

# **FUNCTIONAL HEADS AND CLAUSE STRUCTURE**

**MIT Working Papers in Linguistics  
Volume 10**

**edited by**

**Itziar Laka and Anoop Mahajan**

**MITWP**

**1989**

**Distributed by**

**MIT Working Papers in Linguistics  
Department of Linguistics and Philosophy  
Room 20D-219  
Massachusetts Institute of Technology  
Cambridge, MA 02139**

# Unergative-Unaccusative Alternations in Spanish<sup>1</sup>

Esther Torrego  
University of Massachusetts, Boston

## 0 Introduction

According to Perlmutter's Unaccusative Hypothesis (1978), unaccusative and unergative verbs differ syntactically and semantically in systematic ways. The single argument of unaccusative verbs, unlike that of unergative verbs, is base-generated in the structural object position at D-structure. The thematic role of unaccusative verbs is generally theme or patient, while the argument of unergatives tends to be agentive. The following is a minimal pair:

- (1) a. Eva canta (INT)  
Eva sings
- b. Eva crece (UNAC)  
Eva grows

There is a vast literature dealing with unaccusatives from both a syntactic and a semantic perspective. Many of these studies are devoted to investigating the semantic characterization of each class. There is common consensus that some verbs systematically fall into the unergative or into the unaccusative class across languages. However other verbs, whose meanings fit into the unergative and into the unaccusative classes, are unergatives in some languages and unaccusatives in others.<sup>2</sup>

In this paper, I will discuss a class of structures from Spanish and other Romance languages in which some unergative verbs enter into the unaccusative class under specific syntactic and semantic conditions. After describing the phenomena in question, I will discuss the nature of the specific constraints that seem to make this process possible. In my account, the "extra" argument that, according to Davidson (1966) and others, predicates may have, will play a major role. My leading assumption will be that the shift from unergatives to unaccusatives crucially involves the overt expression of a spatiotemporal argument, which manifests the otherwise hidden argument of unaccusative verbs. Following

- 
- 1. I am grateful to N. Chomsky, S. Epstein, J. Grimshaw, I. Laka, R. Larson, and J. Uriagereka for their help. I also want to thank the linguists from the Universitat Autònoma de Barcelona for discussing this material with me in 1984.
  - 2. See Rosen (1984) and Centineo (1986) for relevant discussion; also Grimshaw's (1987) overview of unaccusativity.

Kratzer (1988), I will refer to this otherwise hidden argument as the d(avidsonian)- argument.

# 1 The phenomenon

It is well known that unaccusative verbs in some Romance languages display specific syntactic phenomena. In Italian unaccusatives select auxiliary *essere*, while unergatives select *avere*. In addition, unaccusatives but not unergatives allow ne-cliticization. Verbs in Spanish, with the exception of passives, select *haber* 'have' irrespective of their class. Contemporary Spanish does not have the equivalent to clitic *ne*. Thus, the typical tests to diagnose verbs such as *venir*, 'to come' or *pasar* 'to pass' as unaccusatives are not available in Spanish. Nevertheless, it is possible to provide evidence that unaccusative verbs in Spanish pattern with transitives in the relevant respects. The evidence I wish to introduce has to do with the distribution of Spanish bare plurals. Both accusative and unaccusative verbs allow bare plurals in postverbal position. However, intransitive verbs do not permit a bare plural as their argument, whether in postverbal position or not. Consider the following examples:

- (2) a. Han leído libros  
They have read books
- b. Han pasado camiones  
Have passed trucks  
      'Trucks have passed by'
- c. \*Han dormido animales  
        Have slept animals  
        'Animals have slept'

Bare plurals in Spanish can appear as direct objects, as illustrated in (2a). Notice that the single argument of an unaccusative verb such as *pasar* in (2b) can be a bare plural in postverbal position. By contrast, bare plurals are disallowed with unergative verbs such as *dormir*, irrespective of whether they appear postverbally, as shown by (2c). The examples in (3) illustrate the same point:

- (3) a. Crecen flores  
Flowers grow
- b. \*Anidan cigueñas  
Storks shelter

In (3a), the single argument of the unaccusative verb *crecer* is a bare plural. However, a bare plural with an unergative verb

yields ungrammaticality, as shown by (3b). The descriptive generalization that arises from these data is this:<sup>3</sup>

- (4) In Spanish, unaccusative verbs allow their single argument to appear as a bare plural in postverbal position, but unergative verbs do not.

Let us take generalization (4) to be a diagnosis for base-generation of a NP in direct object position in Spanish.<sup>4</sup> Next, consider the following examples:

- (5) a. \*(Aquí) han dormido animales  
Here have slept animals  
b. \*(En este parque) juegan niños  
In this park play children  
c. \*(En este árbol) anidan cigüeñas  
In this tree storks shelter

By the criterion we have established, the Spanish verbs in (5) behave as unaccusatives, not as unergatives. Since a bare plural in postverbal position is allowed, it must be that these nominals are base-generated in object position. Still, ordinarily, Spanish *dormir*, *jugar* and *anidar* are unergative, not unaccusative verbs. This can be clearly seen in that these verbs select *avere* and disallow *ne*-cliticization in Italian, and in that bare plurals in postverbal position yield ill-formedness in the regular case in Spanish. The sentences in (5) are only well-formed when there is

