

# *Clause-Types and Verb-Types: Implications for Descriptive and Pedagogical Grammars of English*

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## ABSTRACT

This paper argues in favour of introducing Perlmutter's (1978) *Unaccusative Hypothesis* into descriptive and pedagogical grammars of English. We show that verbs which have traditionally been classified as intransitive verbs occurring in clauses of the type SV belong, in fact, to two different verb classes: unaccusative and unergatives, depending on the position of the only argument of the verb at a more abstract level of analysis. This distinction is shown to be useful for both descriptive and pedagogical purposes. Descriptively, we can account naturally for syntactic processes affecting unaccusative Vs such as *there*-insertion, locative inversion, the occurrence of resultative phrases and the causative alternation. Pedagogically, it appears to be the source of students' errors when using unaccusative verbs. Finally, the discussion suggests that the use of grammatical functions, like Subject, for the classification of clauses and verbs is misleading in that it concentrates on surface properties.

## 1. INTRODUCTION: GRAMMARS AND GRAMMATICAL FUNCTIONS

This paper looks at the classification of the simple sentence into different clause-types, as commonly found in descriptive and pedagogical grammars of English. Since a classification of clauses entails a classification of

V(erb)s we will have as many clause-types as V-types can be distinguished in the grammar. The issues to be discussed here concern the transitive-intransitive distinction, and more specifically, the class of intransitive Vs and clauses in English.

A three-way categorization of grammars of the kind proposed by Leech (1988) is assumed, with theoretical and *pedagogical* types of grammars as self-contained to some extent, each trying to fulfil different purposes and addressed to different readers; and *descriptive* grammars, as falling somewhere in the middle between theory and pedagogy. I am thinking of comprehensive grammars of English aimed at (native or nonnative) university students, containing a wide coverage of grammatical structures which are described accurately, reflecting how language is actually used and avoiding unnecessary reference to highly abstract theoretical concepts. Since the boundaries between description and pedagogy are less clearly defined in grammars designed for *advanced* L2 learners, I shall refer to those grammars as descriptive/pedagogical; whether emphasis is placed on description or pedagogy will depend on the final objectives of the grammar itself <sup>1</sup>.

In the search for an alternative to the classification of clauses and Vs found in descriptive and pedagogical grammars, a *non-functional* approach will be adopted. Such an approach may be considered non-functional in three different ways that correspond to three common different uses of the term 'functional' in linguistic and language studies.

First, a functional grammar in the ESL tradition is «a grammar which puts together the patterns of the language and the things that you can do with them» (Introduction to the *Collins Cobuild English Grammar*, v). This is a grammar concerned with functions of the language: making up messages, reporting what someone has said, and so on. Although it is not my concern to establish why the type of grammar used here is non-functional in this sense, it should perhaps be mentioned at this point that such an approach faces a difficult compromise: if the theory behind such a grammar becomes too sophisticated, it becomes a grammar which describes, rather than one which is concerned with active use; if the emphasis is on pedagogy, the theoretical body is inevitably weaker and becomes taxonomical in nature.

A second use of the term functional corresponds to what is generically known as functional approaches to grammar in theoretical linguistics. Under the functional perspective, *function* precedes *form* in the sense that the particular uses to which language is put determine the shape of what is actually said. The rules and principles of language are explained in terms of their function in communication and discourse, and hence, the emphasis is on grammar beyond the sentence level <sup>2</sup>. The approach followed here is non-functional because it is closer to the ideas put forward by a different school of linguistics, generative grammar, which disregards the role played by function and concentrates on form <sup>3</sup>. Although, it is not my intention to evaluate

these different theories, in my opinion there are particular areas of language description for which an analysis based on form is more enlightening; e. g. the basic pattern underlying clause-types and V-types. An analysis based on function, however, may be very useful in explaining the nature of variations on this basic pattern.

The third use of the term functional is the one that concerns the topic of this paper most directly. I shall argue against a functional classification of clause-types in English, i.e. a classification based on *grammatical functions* (GFs), such as (S(ubject), O(bject), and so on. Two questions divide theoretical grammars concerning GFs: (i) Are GFs defined as primitive or derived concepts? (ii) Are grammatical processes better accounted for by making use of GFs or not? In Relational Grammar and Lexical-Functional Grammar GFs are primitives; in Government and Binding Theory GFs are structurally derived; Fillmore's Case Grammar derives GFs from semantic roles. GFs are present also in functional approaches to grammars and are given a semantic interpretation, which is often related to the perspective from which the state of affairs expressed by the predicate is presented in the linguistic expression. As before, my purpose is not to evaluate different theoretical frameworks according to their use of GFs, under the assumption that terms like S and O have no clear pretheoretical reference and that any answer to the questions above is inevitably linked to the explanatory power of the different theories, an issue well beyond the scope of this paper.

