of the same candidate set, then a passive sentence like (i), where the patient surfaces in the prominent Pole position, emerges as the winner when the patient is more discourse-prominent than the agent.

Consider now other kinds of psych predicates. In their influential analysis of psych verbs in Italian, Belletti & Rizzi (1988) list three basic classes of these verbs. One class, the piacere 'please' class, where the theme is realized as the nominative subject and the experiencer as a dative oblique, corresponds to the psych verbs we have discussed so far. In another class, the temere 'fear' class, the experiencer is realized as the nominative subject and the theme as an accusative argument. This class of psych verbs is also observed in Spanish, and includes verbs like conocer 'know', admirar 'admire', amar 'love', odiar 'hate', despreciar 'loathe/despise',...

The precise analysis of pro-drop constructions depends largely on the assumptions that we start out with. In an OT analysis where there are no null subjects at all (Samek-Lodovici 1996), the EPP is violated in (37b), but this is still better than violating *Pole/Theme. In OT analyses that do allow for null subjects (Costa 1998), it is necessary to determine first if null elements can satisfy constraints like the EPP, CASE, etc., and then determine if there is any evidence that a pro is functioning as a Pole in pro-drop constructions. Settling this issue goes beyond the scope of this dissertation, but my proposal is compatible with either analysis.
'accept', etc. The unmarked word order of clauses with these verbs, where the experiencer subject occupies the preverbal position, is illustrated in (38).

(38) Juan ama a María.

S V O

Juan loves

ACC

María

<THEME>

'Juan loves María.'

These word order facts are the ones predicted by my analysis. In terms of semantic roles, these predicates are just like gustar 'like', analyzed in (32), and so we expect them to have in a similar way, independently of the specific grammatical relations that their arguments display.

The situation is slightly more complex with the third class considered in Belletti & Rizzi (1988), which corresponds to the preoccupare 'worry', class. In this case the experiencer is realized as an accusative argument, and the nominative subject occupies the preverbal position, as shown in the Italian example in (39).

(39) Questo preoccupa Gianni.

S V O

this worries Gianni

My claim, however, is that in these cases the subject is not really a theme, but rather is closer in its thematic properties to an agent (see also Pesetsky 1995). The broad semantic roles we have been using do not do justice to the fact that the subject is the one doing the action, so we need a new way to classify these subjects.

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Spanish does have some passive verbs where the experiencer is realized as an agent, but these are exceptions and do not represent the norm. Examples are shown in (40).

(40) A Juan le preocupan sus hijos.

IO V S

to Juan

DAT-CL

worry -3p

his children

<THEME>

'Juan is worried about his children.'

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(40) A Juan le preocupan sus hijos.
with respect to the object in (38) and to the subject in (40), where the psych verbs do not entail the volitionality of these arguments. Notice also that, just like the theme arguments of the gustar 'like' class (see (40)), the subjects in (41) already carry two of Dowty's five possible Proto-Agent entailments, causing an event or change of state in another participant and existing independently of the event named by the verb (see Dowty 1991). Apparently, the additional volitionality entailment of the verbs in (41) is enough for their subjects to qualify as agents.

With these considerations in mind, the word order in (41) is expected under my analysis. Given the ranking EPP >> *Pole/Experiencer >> *Pole/Agent (see (30)), whenever there is both an agent and an experiencer present, the candidate that satisfies the EPP by moving the agent into the Pole emerges as the winner. In support of this proposal, notice that even though Spanish does not appear to have a large class of verbs equivalent to the Italian preoccupare class, it does have a large class of psych verbs that show an alternation where the experiencer is realized either as a dative or as an accusative argument. Verbs in this class include molestar, alterar 'get on one's nerves', conmover 'be moved by', asustar 'frighten', excitar 'turn on', etc. Crucially, this alternation is correlated to unmarked word order, as shown in (42).

(42) UNMARKED WORD ORDER

a. Los niños molestan a Juan.

b. A Juan le molestan los niños.

Example (42a) means that the children are intentionally engaged in doing things with the purpose of bothering Juan. In contrast, (42b) means that Juan finds the children bothersome, i.e., he is irritated by their mere presence or by the normal things that children usually do. This alternation can be straightforwardly accounted for in terms of Proto-Role entailments. In both cases, the children are the cause of Juan's mental state, but (42a) further has a volitionality entailment. This can be seen in that (42a) is compatible with certain adverbial phrases like a propósito 'on purpose', whereas (42a) (with a subject-oriented reading) is not.

The dative/accusative alternation is also reported for certain Italian verbs in Belletti & Rizzi (1988: 335, fn. 28). I am unaware if the alternation in Italian is also dependent on semantic entailments, though.