- 
3. Notice that *ne*-cliticization and the distribution of bare plurals are exchangeable diagnoses for unaccusatives. Both of them single out a thematic argument which is the D- structure object of a verb. Nevertheless, the distribution of bare plurals is more restricted than that of the nominal construed with Italian *ne*. Spanish bare plurals cannot appear in preverbal subject position, even when they originate in object position:

- (i) *Pasan trenes*  
Pass by trains  
(ii) *Trenes pasan*

Example (ii) is only acceptable under a topicalized reading of the bare plural (See footnote 9). Unlike the situation of Spanish bare plurals, the object theme of a *ne*-construction can move to preverbal subject position, as discussed by Burzio (1981)/(1986) and Belletti and Rizzi (1981).

4. Here I will ignore the theoretical reasons behind the particular distribution of Spanish bare plurals. I use the term "bare plurals" to refer to **unmodified** bare plurals. Spanish bare plurals with adjectival or other types of modification do not necessarily have the same distribution.

a locative phrase preceding the verb (I will come back to the position of the locative phrase later).

From this, we must conclude that unergative verbs in Spanish can fall into the class of unaccusatives under certain conditions.

Before proceeding to analyze unergative-unaccusative alternations of this sort, I wish to provide additional evidence in support of the assumption that the verbs in sentences (5) have shifted from unergatives to unaccusatives.

I have argued that, under certain conditions, unergative verbs have subjects that are base-generated in object position. If this is indeed true, one would expect that in a language identical to Spanish but with the clitic *ne*, the clitic *ne* would surface in syntactic contexts like (5), as it does with ordinary unaccusatives. This prediction is fulfilled within the Romance languages. Catalan has contrasts of the following sort:<sup>5</sup>

- (6) a. N'hi canten molts  
           of them-there sing many  
           'There sing many of them'
- b. \*En canten molts
- (7) a. N'hi dormen molts  
           of them-there sleep many  
           'There sleep many of them'
- b. ??En dormen molts

Sentences (6a) and (7a), which contain a locative clitic *hi*, allow the clitic *en*, analogous to Italian *ne*, here realized as *n*. By contrast, (6b) and (7b), which have no locative clitic, do not permit *en*. The fact that *en* is allowed in (6a) and (7a) and disallowed in (6b) and (7b) provides indirect evidence that the verbs in both (6a) and (7a) now belong to the unaccusative class, unlike the situation in (6b) and (7b). As with canonical punaccusatives, the clitic *en* is allowed in both (6a) and (7a).<sup>6</sup>

It is quite clear that locatives play a significant role in the shifting from unergatives into unaccusatives.

---

5. I thank Picallo and Rigau for discussion of the Catalan examples.

6. Italian also allows unergatives to become unaccusatives via a locative clitic, although the phenomenon appears to be more restricted than in Catalan. It seems that only a subclass of unergative verbs have the option of shifting into unaccusatives; verbs in this class include 'to fly' and 'to life'. The following is an example: *Ce ne vivono molti*; \**Ne vivono molti* (There of them-live many).

Notice that unergatives can shift into unaccusatives, but ordinary accusatives (i.e., transitives) cannot:

- (8) \*En esta película han matado mujeres al vendedor  
dentro una tienda  
In this movie have killed women to the salesman  
inside a store  
'In this movie, (some) women have killed the salesman  
inside the store'

The fact that both unergatives and unaccusatives have just one theta-role to assign appears to be a *sine qua non* condition for unergative-unaccusative alternations to be possible at all.

Shifting from unergatives into unaccusatives is a productive process in Spanish. Nevertheless, the results are not equally felicitous. The best cases are those in which the meaning of the resulting sentences is closer to that of sentences containing canonical unaccusative verbs:

- (9) a. En esta pista aterrizan (han aterrizado) helicópteros  
On this runway land helicopters  
'Helicopters land on this runway'  
b. En este avión viajan (han viajado) ejecutivos  
In this plane travel (have travelled) executives  
c. ? En este ring han boxeado campeones  
In this ring have boxed champions  
d. ??En este taller han trabajado (trabajan) mujeres  
In this shop have worked (work) women

Other things being equal, the shift from unergatives to unaccusatives gives better sentences when the internal argument of the corresponding verbs can be made to fit the characterization of theme or patient more easily. Within the sentences in (9), (9a/b) are better than (9c/d); the internal argument of the verbs *aterrizar* and *viajar* are more theme-like than those of verbs such as *mandar* and *trabajar*.<sup>7</sup>

My view is that the sentences in (5) have essentially the same analysis as sentences involving ordinary unaccusative verbs. This might in fact be the null hypothesis. Assuming this, one

---

7. In a talk on "Locative Inversion in English and Chichewa" given at MIT on December 2/1988, Bresnan provided abundant evidence that semantic restrictions of this sort play a crucial role in sentences with "locative subjects". The similarity between the cases I discuss here for Spanish and Bresnan's locative inversion phenomena is quite apparent. The analysis I propose for unergative-unaccusative alternations in Spanish is restricted to just these cases, independently of whether at a more abstract level of analysis all instances of locative subjects can receive a unified treatment. See Bresnan and Kanerva (1989).

expects (5) to exhibit whatever syntactic and semantic properties are characteristic of unaccusative verbs.