Although GFs may not have unique referents outside a particular theory, pedagogical and descriptive grammars make extensive use of notions like S, O, and so on. This seems to imply that some type of generalization is possible concerning the definition of S, for example, outside a particular theory. Thus, pedagogical grammars tend to define Ss in terms of semantic roles: SS are often referred to as 'actors'. When the emphasis is more towards description, the definition of S often encompasses a cluster of morpho-syntactic and semantic properties, similar to that proposed by Keenan (1976). From a theoretical perspective, this approach is inherently non-explanatory. As pointed out by Marantz (1984: 310): «If, in fact, a set of constituents shares a cluster of properties, the explanatory task is to account for the way these properties cluster together.» But it remains to be seen whether the use of terms like S is appropriate for a *descriptive* and *pedagogical* task like the one examined here. My proposal is that reference to GFs, and in particular to the notion of S, in relation to clause-types and V-types is misleading because it places the emphasis on the superficial properties of sentences, missing generalizations among classes and failing to distinguish between some clause-types.

In *section 1*, we will see that a functional classification of clauses and Vs entails a two-way transitive-intransitive distinction. To see whether the class of intransitives is syntactically homogeneous, the properties of Ss in SV clauses are examined in *section 2*. The discussion there suggests that Vs occur-

ing in SV classes are better divided into two classes: unaccusatives and unergatives, based on the semantic and syntactic properties of the only argument of these Vs. In *section 3*, we look at syntactic processes affecting unaccusatives in relation to Vs of existence or appearance (3.1) and Vs of change of state (3.2), providing strong support for introducing a class of unaccusatives in the grammar. *Section 4* is the conclusion, where the conceptual advantages of the classification proposed for clauses/Vs are put forward.

## 2. THE FUNCTIONAL CLASSIFICATION OF CLAUSES AND VS

In their characterization of clause-types in English, descriptive and pedagogical grammars often focus on the *function*, rather than on the *category*, of clause constituents. An argument in favour of this approach is that elements belonging to different syntactic categories often have the same function, as illustrated in (1) for the V *deny*:

- (1) a. They denied [<sub>NP</sub> the mistake] NP-V-NP  
 b. They denied [<sub>S</sub> that there was a mistake]. NP=V=S

If we were to classify the V *deny* as a V which may appear in two different constructions like those above, we would miss the generalization that the V *deny* is a transitive V which appears in SVO clauses. Similarly, superficially classifying clauses according to the categories of their constituent parts would put (1a) together with (2), even though these are structures with very different syntactic and semantic properties.

- (2) Your proposal seems a good solution. NP-V-NP(=(1a))

Thus, a description base on categories would miss important generalizations about the type of clauses in which the V *deny* is found, and would incorrectly predict that *deny* and *seem* are the same V-type. These well known facts for descriptive and pedagogical grammars of English have led to a classification of clauses in terms of functions [e.g. Huddleston (1984), Greenbaum & Quirk (1990), Downing & Locke (1992)]. Although there is disagreement about the number and/or types of functions involved (which could in itself be a major criticism against this approach), the following is a standard assumption about the basic types of clauses found in English, taken from Greenbaum & Quirk (1992):

- (3) *A 'Functional' Classification of Clauses*  
 a. SV Fergus is *sleeping*.  
 b. SVO<sub>d</sub> Fergus *kicked* the door.

- c. SVO<sub>i</sub>O<sub>d</sub> Fergus gave his mates some fags.
- d. SVA<sub>s</sub> Fergus seems bored.
- e. SVOA<sub>o</sub> Hilda finds Fergus dead boring.
- f. SVA Fergus stayed in the bath.
- g. SVOA His parents put Fergus in the bath.

(A<sub>s</sub>=Subject Attribute; O<sub>i</sub>=Indirect Object; O<sub>d</sub>=Direct Object; A<sub>o</sub>=Object attribute; A=Adverbial).

Accordingly, there are five V-types: (a) *Intransitive*: Vs occurring in SV clauses, like *sleep*; (b) *Copula*: Vs occurring in SVA and SVA<sub>s</sub> clauses like *seem* and *stay*; (c) *Monotransitive*: Vs occurring in SVO<sub>d</sub> clauses, like *kick*; (d) *Complex Transitive*: Vs occurring in SVOA<sub>o</sub> and SVOA clauses, like *find* and *put*; and (e) *Ditransitive*: Vs occurring in SVO<sub>i</sub>O<sub>d</sub> clauses, like *give*.

