Dª. Mª Carmen Portero Muñoz

SYNTACTICALLY RELEVANT SEMANTIC FEATURES

UNIVERSIDAD DE CÓRDOBA

0. Introduction.

My aim in this paper is to demonstrate that some grammatical properties of a predicate can be predicted from certain semantic components included in its lexical structure.

In the first part, I will briefly summarize the theoretical foundations of a model of lexical description, Functional-Lexematics, as proposed by Martín Mingorance (1990), considering its role within the wider context of contemporary linguistic theories of lexical description in relation to issues such as the syntax-semantics interface or semantic decomposition.

In the second part, evidence of the hypothesis of syntactic prediction will be provided.

The paper will conclude with a number of remarks concerning the theoretical significance of the syntactic predictability hypothesis for a theory of lexical description in general, and for Dik's (1978) proposal of lexical description in particular.

1. Theoretical preliminaries.

1.1. The role of the lexicon: the semantics-syntax interface and semantic decomposition.

The position maintained as regards the consideration of the lexicon as a source for the prediction of some syntactic facts is one of the factors accounting for the distinction among major contemporary lexicon-based linguistic theories.

In this respect, two main schools of thought can be distinguished:

Those theories which do not use the lexicon as a source for the prediction of syntactic facts, such as Head-driven Phrase Structure Grammar (HPSG), Lexical Functional Grammar (LFG), Jackendoff's Conceptual Semantics; within these, lexical entries list only arbitrarily the syntactic categorization frames, prepositions and complements the predicate can occur with, so that they do not capture any generalizations.

Government-Binding Theory (GB) (Chomsky 1981) with the so called «Projection Principle» and Role & Reference Grammar (RRG) (Dowty 1979, Foley & Van Valin 1984) defend the possibility of partially predicting syntactic facts from lexical semantic structure. Chomsky (1986: 86-90) has even suggested the possibility of deriving syntactic subcategorization features of a verb from its semantic selection properties, i.e., the aspect of its lexical representation related to its argument structure.

If some syntactic properties are semantically motivated, the next step would be to identify the set of syntactically relevant meaning components, which poses more than a challenge, since there are many ways in which verbs can be classified according to their meaning. In this respect, lexical theories can be differentiated according to how much of the meaning they attempt to represent, being sometimes too minimalist and sometimes richer, but not trying to describe combinatorial possibilities.

1.2. A functional-lexematic model.

1.2.0. Overview.

Functional-Lexematics is a model of lexical description consisting basically in an integration of a paradigmatic model of lexical analysis (Coseriu's *Functional Lexicology* or *Lexematics*) into a lexicon-based grammatical model (Dik's *Functional Grammar* or FG), which provides a highly-structured development of the syntagmatic aspect of lexical units.

Due to the integration of these two models, Functional-Lexematics can be defined positively in relation to the two issues of semantic decomposition and semantically-based syntactic predictability, through the use of the method of *stepwise lexical decomposition* and the postulation of *classemes.*

1.2.1. Stepwise lexical decomposition.

In 1978 Dik sketched *Stepwise Lexical Decomposition*, a theory of lexical meaning definitions, which is conceived within the wider framework of the

model of syntactic-semantic description known as Functional Grammar.

In FG the lexicon plays an important part. It contains all basic 'contentive' lexemes of the language in the form of predicates together with a specification of their structural and functional properties. Thus, basic predicates are not given as isolated items, but as part of structural schemata called *predicate-frames*. Each predicate frame specifies at least the following information about the predicate: (i) its lexical form, (ii) the number of arguments it requires, (iii) the selection restrictions imposed on those arguments, (iv) the syntactic type of the predicate.

As to the specification of the meaning of lexical items, each predicate frame is associated with a meaning definition[1], accounting for both the semantic properties of each predicate, and the semantic relations among them.