According to previous evidence, the locative phrase that appears preverbally with non-canonical unaccusative verbs plays a crucial role in licensing the unergative-unaccusative alternations of Spanish. I will consider the import of the locative phrase in this construction in more detail next.

### 1.1 The Locative Argument

As we have seen, Spanish unergative-unaccusative alternations are licensed by a locative argument. This must be so, since the elimination of the locative phrase in (5) yields ungrammaticality. Moreover, the most natural position for the locative phrase to appear is in preverbal position. In fact, the grammaticality of these sentences considerably decreases when the locative appears postverbally:<sup>8</sup>

- (10) a. ?? Han dormido animales aquí  
 b. \*Juegan niños en este parque  
 c. ??Han anidado cigueñas en este árbol

One important fact to note in regard to the locative phrase that licenses unergative-unaccusative alternations is that it has to be "specific"; that is, it can be "here", or "in this room", but not, for example, "in many rooms". Consider (11):<sup>9</sup>

- (11) a. \*En ninguna habitación juegan niños  
 Lit. In no room play children  
 b. \*En cuevas duermen animales  
 In caves sleep animals  
 c. \*En un árbol anidarán cigueñas  
 In a tree shelter storks

Spanish preverbal subjects in the general case do not have to obey this semantic restriction: **Ninguna mujer aceptó la propuesta** 'no woman accepted the proposal', **Muchas mujeres viven así** 'many women live like this'. However, as it will be discussed

8. This is so with **unmarked** intonation. I return to this issue below.

9. The examples in (11) should be kept apart from superficially similar cases in which I would argue the locative phrase is topicalized. As in other instances of topicalization, contrastive stress must accompany the proposed PP (see Torrego (1985)):

- (i) HACIA LA MONTAÑA suben los rebaños  
 Towards the mountain climb herds  
 Topicalized locative PPs do not give rise to unaccusative effects:  
 (ii) \*Hacia la montaña suben rebaños

later, "locative subjects" in sentences such as (5) are not coindexed with INFL. Since, surely, ordinary subjects are, one could make the argument that coindexation with INFL (with "pronominal" AGR, specifically) makes Spanish subjects somewhat "specific". Under such an assumption, the semantic difference between "locative subjects" and ordinary subjects would be only an apparent one. Be this as it may, I will consider the specificity of the locative phrase in this construction to be a semantic restriction having to do with the interpretation of these sentences. More concretely, I take it that the locative phrase we are dealing with here is the subject of a predication. This is indeed consistent with the interpretation of such sentences.<sup>10</sup>

The locative phrase is interpreted here as the "external" argument of the verb, in Williams' (1980) sense. Given that the verbs involved in (5) meet the criteria for unaccusativity via an overt locative argument, it is conceptually plausible that the sentences in (5) manifest **overtly** a predication relation that is non-overt in sentences with canonical unaccusative verbs. Under this view, ordinary unaccusatives must have a hidden locative argument corresponding to the overt locative subject of the sentences in (5). What argument can this be? My proposal is that this is the hidden argument of unaccusative verbs, the argument that corresponds to the "extra" argument that Davidson proposed for just action predicates. This shall also be my approach to the so-called expletive **there** in English, which, I shall assume, is saturated at LF by existential quantification. I have made the observation that the semantic relation of location plays a crucial role in the lexical semantic properties of unaccusative verbs. Interestingly, the class of unaccusative verbs includes, in addition to verbs of change of location, change of state, motion, etc. It is well-known that there is a semantic connection between locatives and existential sentences. Lyons (1977) (page 390) writes: "In fact, the 'existential' **be**-copula does not normally occur in English without a locative or temporal complement; and it might appear reasonable to say that all existential sentences are at least implicitly locative (the term **locative** being taken to include both temporal and spatial reference)".<sup>11</sup> The well-established connection between locatives and existentials may be taken to be characteristic not just of existentials but of unaccusatives in general. This sometimes hidden locative argument can be analyzed as the d-argument of existentials and other unaccusative verbs.

---

10. The interpretation of these sentences is that of a typical predication, with the VP ascribing a property to a referential subject.

11. See Bresnan (1988) and Bresnan and Kanerva (1989) for a more complete list of references on the subject of locatives.



## 1.2 Classes of Verbs

The idea that predicates have an hidden argument that corresponds to a d-argument has received much attention in recent work. Higginbotham (1985)/(1987) proposes to encode the information about the d-argument of predicates in their lexical matrix. For him, a verb such as *see* has three rather than two arguments: one for the subject, another for the object and a third E (in his terms) for the event. For the purpose of the present discussion, it suffices to assume that d-arguments are part of the argument structure of predicates.<sup>12</sup> My basic concern here will be to consider the classes of verbs that arise in a system that assumes d-arguments for predicates. Verbs can be classified depending on whether they assign thematic roles or not, and whether they have a d-argument or not. For convenience, I will refer to verbs as being [+/-d-assigners]:

- (12) a. [+theta assigner +d-assigner]
- b. [+theta assigner -d-assigner]
- c. [-theta assigner -d-assigner]
- d. [-theta assigner +d-assigner]