Two questions arise immediately: (i) Do the terms *transitive*, *intransitive*, and so on represent homogeneous classes? and (ii) Is it possible to find common properties across some V-types; i.e. could *transitives* and *complex transitives* belong to the same class? A full answer to these questions is obviously beyond the scope of this paper. Here, I shall simply consider whether the term *intransitive*, used for Vs occurring in SV clauses, represents a syntactically homogeneous class, a task which requires a close examination of the notion of S.

### 3. SEMANTIC AND SYNTACTIC FACTORS IN THE DEFINITION OF Ss

#### 3.1. *Defining transitive and intransitive Vs and clause-types*

The first problem for a functional classification of clauses is that there are not many Vs which are 'pure' intransitives (SV) like *emerge*, *vanish*, *elapse* or 'pure' transitives (SVO) like *wield*, *contain*, *dislike* (examples from Kilby, 1984). Most Vs can appear in either one or the other clause-type:

- (4) a. Fergus laughed. SV
- b. Fergus laughed [a scornful laugh]/[at me]. SVO
- (5) a. Maggie opened the door. SVO
- b. The door opened. SV
- c. This door opens (easily). SV
- (6) a. The horse jumped SV
- b. John jumped the horse (over the fence) SVO
- (7) a. They inhaled some gas. SVO
- b. Inhale! Exhale! SV
- (8) a. Fergus met Maggie. SVO
- b. Maggie and Fergus met. SV

These Vs appear to be both transitive and intransitive at the same time and thus, they occur in both SV and SVO constructions. But since most Vs appear to show this property, the validity of the classification is questioned.

The obvious solution is to say that these Vs belong primarily to one class: they are either transitive or intransitive. The (a) examples show what is often considered to be the most common occurrence of these Vs: i.e. the Vs *laugh* and *jump* occur primarily as intransitive, while the Vs *open*, *inhale* and *meet* are primarily transitive. Our grammar would specify, for instance, that a primarily intransitive V like *laugh* may also occur in transitive SVO clauses with a cognate O, or with a prepositional O; the V *jump* may also appear in SVO clauses, with a causative meaning, and so on. The question that follows is: on what basis do we classify these Vs as primarily transitive or primarily intransitive? The criterion appears to be semantic, rather than syntactic: Vs like *laugh* and *jump* may in principle involve only one participant, while Vs like *open*, *inhale* and *meet* involve two participants.

In fact, semantic criteria (in terms of participants) and syntactic criteria (in terms of functions) often appear together in definitions of these Vs in pedagogical and descriptive grammars. Thus, intransitives are typically defined as Vs which involve one participant realized as a S (or lacking an O), and transitives as Vs involving two participants realized as S and O. GFs are, then, the syntactic realization of participants —a derived notion that does not seem to add much to the definition of Vs if an independent mapping principle can be established by which Vs associated with one participant are mapped into SV clauses and VS with two participants are mapped into SVO clauses. However, though somewhat redundant, a definition of Vs in terms of participants and GFs appears to be useful to correctly classify *laugh*, *jump*, *open*, and so on. Since a certain amount of redundancy is certainly not harmful for the purposes of descriptive and pedagogical grammars, such definitions would only be put to question if it could be shown that they make the wrong kind of predictions concerning the Vs which fall under the classification. With that purpose, let us carefully look at intransitive Vs and SV clauses.

### 3.2. *Intransitive Vs: SV*

According to the definitions above, the clauses in (9) all contain intransitive Vs (although *jump* and *open* can appear in SVO clauses as well):

- (9) a. The child jumped/cried.  
 b. A man fell/arrived.  
 c. The door opened/broke.

The N(oun) P(hrases) *the child*, *a man* and *the door* are Ss according to all morpho-syntactic criteria: they occupy a position before the V in declarative sentences like (9) above, and a position after the operator in interrogative clauses; they determine number and/or person agreement and can be replaced by nominative pronouns in finite clauses.

From a semantic point of view, however, it seems that the only participant involved in these sentences and realized as the GF of S does not form a homogeneous class: it is the *agent* of the action in (a), with *jump* and *cry*, and the *theme* with *arrive / fall* in (b) and *open / break* in (c) <sup>4</sup>.

The heterogeneous nature of the S in terms of semantic or thematic roles is recognized by most pedagogical and descriptive grammars (though still defining S as the 'actor' or 'agent' in some cases) <sup>5</sup>. But while theoretical grammars in general have looked into the relevance of thematic roles for the syntax, and in particular for the classification of clauses and Vs, pedagogical and descriptive grammars often limit themselves to providing a list of the different thematic roles associated with the S, and thus, important generalizations are missed and fundamental distinctions are not established.