In some dialects of Spanish, human direct objects can be doubled by the clitic le (the so-called leista dialects). Mexican Spanish is not one of these dialects, so it is certain that the experiencer in (42b) is a dative indirect object, and not a clitic left-dislocated direct object.
(43) a. Los niños molestan a Juan a propósito.
'b. A Juan le molestan los niños a propósito.

The children bother Juan on purpose.'

In terms of word order, when *molestar* 'to bother' entails volitionality, its subject has enough Proto-Agent entailments to count as an agent, and so it will surface as the Pole in the unmarked case, as in (42a). In the absence of this entailment, the subject of *molestar* corresponds to a theme, and so (42b) displays the experiencer-verb-theme order observed in the two other major classes of psych verb (the *gustar* 'like' class, and the *amar* 'love' class).

Finally, I consider a number of active intransitive constructions, labeled impersonal constructions in the literature on Spanish, which have been recently analyzed in Fernández-Soriano (1999). These constructions are of two kinds. The first kind involves intransitive stative predicates and meteorological verbs that can appear with a preposed locative XP; some of these predicates (such as *faltar* 'lack') can also take a dative XP as their argument, which can also appear in the preverbal position. The two constructions are exemplified in (44) and (45), respectively.

(44) En Madrid nieva.
'It snows in Madrid.'

(45) a. Aquí pasa algo.
'b. A Juan le pasa algo.

'Something's going on here.'

'Something's going on with Juan.'

Fernández-Soriano provides considerable evidence that the locative and dative XPs in (44) and (45) are arguments of these predicates. She shows that they behave differently from adjuncts in a number of respects, such as extraction from coordinate sentences and reflexive inversion. She further shows that these arguments are base-generated in a position that is both structurally higher than the base position of the experiencer and the base position of the locative and dative (goal) arguments of other class of predicates. These constructions seem well-motivated and will not be treated here.

I consider a number of active intransitive constructions. The second class corresponds to impersonal constructions in Spanish, which are also frequent in the syntax of other languages (example (46)). These constructions are of two kinds. The first kind involves intransitive stative predicates and meteorological verbs that can appear with a preposed locative XP; some of these predicates (such as *faltar* 'lack') can also take a dative XP as their argument, which can also appear in the preverbal position. The second kind corresponds to intransitive eventive predicates (such as *suceder* 'happen') that can take either a locative or a dative argument. In the second class, the second class corresponds to impersonal constructions in Spanish, which are also frequent in the syntax of other languages (example (46)). These constructions are of two kinds. The first kind involves intransitive stative predicates and meteorological verbs that can appear with a preposed locative XP; some of these predicates (such as *faltar* 'lack') can also take a dative XP as their argument, which can also appear in the preverbal position.
The thematic hierarchy assumed in (46) and (66). Thus is the case of the verb
pasar 'happen' in (45b). For these constructions I agree with Fernández-Soriano both in
that the unmarked word order corresponds to the one in (45b), where the dative appears in
the preverbal position, and in that it is fairly clear that the secondary predication, interrogative inversion and other phenomena
tened to secondary predication, interrogative inversion and other phenomena 
are more clearly a two different ways. First, the role that the dative XP in these
sentences plays the opposite of the psych predicates. Similar observations can be made with respect to
the thematic characterization of the arguments of this verb. The dative is clearly not an
experiencer, The glosses are my own.

Based on this observation, it is not unreasonable to suggest that the predicates in

(pasar 'happen' in (45b)).

Where has a very good time in Dominicana?

Where has a very good time in Dominicana?

Where has a very good time in Dominicana?

Where has a very good time in Dominicana?

Where has a very good time in Dominicana?

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but it is clearly not a goal either, since the verb expresses a state. Rather, *faltar* seems to establish something akin to a whole-part relation between the dative argument and the subject DP, where it is unclear if semantic roles as understood in §3.2 are of any relevance in defining this relation.

However, it does not necessarily follow from this that the arguments of the verb must be equally prominent. In light of our discussion of semantic entailments in psych verbs, it is not unreasonable to think that the Pole may be sensitive to other prominence hierarchies, one of which could include whole > part as a part of the scale. This would explain why the dative appears in the preverbal position, since the whole would be more prominent than the part.

Investigating this issue in detail, however, requires a more detailed analysis of the semantics of these predicates than is possible here.

The case of preposed locative XPs in (44) and (45a) is somewhat clearer. In this case there is considerable evidence that these preposed locative XPs are topics, and, contra Fernández-Soriano's analysis, they do not appear in the preverbal position in the unmarked case. Fernández-Soriano claims that the word order in (44) and (45a) is felicitous in an out-of-the-blue (i.e., sentence focus) context, which corresponds to a discourse focus in the unmarked word order. Although it is not clear in this case whether these preposed locative XPs are topics, it is possible that the referent of the locative has already been introduced in the discourse or is readily identifiable by both speaker and hearer.