We expect some thematic-assigning verbs to belong in (12a) and others in (12b). Kratzer (1988) argues that stage-level predicates have a d-argument but individual-level predicates do not. Under Kratzer's proposal, some stative verbs do not have a d-argument; specifically, statives expressing individual properties, like the ones that disallow progressive *be* in English ('to know', for example). These verbs will then belong in (12b). However, unaccusatives, for example, will belong in (12b). As for option (12c), it is unclear whether it is realized at all, and, if it is, by what verbs.<sup>13</sup> It could be that, as a matter of licensing, no verb can be negatively specified for both theta and d-arguments.<sup>14</sup> Let us finally consider option (12d). I would like to consider the idea that 'weather' verbs are in this group. Chomsky (1981) analyzes 'weather' verbs as verbs assigning a quasi-argument theta role to the subject. In Spanish, some of these atmospheric states are expressed by *hacer* 'do' and a nominal: *hace frío/calor/viento/sol* (Lit. It does/makes cold/warm/wind/ sun 'to be cold, hot..., 'etc.); *hace buen/mal tiempo* (Lit. It does/makes good/bad weather), 'it is cold/hot/windy'. Within the framework of my assumptions, the nominal that appears in these expressions can be regarded as a predicate of the event (cf. Ruwet (1986) for relevant

---

12. Recent studies of lexical representation include Rappaport and Levin (1986), Rappaport, Laughren and Levin (1987), Grimshaw (1988), and Hale and Keyser (1988).

13. Maybe light verbs fit here. See Grimshaw and Mester's (1988).

14. I leave open the issue of where modals fit in the classification of (12). See Zagana (1982)/(to appear) for relevant discussion of modals and auxiliary verbs.

discussion). This is a way of capturing the import of Chomsky's proposal about the quasi-argument role of weather verbs without assuming that weather verbs assign any theta-role.<sup>15</sup> How about auxiliary verbs? It is uncontroversial that auxiliary verbs are not theta-assigners. They can nevertheless assign a d-argument, as the fact that there are semantic restrictions holding between classes of verbs and auxiliaries might suggest. Auxiliaries can be viewed as assigners of secondary d-arguments, subject to the same restrictions that constrain the thematic assignment of adjunct predicates. However, this possibility will not be explored here.

Let us now focus on argument-taking verbs of the class (12a), to which presumably both unergatives and unaccusatives belong.

Leaving aside how the semantic relation between a verb and its arguments should be represented, it is clear that verbs fall into different semantic classes depending on the relations they establish with their arguments. Typically, action verbs involve an argument that expresses the semantic relation of agent; another expresses the theme or the patient relation. Similarly, verbs of experience involve an experiencer and a theme, and so on. On the assumption that verbs may also have d-arguments, predicates can differ both in the nature of the theta-role they assign, as well as in the nature of their d-argument.

Although the class of *hacer*+nominal expressions for unergatives is limited in Spanish to just weather predicates and a few other cases, expressions involving *do* and a nominal are the ordinary means by which other languages express unergativity. Thus, in Basque, the lexical class of unergatives can be systematically expressed by *do* and a nominal, as discussed by Levin (1983) and also by Hale and Keyser (1988).<sup>16</sup>

However, the combination *do*+nominal is never found with verbs of the unaccusative class (cf. Levin (1984)).<sup>17</sup> This cannot be

---

15. Higginbotham (1985) and (1987) discusses a different but somewhat comparable class of cases in which an overt nominal expresses the d-argument overtly. The following Spanish expressions can be analyzed along the lines of Higginbotham's proposal: *hacer caricias* (Lit. to do/make caresses' 'to caress'); *hacer señas* (lit. to do/make signs' 'to signal').

16. The view taken by Hale and Keyser on this issue is that a lexical entry such as *laugh* should be represented as "[x do LAUGH]". Within their theory of lexical representation, the Lexical Conceptual Structure of the verb *laugh* includes two variables: x for the subject, and LAUGH for what they call 'the "restricted" variable', which they argue corresponds to the relevant action.

accidental.<sup>18</sup> The semantic distinction dynamic/stative must be syntactically relevant. Perlmutter (1978) notes that, to a large extent, it is possible to predict what verbs fall into which class by their meaning. The fact that verbs of the unergative class shift into the unaccusative class when there is an overt locative phrase in subject position must follow from some semantic generalization over classes of verbs.<sup>19</sup> I have taken the unergative-unaccusative alternations of Spanish illustrated in section 1 to be telling evidence bearing on this issue.

The proposal is then to incorporate in the lexical representation of each predicate appropriate information about the semantic nature of its d-argument. Within such an approach, the shift from unergatives to unaccusatives can be thought of as shifting the means by which lexical classes of verbs meet semantic criteria.<sup>20</sup>

## 2 On Locative Subjects

According to previous evidence, the locative argument that licenses unergative-unaccusative alternations in Spanish must meet two conditions: it must be realized in preverbal position outside VP at S-structure, and must also be overt. I will now show that this locative phrase must also be referential.