It was a mainstay of generative semantics that thematic roles are uniformly mapped into GFs, a hypothesis which has been recently revived in its strongest form within generative grammar by Baker (1988) as the *Uniformity of Theta Assignment Hypothesis (UTAH)*, and which follows a slightly weaker condition proposed by Perlmutter and Postal (1984): the *Universal Alignment Hypothesis (UAH)*. The U(T)AH (as Pesetsky (1994) refers to both hypotheses) predicts that if a NP bears the thematic role of agent it is mapped into the S position, and if a NP bears the semantic role of theme it is mapped into the O position at an abstract level of analysis [*D(eep)-S(tructure)*] in Government and Binding Theory, and the *initial stratum* in Relational Grammar). At such a level of analysis, which is henceforth referred to as D-S, a distinction is established between *internal arguments* (generated inside the VP as complements of the V), and *external arguments* (generated outside the VP) following Williams (1981). The terms S and O are reserved for the *surface* [S-S(tructure)] manifestation of the arguments.

Let us see, then, what the implications are for a clause like *A man arrived* in (9b). Since the NP *a man* is semantically a theme, it must occupy the position of the internal argument. As this is the only participant associated with the V, the position for the external argument is empty at D-S (i.e. this clause lacks a S), as shown in (10):

(10) D-S: \_\_\_ [<sub>VP</sub> arrived a man]

Theories which distinguish an abstract level of analysis have different ways of ensuring that structures like (10) have a surface S. Within Government and Binding Theory, for example, a rule known as *NP-movement* ap-

plies to (10) to create the structure in (11) (where *t* indicates the trace left by the moved NP after the application of the rule):

(11) S-S: A man [<sub>VP</sub> arrived *t*]

Vs like *arrive* whose surface S is the internal argument at a more abstract level of analysis are called *unaccusatives*<sup>6</sup>. In this, they differ from other monoargumental Vs like *cry* which have an external argument, i.e. they have a S at all levels of representation. Vs like *cry* are called *unergative*. This is specified in the lexical entry of these Vs by means of variables, where *x* is used for the external argument and *y* for the internal argument:

(12) *unaccusative*: [ARRIVE<sub>y</sub>] [— [<sub>VP</sub> V NP]]  
*unergative*: [<sub>x</sub>CRY] [NP [<sub>VP</sub> V]]

Thus, the class of intransitives has to be split into a class of unaccusatives and a class of unergatives. This distinction is the basis for the *Unaccusative Hypothesis*, as first stated by Perlmutter (1978) within the framework of Relational Grammar.

Notice that mapping principles as stated by the U(T)AH and the adoption of the terms internal vs. external argument render unnecessary the use of GFs, which are reserved for the actual surface position of the sole argument of unaccusative/unergative Vs. This is why this argument behaves as a S according to all morpho-syntactic criteria. However, the incorporation of the Unaccusative Hypothesis into our descriptive/pedagogical grammar involves the addition of another level of analysis and a rule of NP-movement. This level of complexity does not justify in any way the task undertaken if it cannot be shown that a grammar that incorporates the Unaccusative Hypothesis in its inventory of clause/verb types is able to make generalizations and provide explanations which would not be made and provided otherwise. This is, in fact, the topic of the following section.

#### 4. SYNTACTIC AND SEMANTIC DIAGNOSTIC FOR UNACCUSATIVITY

Although Perlmutter's initial formulation of the Unaccusative Hypothesis stated that Unaccusativity was both *syntactically* encoded and *semantically* predictable, much of the work on unaccusativity has concentrated on determining the syntactic properties of unaccusative Vs. Perlmutter's approach has been followed by Levin and Rappaport (1992), for whom the correct characterization of unaccusativity is at the syntax-semantics interface.



The leading question for Levin & Rappaport (1992: 2) is «How does the language learner know how to classify newly learned verbs?», a question which they formulate for L1 learners, but which is equally valid for L2 learners. According to these authors, there are two options: (i) class membership is predictable on the basis of V meaning, or (ii) simple data provide the clue for the classification of Vs. While option (ii) may be the correct one for languages that show morpho-syntactic markers of unaccusativity<sup>7</sup>, it is clearly not true for English, forcing us to assume (i).

There is of course a third option from a theoretical perspective: to claim that unaccusative Vs are simply listed as such in the lexicon [see (12)], the place for idiosyncrasy in language. The equivalent to this third option for a descriptive and pedagogical grammar would be to provide lists of unaccusative Vs which are considered to be unaccusative. Given that much of the recent effort in linguistics has been devoted to deriving lexical properties from semantic properties, this does not appear to be a desirable solution either for a theoretical grammar or for a descriptive or pedagogical grammar. Let us then explore option (i): i.e. the hypothesis that whether a V is unergative or unaccusative is for the most part predictable on the basis of verb meaning.