Semantic definitions are paraphrases of the *definiendum* in terms of simpler/ higher predicates (or combinations of predicates) of the language, which make up a network among predicates. By decomposing a predicate in others more basic, these definitions are used to derive or infer more specific semantic properties among those predicates, when such specification is necessary.

Predicate frames capture the set of properties which codetermine the structure of those expressions in which the predicate occurs, whereas semantic definitions represent the meaning of the lexeme.

Each defining predicate can be defined too, so that the process can be repeated gradually, which leads to *stepwise lexical decomposition.*

According to this theory of lexical description, the format of each lexical entry would be as follows:

$$\alpha =_{\text{def}} \pi$$

where α stands for a predicate-frame and π for some combination of predicate-frames of semantically simpler predicates, according to the following postulates:

(A1) The defining predicates occurring in meaning definitions are lexical items of the object language.

(A2) The defining predicates occurring in meaning definitions are not drawn from a universal, language-independent set of such predicates.

---

1. By *meaning definition* Dik (1978:6) understands any kind of attempt at analysing the (or some) meaning or sense of a lexical item. The concept goes back to that of *meaning postulates* introduced by Carnap (1956).

(A3) The defining predicates occurring in meaning definitions need not be primitives; they may themselves be predicates defined in other meaning definitions.

(A4a) The structure of the definiens of meaning definitions is of the same formal type as the structures underlying sentences.

(A4b) The definiens of meaning definitions is not directly accessible to the operation of syntactic rules.

Stepwise lexical decomposition has certain advantages following directly from the underlying assumptions, since this theory is not only economical in that no semantic elements are postulated other than those expressed by the lexical items of the language in question, and concerning the extension and complexity of meaning definitions, but also leads to a description where paradigmatic relations among lexical units of a language are expressed directly.

Martín Mingorance (1990:232) states the compatibility of these postulates with Coseriu's proposal of lexical organization in semantic fields and dimensions within Lexematics.

1.2.2. Classematics.

1.2.2.1. The notion of classeme.

Within the structuralist paradigm, more specifically in Lexematics, a distinction is made between two kinds of features, namely, *semes* and *classemes*, which corresponds, roughly, to the well-known distinction of the transformational-generative paradigm between *distinguishers* and *markers*[2].

Although the distinction was helpful for the task of formalizing empirical generalizations about the semantic structure of linguistic constructions, it was not uncontroversial.

The function of classemes seems to be reduced to their role as distinctive features in one of the three types of *lexical solidarities*, syntagmatic structures defined as:

> the determination of the content of a word through a class, an archilexeme or a lexeme, and under the perspective that a specific class, a specific

2. The distinction *seme-classeme* is based on lexical field theory, of which the dichotomy *distinguisher-marker* is completely independent, relying primarily on the notion of systematicity within language.

> archilexeme or a specific lexeme functions as a distinctive feature in the content of the word in question. (Coseriu 1967:296)

According to Martín Mingorance (1988), a certain degree of contradiction can be found between Coseriu's conception of classemes as semantic distinctive features in lexical solidarities and the semantic-syntactic character attributed to them in his definition of *lexical classes*:

> A class consists of the sum total of the lexemes which, regardless of the word-field structure, belong together through a generic content-differentiating feature. Classes manifest themselves through their *grammatical and lexical* distribution; i.e. the lexemes which belong to the same class behave *grammatically and lexically* in a similar way: they can take on the same grammatical functions and appear in similar grammatical and lexical combinations. (Coseriu 1967:294)

The confusion derived from the semantic-syntactic nature of classemes clearly reflects a traditional tendency to draw a sharp line between syntax and semantics. There seems to be agreement as to the existence of certain features of a more generic type which have syntactic consequences, but the question whether those features are also distinctive semantic components is not so clear, so that when this dualism is suspected, a dichotomy of features is established: semantic vs grammatical markers, selection restrictions vs subcategorization features, semantic vs grammatical classemes.