Consider presentational sentences in English, which have the so-called expletive *there* as a subject: 'there arrives Mary', 'there is an argument here'.<sup>21</sup> English non-argumental *there* is homophonous between the indexical locative adverbial and the

- 
17. The following are examples from Basque due to I. Laka, who has also helped me seeing the theoretical import of the examples:

(a) **unergatives**

- i. Irune-k [dantza egin] du  
 Irune-ERG dance do AUX  
 'Irune has danced'

(b) **unaccusatives**

- ii. Irune heldu da  
 Irune-ABS arrived AUX  
 'Irune has arrived'

- iii. \*Irune-k heldu egin du

18. Hindi is another language in which unaccusatives and activity verbs contrast in this manner.
19. Cf. Carter (1988) for relevant discussion.
20. I will make no attempt to integrate my assumptions into a theory of lexical representation.
21. See Gueron (1980).

expletive subject of existential and other unaccusative constructions.<sup>22</sup> The same happens in Spanish with the overt counterpart of English *there*: *ahí*, pronounced with stress over the first vowel: *ahí llega tu padre* 'there arrives your father'.<sup>23</sup> As English *there*, Spanish non-argumental *ahi* is homophonous with referential *ahi*, pronounced with stress over the last vowel: *ahi vive mi abuela* 'my grandmother lives there'. Suppose we take the Spanish *ahí* and English *there* of presentational sentences to be locative subjects, specifically. I have argued that all arguments, including d-arguments, are relevant to determine specific semantic classes of verbs (and of predicates in general). Within this approach, it is quite plausible to analyze non-argumental *ahí* and *there* as DPs standing for the d-argument of unaccusative verbs. This analysis permits us to treat *ahí/there* as a free variable to be licensed at LF by quantification. Quantification of *ahi/there* would render expletive substitution at LF superfluous in this case (Chomsky (1986)). That is, assuming that, quite generally, d-arguments are saturated by existential closure, *there* will be bound by an existential quantifier at the level of LF.<sup>24</sup> We may assume that, in the general case, the value of the variable will be determined by discourse (See Heim (1982)).<sup>25</sup>

Clearly, locative subjects do not have to be supplied a semantic value at S-structure with ordinary unaccusatives. However, in Spanish, while non-argumental *ahí* can be a subject in sentences involving unaccusative verbs, Spanish "ahi" only licenses unergative-unaccusative alternations when it is referential. Thus, Spanish has no sentences such as: *ahí trabajan mujeres* 'there work women'. In other words, Spanish non-canonical unaccusatives require their locative subject to bear a semantic value already at S-structure.

- 
22. Similar arguments apply to French locative clitic *y* (cf. Kayne (1975) for extensive discussion) and its Catalan and Italian counterparts.
  23. I own this observation and a good discussion on this matter to J. Uriagereka.
  24. On this issue, see the articles by Davidson in Davidson (1980); Higginbotham (1985)/(1987)), Kratzer (1988), Carter (1988) and references cited in these works.
  25. Milsark's (1974) treatment of expletive *there* in existential sentences, for which he credits Chomsky, is basically the one I am arguing for non-argumental *there* in sentences involving unaccusative verbs in general. For reasons that do not concern us here, Milsark proposes that *there* gives rise to existential quantification at LF. On this and related issues, see Safir (1982)/(1985) and (1987); (1984) and Davis (1984), among many others.

The fact that the locative subject of a non-canonical unaccusative must be supplied with a value already at S-structure can be made to follow from the specific semantic characterization of the class of unaccusative and unergative verbs. Informally speaking, what we want is the lexical representation of unaccusatives to be such that it follows from their lexical properties that the d-argument of this class of verbs is marked as locative. By contrast, the lexical representation of unergatives will not contain such information. Under these assumptions, the licensing of locational d-argument will be more costly to the grammar with canonical unergatives than with canonical unaccusatives. Therefore, non-canonical unaccusatives must have a locative subject whose semantic value is supplied at S-structure for the unergative-unaccusative to be possible at all.

The next question to address in regard to locative subjects is Case.<sup>26</sup>

## 2.1 Case and Locative Subjects

The locative subjects of unergative-unaccusative alternations of Spanish must appear in Case-marked positions. In this respect, they are just like quirky subjects.<sup>27</sup>

- (13) a. En este jardín parecen [ e crecer muchas orquídeas ]  
In this garden seem to grow many orchids
- b. \*Parecen [ en este jardín crecer muchas orquídeas ]  
      Seem in this garden to grow many orchids
- (14) a. En esta escuela parecen [ e estudiar adultos ]  
In this school seem to study adults
- b. \*Parecen [ en esta escuela estudiar adultos ]  
      Seem in this school to study adults

The examples in (13) involve an ordinary unaccusative verb, and those in (14) a non-canonical unaccusative (i.e., an unergative shifted into unaccusative).

---

26. The analysis I have proposed for the unergative-unaccusative alternations of Spanish raises the obvious issue of why unergatives shift into unaccusatives just in some languages. Since the argument structure of verbs will be the same across languages, whatever is responsible for the distribution of this phenomenon cross-linguistically ought to be of syntactic rather than of semantic nature.

27. In fact, Williams' (1984) discussion of "quirky subjects" includes locative subjects in English ('Under the bed is a nice place to hide'). There is a vast literature on quirky subjects; since this topic is only marginal to my interests here, I will not give a list of references. The interested reader can find relevant references in Zaenen & Maling (1984).