The central question concerning option (i) is to determine those aspects of meaning relevant for the syntax. For Levin & Rappaport (1992) unaccusativity encompasses two main semantic groups: Vs of existence and appearance; and Vs of change of state. Let us now see how unaccusativity is syntactically encoded for these two semantic classes of Vs.

#### 4.1. Vs of appearance and existence: *there*-insertion and locative inversion

The strongest syntactic motivation for the Unaccusative Hypothesis in English comes from the phenomenon known as *there*-insertion, by which the expletive *there* is inserted in S position, allowing the internal argument to surface in its original position within the VP:

- (13) a. D-S: \_\_\_ [<sub>VP</sub> arrived a man]  
 b. S-S *There* [<sub>VP</sub> arrived a man]

Vs that allow *there*-insertion have thematic structures like those in (12a) and their meaning expresses appearance or existence: e.g. *begin*, *emerge*, *derive*, *stem*, *exist*, *grow*, *live*, etc. [see Levin (1993: sec 6) for a complete list]<sup>8</sup>. In this, they contrast with monoargumental Vs with external arguments: i.e. unergative Vs like *work*, *cry* and *yawn* [see (12b)]:

- (14) a. \* There worked John (all day)  
 b. \* There cried Fergus (after his defeat)  
 c. \* There yawned Maggie (in the middle of her speech)

The semantic class of unaccusative Vs which allow *there*-insertion is roughly the same as that of Vs which allow locative inversion, the notion of existence and location being closely linked [see e.g. Lyons (1968)]. Like *there* is (13b), in constructions such as (15) the locative phrase occupies the S as argued for example by Hoekstra & Mulder (1990) <sup>9</sup>:

- (15) a. Into the room stormed John.  
b. In the streets of Chicago lives an old man.

An intriguing case concerning *there*-insertion and locative inversion is that of Vs of motion like *walk*, *jump*, *fly*, etc. With these Vs the occurrence of *there*-insertion is subject to the presence of a locative adjunct, as observed by Hoekstra & Mulder (1990) <sup>10</sup>:

- (16) a. There walked a man (*into the room*). (loc)  
b. \* There walked a man (*with a dog*)  
(17) a. There jumped a horse (*over the fence*). (loc)  
b. \* There jumped a horse (*right at the queen's arrival*).  
(18) a. There flew a midge (*into my eye*).  
b. \* There flew a midge (*at high speed*)

The fact that the occurrence of *there* is not free, but conditioned by the presence of a locative adjunct suggests to Hoekstra & Mulder (1990) that these are primarily unergative Vs (disallowing *there*-insertion) which undergo a process of *ergativization* triggered by the presence of a locative adjunct. That is, the V *jump* is an unergative V which becomes unaccusative (or ergative) when a locative adjunct is present (see fn 10) <sup>11</sup>:

- (19) a. [<sub>X</sub>JUMP] The horse [<sub>VP</sub> jumped]  
b. [<sub>JUMP</sub>y] — [<sub>VP</sub> jump [<sub>NP</sub> the horse] [<sub>PP</sub> over the fence]]

A structure like (19b) can surface as (16a) after *there*-insertion, but also as (20a) after NP-movement, or as (20b) after locative-preposing, all of which support the hypothesis that the position for the S is actually empty at an abstract level of representation. The same is true for *walk* and *fly*.

- (20) a. [<sub>NP</sub> The horse] [<sub>NP,0</sub>] [<sub>PP</sub> over the fence]]  
b. [<sub>PP</sub> Over the fence] [<sub>VP</sub> jumped] [<sub>NP</sub> the horse] [<sub>PP</sub> t]]

The discussion so far has suggested that *there*-insertion and locative inversion are processes affecting structures that lack an external argument. In this sense, Vs of motion pattern together with Vs of appearance and existence, and the only difference between them is that Vs of motion are primarily unergative Vs which suffer a process of ergativization (although it is unclear how that operation actually takes place).

#### 4.2. Vs indicating change of state: resultative phrases and the causative alternation

Levin & Rappaport's (1992: chap. 2) analysis of resultative phrases offers compelling evidence for a syntactic account of unaccusativity in English. Syntactically, a resultative phrase is a XP (normally AP or PP) which is predicated of a NP object; semantically, it denotes the state achieved by that NP as a result of the action denoted by the V. The examples in (23), with transitive Vs, are from Levin & Rappaport (1992: 27):

- (23) a. Woolite safely soaks all your fine washables clean (ad.)  
 b. a 1,147 page novel that bores you bandy-legged (*NYT Book Review*, December 7, 1986, p. 28)

The generalization is that Vs lacking Os cannot occur with resultative phrases (*\*Mary laughed sick*). There are, however, three ways in which Vs with no Os may appear in resultative constructions: with a *fake* reflexive, with a non-subcategorized NP, and with a NP expressing inalienable possession, as illustrated in (24), where the asterisk indicates that without the resultative phrase the construction is ungrammatical:

- (24) a. Mary laughed *herself* (*\*sick*).  
 b. The dog barked *the caretaker* (*\*awake*).  
 c. Fergus yawned *his head* (*\*off*).