As further evidence that fronted locatives in these constructions are functioning as topics, notice that for some speakers their acceptability is considerably downgraded in an out-of-the-blue context when they are indefinite, as shown in (51-52).

3.7 See the section on sentence topics in §4.3.

3.8 Definiteness and specificity are variables that are not controlled for in Fernández-Soriano's investigation. In most of her example sentences, the preverbal locatives are either deictic locative
Soriano notes that the locative XPs are in complementary distribution with the dative XPs previously discussed, which are also quirky subjects. This is shown in (54):

- (54)a. Me falta café.
  'I am missing coffee.'
- (54)b. Aquí falta café.
  'Coffee is missing here.'
- (54)c. ??Aquí me falta café.

Fernández-Soriano claims that constructions like (55) are only possible when the locative XPs are in complementary distribution with the dative XPs.

- (55)a. En Barcelona nos pasó lo peor.
  'The worst happened to us in Barcelona.'
- (55)b. En esta colonia nos faltan policías.
  'We do not have enough policemen in this neighborhood.'
- (55)c. ??En este aburrido no nos falta nada.

The argument is that if quirky case is discharged on the dative, then there is no possibility for the locative to receive quirky case in [Spec, I]. This is shown in (54c), however, seems to me to be simply pragmatically anomalous, since one can readily construct other instances where the locative and the dative are not in complementary distribution. Consider also one of the crucial arguments presented by Fernández-Soriano in favor of her analysis of these locative XPs as quirky subjects. In her analysis, these locative XPs must receive quirky case in [Spec, I], which helps explain why they surface in the position in the unmarked case. In support of this proposal, Fernández-Soriano points out that these locative XPs and the dative XPs are in complementary distribution.
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necessarily that of an adjunct. In other words, (54c) would have to be interpreted as something like 'when I am here, I lack coffee' (Fernández-Soriano 1999: 122).

Although this is certainly a possible interpretation for (55a), ('When we were in Barcelona, the worst happened to us'), example (55b) cannot have an interpretation along these lines (i.e. 'When we are in this neighborhood, we don't have enough policemen'). This points to the conclusion that the presence of the locative XP in [Spec, I] is not related to its status as either an argument or an adjunct, but rather to information structure considerations (i.e. topicalization).

Finally, recall from §3.3.2 that fronted topics create islands for extraction. The fronted locative XPs of impersonal verbs behave like topics in this respect, as shown in the examples in (56-57). Notice here that extraction is perfect when the locative XP appears in the post-verbal field. In contrast, preverbal subjects (Goodall 2001) and experiencers do not lead to such island effects, as shown in (58) (example (58a) is from Goodall 2001). This contrast holds both when the extracted wh-operator is D-linked (as in (57a) and (58b)) and when it is not (as in (56a) and (58a)).

(56) a. *Qué dice [que en Barcelona pasó la semana pasada]?
   b. Qué dice [que pasó la semana pasada en Barcelona]?

'What did you say happened in Barcelona last week?'

(57) a. Cuántos días dice [que en Barcelona nevó la semana pasada]?
   b. Cuántos días dice [que nevó la semana pasada en Barcelona]?

'For how many days did you say that it snowed in Barcelona last week?'

(58) a. A quién crees [que Juan le dio el premio]?
   b. Qué discurso dice [que a Juan le gustó tanto que quiere publicar]?

'Who do you think that Juan gave the prize to?'

'What speech did you say that Juan liked so much that he wants to publish it?'

Summing up, Spanish impersonal constructions deeply deserve more study, but

...
Conclusions

In this chapter I have proposed that the unmarked word order observed in transitive, psych and unaccusative clauses in Spanish is dependent on structural markedness considerations. Poles with different semantic roles instantiate different degrees of markedness, and beyond a certain degree it is better to leave clauses without a Pole, in violation of the EPP. The scale of structural markedness responsible for these effects can be formalized by Harmonic Alignment of a scale of semantic roles with a structural prominence scale that incorporates the notion of the Pole. Embedding the EPP in the subhierarchy of markedness constraints that results from Harmonic Alignment then provides an analysis of the relevant word order facts.

The analysis developed in this chapter and the previous one constitutes the core of my proposal. However, the sensitivity of the Pole to the semantic role of the constituent that occupies the Pole also affects different kinds of psych verbs, and it can accommodate the fact that the word order is different in impersonal passives, pro-dropped constructions and in clauses with double objects. The resulting analysis also accounts straightforwardly for the unmarked word order observed in impersonal constructions.

In this chapter, I have proposed that the unmarked word order observed in Spanish is directly linked to the properties of the Pole.