While locative subjects must appear in Case-marked positions, observe that agreement is with the thematic object rather than with the locative. Unlike (13a), (15a) is impossible; similarly, (15b) is also out:

- (15) a. \*En este jardín pareCE crecer orquídeAS  
           In this garden seem to grow orchids  
       b. \*En este jardín creCE orquídeAS  
           In this garden grow orchids

It is well-known that the same array of facts is obtained when non-argumental *there* in English occupies the subject position:

- (16) i. a. There seems to be a riot  
           b. \*It seems there to be a riot  
       ii. a. There grow orchids  
           b. \*There grows orchids

We are led to assume that locative subjects need Case, but that they do not get it from AGR. AGR appears to be coindexed with the thematic object instead.<sup>28</sup>

Why is agreement with the locative subject impossible in unaccusative constructions?<sup>29</sup> Let us consider locative subjects that are argumental first, as in (13a) and (14a). One might want to argue that locatives cannot be coindexed with AGR because locatives are not, after all, DPs, but PPs.<sup>30</sup> However, this seems to me to be a spurious argument. In Castilian Spanish, the adverbial locative *aquí* 'here' is also found as an indexical

- 
28. Assuming that locative subjects are NOT coindexed with AGR in unergative-unaccusative alternations, the impossibility of locative subjects to appearing in positions other than the preverbal subject position follows (examples (10)). Subjects will only be able to appear in non-canonical subject position when they are coindexed with AGR (i.e., when they are i-subjects (see Borer (1986))).
29. Note that this issue also arises with Belletti's (1987) cases of partitive Case-assignment, a fact that Belletti herself acknowledges. In a sentence such as *han llegado muchas cartas* 'there have arrived many letters', the verb agrees with the thematic object, in spite of the fact that, in Belletti's system, the thematic object *muchas cartas* is assigned partitive Case.
30. The issue of whether locative subjects are PPs or DPs is in a way tangential to my argumentation. My claim is simply that locative subjects must appear in Case-marked positions. If locative subjects turn out to be PPs, the fact that they must be in Case-marked positions could be viewed as favoring the Visibility approach to Case, as S. Epstein has pointed out to me. It is an open issue whether d-arguments need Case.

third person personal pronoun (similar to a demonstrative). It can be the complement of prepositions:<sup>31</sup>

- (17) Voy con aquí al cine  
I am going with here to the movies

It can also be a subject pronoun:

- (18) a. Aquí dice que a él no le han pagado  
Here says that to him/her (they) haven't paid  
b. Aquí y yo no sabemos (PLURAL) nada  
Here and I do not know anything

It is also found in clitic-doubling sequences:

- (19) a. Aquí le duele la cabeza  
Here to him/her-hurts the head  
Here has a headache  
b. Le llame' (a) aquí por telefono  
To him/her called (to) here on the phone  
'I called him/her on the phone'

In spite of this, the agreement facts of unaccusative constructions do not change when the locative subject is realized as aquí:<sup>32</sup>

- (20) a. \*Aquí parece crecer (las) orquídeas  
b. \*Aquí crece (las) orquídeas

On the other hand, the possibility that argumental locative subjects be in a position other than the subject position (in Topic, or in some other specifier position) is not very plausible for Romance. Consider the following facts from Italian, discussed by Burzio (1983) and (1986) -(chapter 2); (similar facts hold for Catalan)<sup>33</sup>

- 
31. The use of 'here' as a person pronoun in this dialect is stylistically marked as "working class" speech.
32. The results are slightly less deviant in sentences involving bare plurals. Because bare plurals in Spanish can undergo incorporation, the Case-violation is presumably less severe in this case. This, assuming that incorporation and Case are two ways to license an argument at the LF-level.
33. For discussion of Catalan, see Bonet (1988).

- (21) Ci sono molti clienti nel negozio (his 95b)  
 there are many clients in the store
- (22)a. Ci sono io alla festa (his (106))  
 there am I at the party
- b. \*Ci sono a la festa  
 there am (I) at the party
- c. \*Io ci sono alla festa (footnote 57 of chapter 2)  
 I there am at the party

Both (21) and (22) involve locative clitics. Let us look at (22) more closely. Notice that in (22c) the adverbial *ci* is preventing the subject from appearing in preverbal position. Furthermore, *ci* makes subject pro-drop impossible in (22b). At the least, (22) provides evidence that locative subjects in Italian crucially implicate the subject position.

The Italian facts of (22) raise a number of very interesting questions, some of which bear directly on unergative-unaccusative alternations of the sort I have discussed for Spanish. In both Catalan and Italian, the shift from unergatives into unaccusatives requires the locative clitic: Italian *ce ne vivono molti* vs. *\*in questa cita ne vivono molti*; Catalan *n'hi canten molts* vs. *\*A Tarragona en canten molts*. In discussing (22), Burzio (1983)/(1986) argues that *ci* is in INFL and binds the specifier position where subjects otherwise occur. Assuming that Burzio's assumption is correct, it looks as if INFL is playing an important role in existential constructions, as well as in unergative-unaccusative alternations. I would now like to sketch a tentative proposal for why this might be.