The examples below would be considered as counterexamples to the generalization under a superficial classification of the clauses in (25) as SV clauses. However, the restriction on the occurrence of resultative phrases can still be maintained if these are unaccusative Vs with the NPs in the position of the S as internal arguments at a more abstract level of analysis:

- (25) a. The door swung open.  
 b. The lake froze solid.

In fact, further evidence that clauses of this type contain unaccusative Vs is that superficially SV constructions like those in (25) that allow resultatives never show fake reflexives or non-subcategorized Os:

- (26) a. \* The lake froze *itself* solid  
 b. \* The show melted *the path* slushy

The contrast between (26) and (24) is related to another observed contrast between unergative and unaccusative Vs concerning cognate Os (*Peter smiled his most sarcastic smile / Carl slept a restless sleep vs \*Fergus arrived a ti-*

*red arrival* / \**The door swung a sudden swing*). For the purposes of this paper it is sufficient to note that the ungrammaticality of constructions with Os for unaccusative Vs is a further indication that the position of the O is 'filled' at some level of representation and hence no elements can occupy that position in the surface. These examples are, thus, additional support for the Unaccusative Hypothesis.

Not all unaccusatives allow resultative phrases, and this is where semantic considerations play a part. As noted by many researchers, resultative phrases derive accomplishments from activities [see Levin & Rappaport (1992: 43) and references cited there]. Accomplishments denote causative changes of state, expressing an activity and a state which is the result of the activity (*freeze*: activity; *sold*: state). This is true even when the V does not denote a change of state in isolation. However, there are some unaccusative Vs whose meaning is incompatible with constructions of this type: stative Vs (e.g. *remain* and other Vs indicating existence or appearance) and Vs of inherently directed motion (e.g. *arrive*). Levin & Rappaport (1992: 2.3) argue that the latter Vs denote an achieved state of location and may not take a resultative phrase indicating change of state, which would function as a second syntactically encoded delimiter. Thus a construction like *Peter arrived breathless* cannot mean 'Peter became breathless as a result of arriving'. This restriction applies as well to Vs that show an unergative/unaccusative alternation in the presence of a locative adjunct like *jump*, which pattern once again together with Vs denoting existence or appearance (see fn 10).

The next step is to look at the causative alternation, as in (27):

- (27) a. John opened the door.  
b. The door opened.

Semantically, the S of the intransitive V is the same element as the O of the intransitive V: a *theme*. Considerations related to the U(T)AH (see sec. 3.2) have led researchers to propose a typical unaccusative analysis for the intransitive use of the V *open*, as represented in (28):

- (28) a. D-S: — [VP opened [NP the door] [OPENy]  
b. S-S: [NP The door] [VP opened [NP t]

Hale & Keyser (1986) suggest that a [CAUSE] predicate containing an external argument is 'added' to an unaccusative predicate, obtaining [xCAUSE(OPENy)] from [OPENy].

A final point in need of clarification is why *there*-insertion cannot apply to unaccusative predicates denoting change of state. A possible syntactic-semantic explanation of the kind employed here would be to claim that only Vs of existence or appearance contain a locative argument which is related

to constructions with *there* and locative inversion [see e.g. Torrego (1988) in her account of unaccusatives in Spanish]. In the next section, I discuss briefly a second alternative based on the discourse function of *there*.

In conclusion, we have looked at unaccusativity at the syntax-semantic interface, mostly following the analysis in Levin & Rappaport (1992). Two semantic classes of unaccusative Vs have been distinguished, and syntactic processes affecting those classes have been discussed, processes that without the unergative-unaccusative distinction would remain mysterious for any account of the syntax of English. Having looked at the empirical advantages of the Unaccusative Hypothesis, I now turn to some of the conceptual advantages of incorporating this hypothesis into the grammar.

## 5. CONCLUSION

The facts discussed in the preceding section lead us to the rejection of the SV-SVO dichotomy, as presented in descriptive and pedagogical grammars of English. The class of intransitive Vs appearing in SV clauses comprises Vs with very different syntactic and semantic behaviour: unaccusatives and unergatives. As for the notion S, we have seen that it is simply a superficial manifestation of an argument that may be the external or the internal argument at a higher level of abstraction, which has been considered necessary for the correct account of certain syntactic processes. Accordingly, the following V-types and clause-types are distinguished:

(29)	Transitive	[- NP]	(x, y)	NP [ <sub>VP</sub> V NP]
	Unergative	[-]	(x)	NP [ <sub>VP</sub> V]
	Unaccusative	[-NP]	(, y)	— [ <sub>VP</sub> V NP]

What counts in (29) is whether the V *subcategorizes or not* for a complement (a NP, in this case), and how many arguments the V is associated with in its *argument structure* (x, y, or both, where x is the external argument and y is the internal argument). The two concepts are different: subcategorization refers to the number and type of complements a V takes in the VP (i.e. the internal arguments), while argument structure includes *all* the participants in the action expressed by the V. The two types of information are needed to correctly define the Vs and the type of clauses they appear in without referring to concepts such as S or O <sup>12</sup>.

We have seen that Vs like *jump* may have multiple classifications: as unergative (*The horse jumped*), unaccusative (*The horse jumped over the fence*) and even transitive (*John jumped the horse over the fence*). But this does not put into question the whole classification, because there are syntactic and semantic phenomena which explain (i) how the unaccusative V is deri-

ved from the unergative (by a process of 'ergativization' in the presence of a locative adjunct) and (ii) how the transitive V is derived from the unaccusative (by the addition of the predicate [xCAUSE]). We thus avoid the arbitrariness of a classification based on functions.

From a theoretical point of view the terms S and O are thus *derived* terms which refer to the surface structure position of the arguments of a V. However, given the fact that there seem to be some common cross-linguistic intuitions about what constitutes a S or an O, it may not be necessary (or even advisable) to eliminate GFs from descriptive/pedagogical grammars. Rather the suggestion here is that these terms be taken as what they appear to be: surface forms which are useful when we want to determine agreement, the element which appears in a tag-question, and so on.

The elimination of GFs for the classification of clauses and Vs, however, involves the recognition of a more abstract level of analysis. In fact, theories which do not postulate that level of description must resort to GFs to account for the mapping of semantic functions into syntactic functions (e.g. functional grammar). Positing an abstract level of analysis for the syntactic representation of arguments has been shown to be fruitful in accounting for certain syntactic processes affecting Vs lacking an external argument, i.e. unaccusative Vs, such as *there*-insertion, locative inversion, the occurrence of resultative phrases and of the causative alternation. These are all processes which provide strong support in favour of introducing the Unaccusative Hypothesis into our descriptive/pedagogical grammar.

So, theoretically and descriptively, it makes sense to introduce the Unaccusative hypothesis, but does it make sense pedagogically? Will it help L2 learners in their acquisition of the structures of English? Several studies seem to suggest so: learners have problems with unaccusative Vs, which are sometimes replaced by passive constructions; i.e. *The glass was broken instead of The glass broke* [see Zobl (1989) and Yip (1994)]. Yip (1994) suggests that grammatical consciousness-raising in this area appears to be useful in correcting mistakes associated with these Vs. Moreover, errors which have been attributed to an incomplete knowledge of the auxiliary/tense system such as *This problem is existed for many years*, and *Something strange was happened*, are reported in Hubbard (1983) as arising out of the confusion between unaccusative and passive morphology, given that unaccusatives have passive morphology in many languages.

Another important question is how our grammar is to present unaccusative Vs. Here, a formal approach has been followed, which concentrates on syntactic and semantic aspects of unaccusativity. A different approach is followed in the *Collins Cobuild English Grammar* (classified here as a descriptive/pedagogical grammar), into which unaccusatives (ergatives in their terminology) have been recently introduced. The causative alternation is

dealt with according to the *functional* notion of point of view: these are Vs which describe an action from the point of view of the O affected by the action. This does not apply to Vs indicating existence and appearance, classified as intransitives appearing in SV clauses.

There is no doubt that functional aspects may play an important role in descriptive and pedagogical grammars. For example, there are aspects of *there*-insertion which are closely related to discourse matters, as theoretical grammars concerned with discourse have pointed out. Downing (1990), for instance, argues, within the framework of systemic/functional grammar, that the (discourse) role of *there* is to 'push' the S to the O position, exactly the opposite of what we have argued here from a formal perspective. The function of *there* is «to present on the scene of discourse a Subject or a whole predication» [Downing (1990: 107)], when two aspects co-occur: (i) the S presents new information, and (ii) the V is of low communicate dynamism; a 'light' V in terms of L & R, explaining why *there* is not found with Vs of change of state. In our view, the *formal* and the *functional* approaches are not incompatible when combined into a descriptive or pedagogical grammar of English. Focusing on form reveals interesting generalizations across the class of unaccusative Vs which may prove fruitful for the L<sub>2</sub> learner, while focusing on *function* provides useful guidelines for the actual use of the construction in real discourse.