In my discussion of Spanish, I reached the conclusion that unergative-unaccusative alternations require the d- argument of the predicate to appear overtly at S-structure in subject position. Let us take Italian *ci* and Catalan *hi* to be clitics associated to a null subject, perhaps *pro*. position.<sup>34</sup> Suppose that the d-argument of unaccusatives must be the external argument of the predicate. Since clitics, quite generally, can attach to INFL (Kayne (1987)), the grammar might give preference to the clitic-option over the XP option. Suppose that, in addition, we make a general assumption for how Tense and Agreement function in regard to Case. In particular, let us

---

34. As discussed by Burzio's (1981)/(1986), *ci* cannot undergo clitic-climbing in Italian raising constructions. The same appears to be true in Catalan. However, in both Catalan and Italian, clitics other than locative clitics can move out of the infinitival clause embedded under raising *seem*. Unless something special is assumed for just this clitic, the fact that *ci* is the only clitic that does not undergo raising is left unexplained. The assumption that *ci* is the overt realization of the d-argument of these predicates can help to explain this fact. Presumably, a d- argument is subject to stronger local conditions than a thematic argument.



assume that Tense has a Case- feature to discharge, but that it can only do so when Tense is grammatically "strong" (i.e, it has the appropriate features, perhaps nominal features). In the general case, AGR will meet with Tense, and Tense then will be able to discharge its Case in conjunction with AGR in tense clauses. However, in the sentences under discussion, a locative clitic rather than AGR reaches Tense. Tense is therefore able to discharge its Case-feature independently from AGR, and, in languages with a strong AGR, AGR will be able to assign Case independently of Tense. The split between Tense and AGR in regard to Case will be responsible for the Case-assignment in Catalan and Italian sentences such as "ci sono io/\*me", noted by Burzio (1986) in footnote 59. Here Tense will assign Case to the null category bound by ci, and AGR to the subject pronoun io. The fact that ci prevents the subject pronoun from being null ((22a)=ci sono \*(io) a la festa) might be interpreted as suggesting that the licensing of referential null *pro* requires Tense and AGR together; that is, (referential) *pro* can only appear in the specifier of IP, as argued by Rizzi (1981). In Spanish, on the other hand, where the phenomenon of unergative-unaccusative alternations is quite free and there are no overt locative clitics, we can either assume that Tense is stronger than in Italian, or else that there is a null locative clitic.<sup>35</sup>

Turning now to English, notice that the same agreement facts that hold for locative expletive *there* hold for the locative argumental subject of Spanish unergative- unaccusative alternations. Thus, expletive *there* needs Case, (examples (16i)), and number agreement is not with *there* but with the thematic

- 
35. Independently of any other consideration, inflectional heads in Spanish appear to be more strongly specified in Spanish than in Italian (and perhaps Catalan). The "scrambling" possibilities involving subjects, available just in Spanish, can be the result of this. Finally, in a language like English we may assume that Tense is too weak to discharge its Case-feature in general. Under this assumption, one would expect locative subjects to be realized outside IP, in some Topic position, (Emonds (1974), Stowell (1981) and more recently by Bresnan (1988)), if indeed locative subjects have to be in Case-marked positions. The exception to this may be sentences involving 'to be' as in Stowell's (1981) example "under the stars is a nice place to sleep" -chapter 3, footnote 43. This might be so because *be*, like *have*, can move to I (Emonds (1974)/(1985)). However, the d-argument that *have* assigns is perhaps eventive and not spatiotemporal. If this is so, it may follow that locative subjects are allowed with *be* but not with *have*. Thus, the verb 'to be', which is inflected, is perhaps the strategy by which English makes INFL strong enough to discharge its Case-feature independently from AGR. Locative subjects in English could then occupy the subject position only in sentences involving *be*.

argument (example 16ii). This parallelism is an important one. While the agreement facts of sentences involving non-argumental there lend themselves to an analysis such as that of Chomsky (1986), in which the expletive is substituted at LF, the identical agreement facts of sentences involving argumental locative subjects do not. Adverbial and the other d-argument locative subjects that we have argued show up overtly in Spanish do have semantic content. Since they appear in Case- marked positions, they are presumably visible at LF; hence they do not violate the Principle of Full Interpretation. Whether something else forces the thematic argument of the verb to adjoin to these locative subjects at LF, as in Chomsky's (1988) analysis, is an open issue.