As a general conclusion, I have argued in favour of the elimination of GFs, and in particular of the notion of S, in the classification of V-types and clause-types in English. Vs appearing in clauses of the type SV have been shown to belong to two different classes with different syntactic and semantic properties. The facts discussed have provided support for the incorporation of Perlmutter's Unaccusative Hypothesis into descriptive and pedagogical grammars of English since it can account naturally for processes such *there*-insertion, locative inversion, the occurrence of resultative phrases and the *causative alternation*. From a pedagogical point of view, the Unaccusative Hypothesis is useful in determining the source of students' errors when using these Vs. Thus, this paper is meant to be a (modest) contribution to bridging the gap between theory and pedagogy, research in linguistics and *language teaching*.

#### NOTES

<sup>1</sup> I have been looking at two of such grammars: the *Collins Cobuild* (1990), and Downing & Locke's (1992) *A University Course in English Grammar*; in the former the emphasis is on pedagogy and in the latter the emphasis is on description.

<sup>2</sup> See the works of Halliday (1985) and Dik (1980) and their associates as perhaps the most representative of different frameworks within functional grammar.

<sup>3</sup> The term generative grammar has encompassed a series of theories since the 1950s up to the present day. The concern here is with ideas in one of those theories: Government and Binding Theory, as in Chomsky (1981; 1986).

<sup>4</sup> The use of the term *theme* may be confusing for those not acquainted with the generative grammar framework. It is commonly used for one of the participants of activity Vs, which in other frameworks is referred to as patient (or goal) (ia); it is also the only participant of Vs of achievement (in other frameworks, position) (ib), and one of the participants of psychological V's with experiencers (ic):

- (i) a. John killed *the spider*.
- b. *John* came.
- c. *The new Head of Department* pleases John.

<sup>5</sup> This is, of course, not true of all descriptive/pedagogical grammars. In Downing & Locke (1992: 32), S is defined as «the element of which something is predicated in a clause», and different semantic roles associated with Ss are mentioned (see sec. 5.1.2).

<sup>6</sup> The term *ergative* is also to refer to these Vs, especially when denoting change of state.

<sup>7</sup> Languages like Italian have a variety of overt morpho-syntactic markers of unaccusativity vs. unergativity, as extensively discussed by Burzio (1986) within the framework of Government and Binding Theory.

<sup>8</sup> Levin (1993: sec. 6.2) points out that not all Vs which appear in constructions with *there*-insertion are readily classified as Vs of appearance or existence, such as Vs of sound emission (*beat, ring, shriek*), Vs of light emission (*flare, flash, flicker*) and other such as *chatter, doze, sleep, wait*, and so on. However it has been suggested that they all show an existence or appearance sense when they appear in *there*-constructions. The same applies to typical change of state Vs (e.g. *break, grow, open*), which are understood as Vs of existence or appearance in these constructions, as claimed by Milsark (1974).

<sup>9</sup> Locative subjects are found in many languages of the world, e.g. Finnish and Icelandic.

<sup>10</sup> The following contrast between *Onto the table jumped a cat* and *\*On the table jumped a cat* observed by Levin (1993: 6.2) suggests that the locative adjunct must specify direction of motion. Thus, the presence of the locative phrase converts a V of motion into a V of directed motion like *arrive*. We will go back to this concept when we look at Vs of change of state in the next section.

<sup>11</sup> There is a variable degree of acceptability concerning constructions with *there* with motion Vs indicating direction; for some authors the variant in which the NP follows the PP, rather than precede it is the only fully grammatical one, as in the following contrast (Levin 1993: 89) [see also Milsark (1974) and Aissen (1975)]:

- (i) a. There darted into the room a little boy.
- b. ??There darted a little boy into the room.

A different set of issues arises in relation to the 'naturalness' of examples (16)-(18). The structures appear to be more natural when the appearance of the entity denoted by S on the scene of discourse is somehow unexpected or shocking; e.g., replacing *a man* in (16a) by *a stranger*, or *a horse* in (17a) by *a hippopotamus* renders these structures 'more natural'. Thus, pragmatic factors play an important role in the acceptability of *there*-constructions. The (b) examples, however, remain ungrammatical no matter what NPs are used as Ss, which shows that the contrast between (a) and (b) is a grammatical one, and not a pragmatic one. I am grateful to A. Downing for bringing my attention to these issues.

<sup>12</sup> The clause-types here make reference to categories, rather than functions. This does not mean that the V *deny* will have to be classified as a different V, depending on whether it takes an NP or an S as a complement [see (1)]. This V is transitive because it subcategorizes for a complement (which can be realized as NP or S) and is associated with two semantic roles in its argument structure.



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