# REFERENCES

- Belletti, A. (1987) "The Case of Unaccusatives", *Linguistic Inquiry*, 19, 1-35.
- Belletti, A. and L. Rizzi (1981) "The Syntax of ne: Some Theoretical Implications", *The Linguistic Review* 1, 117-154.
- Bonet, E. (1988) "The Definiteness Effect and the haver-hi construction in Catalan", ms. MIT.
- Borer, H. (1986) "I-Subjects," *Linguistic Inquiry*, 17, 375-416.
- Bresnan, J. (1988) "The Projection Problem: Locative Inversion in English and Chichewa", talk given at MIT on December 2, 1988.
- Bresnan, J. and J. M. Kanerva (1989) "Locative inversion in Chichewa: A Case Study of Factorization in Grammar", To appear in *Linguistic Inquiry* 20.1.
- Burzio, L. (1981) *Intransitive Verbs and Italian Auxiliaries* PhD dissertation, MIT, Cambridge, Massachusetts.
- Burzio, L. (1983) "Conditions on Representation and Romance Syntax", 14, 193-222.
- Burzio, L. (1986) *Italian Syntax: A Government-Binding Approach*, D. Reidel, Dordrecht Holland.
- Carter, R. (1988) *On Linking: Papers by Richard Carter*, (edited by B. Levin and C. Tenny), Lexicon Project Working Papers, 25. Center for Cognitive Science, MIT. Cambridge, Massachusetts.
- Centineo, G. (1986) "A Lexical Thoery of Auxiliary Selection in Italian", *Davis Working Papers in Linguistics* 1, 1-35.
- Chomsky, N. (1981) *Lectures on Government and Binding*. Dordrecht, Holland: Foris Publications.
- Chomsky, N. (1986) *Knowledge of Language*. New York: Praeger Publications.
- Chomsky, N. (1988) "Some Notes on Economy of Derivation and Representation", ms. MIT, Cambridge, Massachusetts.
- Davidson, D. (1966) "The Logical Form of Action Sentences", *Essays on Actions and Events* (1980) Oxford, Clarendon Press.
- Davis, L. J. (1984) *Arguments and Expletives* PhD dissertation, University of Connecticut at Storrs.
- Emonds. J. (1974) *A Transformational Approach to English Syntax*, Academic Press, New York.

Emonds, J. (1985) *A Unified Theory of Syntactic Categories*, Dordrecht, Foris.

Grimshaw, J. (1986) "Unaccusatives. An Overview", *NELS* 17, 244-258.

Grimshaw, J. (1988) "Adjuncts and Argument Structure", ms. Linguistics and Cognitive Science Program, Department of Psychology, Brandeis University.

Grimshaw, J. and A. Mester (1988) "Light Verbs and Theta-Marking", *Linguistic Inquiry*, 19, 205-232.

Gueron, J. (1980) "On the Syntax and Semantics of PP Extraposition", *Linguistic Inquiry* 11, 637-678.

Hale, K. and S.-J. Keyser (1988) "Explaining and Constraining the English Middle", *Studies in Generative Approaches to Aspect*, ed. by C. Tenny, *Lexicon Project Working Papers* 24, 41-59.

Higginbotham, J. (1985) "On Semantics," *Linguistic Inquiry* 16, 4, 547-593.

Higginbotham, J. (1987) "Elucidations of Meaning," *Lexicon Project Working Papers* 19, MIT.

Kayne, R. (1975) *French Syntax*, The MIT Press. Cambridge, Massachusetts.

Kayne, R. (1987) *Class Lectures*, Fall, MIT

Kratzer, A. (1988) "Stage-Level and Individual-Level Predicates", ms. University of Massachusetts at Amherst.

Lyons, J. (1977) *Semantics*, Cambridge University Press. London.

Milsark, G. (1974) *Existential Sentences in English*, PhD dissertation, MIT. Distributed by Indiana University Linguistics Club.

Perlmutter, D. M. (1978) "Impersonal Passives and the Unaccusative Hypothesis", *Proceedings of the Berkeley Linguistics Society* 4, 157-189.

Rappaport, M. and B. Levin (1986) "What to Do with Theta-Roles", *Lexicon Project Working Papers* 11, MIT.

Rappaport, M., Laughren, M and B. Levin (1987) "Levels of Lexical Representation", *Lexicon Project Working Papers* 20, MIT.

Rizzi, L. (1982) *Issues in Italian Syntax*, Dordrecht, Foris.

Rosen, C. (1981) *The Relational Structure of Reflexive Clauses: Evidence from Italian*, PhD dissertation, Harvard University, Cambridge, Massachusetts.

Rosen, C. (1984) "The Interface between Semantic Roles and Initial Grammatical Relations", in D. Perlmutter and C. Rosen eds. *Studies in Relational Grammar 2*, 38-77, University of Chicago Press.

Ruwet, N. (1986) "On Weather Verbs." In Farley, A., P. Farley & K-E Mc Cullough (eds.) *CLS 22 Part I*, Chicago Linguistic Society.

Safir, K. (1982) *Syntactic Chains and the Definiteness Effect*, PhD dissertation, MIT, Cambridge, Massachusetts.

Safir, K. (1985) *Syntactic Chains*, Cambridge University Press, Cambridge.

Safir, K. (1987) "What Explains the Definiteness Effect?" *The Representation of (In)definiteness*, 71-98. The MIT Press, Cambridge, Massachusetts.

Stowell, T. (1981) *Origins of Phrase Structure*, PhD dissertation MIT, Cambridge, Massachusetts.

Torrego, E. (1984) "On Inversion in Spanish and Some of its Effects", *Linguistic Inquiry* 15, 103-131.

Williams, E. (1980) "Predication", *Linguistic Inquiry* 11, 101-139.

Williams, E. (1984) "There-Insertion", *Linguistic Inquiry*, 15, 131-153

Zaenen, A. and J. Maling (1984) "Unaccusative, Passive and Quirky Case", in Cobler et al. (eds), *Proceedings of 3rd West Coast Conference on Formal Linguistics*, Stanford University, 317-329.

Zagona, K. (1982) *Government and Proper Government of Verbal Projections*, PhD dissertation, University of Washington

Zagona, K. (to appear) *Verb Phrase Syntax: A Parametric Study of English and Spanish*