Coseriu (1967:295) himself distinguishes between *lexical classemes* (e.g. [±ANIMATE], [±HUMAN], [±MALE]), governing purely lexical cooccurrences and *grammatical classemes* (e.g. [±TRANSITIVE], [±OBJECT DELETION], [±PASSIVE], [±HUMAN], [±MALE] which determine grammatical constructions[3].

This latter type of classeme poses problems to the linguist, being sometimes very close to strictly syntactic restrictions of the kind of number concord: **The girl assembled.*

Classemes are thus features of a more general and abstract nature than simple semantic features, with a double function:

---

3. However, notice the confusion since the labels assigned to some of the features in both sets coincide. In this respect, Katz & Fodor (1964:517-18) made a distinction between *syntactic* and *semantic* markers, and pointed out that when both types of features seem to overlap (e.g. in the case of Male, Female, Human, Animal, Animate, Concrete, Abstract), i.e., where it appears that a marker is common to both grammar and semantics, what is in fact the case is that there are two distinct markers having the same or similar names.

- Semantic: they act as classificatory and delimiting features at dimension or even at field level;
- Syntactic: they control the combinatorial properties of lexical items.

This twofold nature is responsible for the confusion as to the proper identity of these features. However, due to this Janus-like linguistic nature, classemes are of crucial importance in language structure since they behave «paradigmatically», as semantically distinctive features, expressing general semantic properties and «syntagmatically», creating a number of selection restrictions projected from the lexicon so that we could speak of a kind of «grammar of vocabulary» (cf. Martín Mingorance 1988:378).

The search for the set of semantic features responsible for the syntactic behaviour of lexemes is nothing else than a search for classemes.

1.2.2.2. Intensification.

Intensification is one of those generic, semantic-domain independent semantic features. Intensification manifests itself as both a paradigmatic and a syntagmatic phenomenon: its incorporation in the semantic specification of a lexeme not only distinguishes groups of semantically-related lexemes, but also has consequences for the type of constructions in which the lexeme can appear.

Intensification in verbs falls in various modalities (Degree, Duration, Completion, Argument Quantity and Reiteration). Pairs such as *shout-yell, see-watch, damage-ruin, move-swarm* or *hit-beat* illustrate a distinction established on the basis of the incorporation of different modalities of the feature by one member of each pair.

In order to justify the classematic nature of intensification, a number of effects for the combinatorial possibilities has to be proved to be generated in those lexemes containing the feature as a component of their lexical structure.

Since combinatorial possibilities are related to *formal* and *semantic* factors, concerning the number and formal nature of the terms the predicate can occur with, on the one hand, and lexical combinations, on the other, the analysis will be focussed on both. More specifically, I will pay attention to the way in which argument structure, modification by aspectual operators and combination with satellites are affected by the incorporation of a classeme.

Due to the limitations of the present paper, I will restrict the analysis to duration, with which I will attempt to provide the reader with sufficient evidence of the syntactic implications of a semantic component.

2. Illustration: the case of duration.

2.1. Argument structure.

If a verb belonging to the perception domain incorporates the semantic feature of duration, the object must be of a kind compatible with that duration.

Due to this duration, there seems to be a semantic motivation for the object to denote a second order entity (Lyons 1977), which can be located in time:

$$watch_{v}\ (x_{i})_{Ag}\ (\text{Sim}\ e_{i})_{Go}$$

There are some complement patterns that *watch* and its hyperonym share as members of the same semantic field. It is not coincidental that those constructions denote typically second order entities, which agrees with the hypothesis of the semantic type of object most appropriate with a durative lexeme in the perception domain:

Bare infinitive

The marked frequency of distribution of the bare infinitive (henceforth BI) as a complement of *watch* is semantically motivated by (i) the type of entity denoted by this construction, typically events[4], (ii) the specific type of perception verb governing the complement, in this case one subclassified as durative.

The duration component makes the bare infinitive the canonical realization of the complement of *watch*:

Jack watched *them slowly climb the wall.* (LDCE)[5]

---

4. Not just in the general sense as opposed to *fact* or *proposition*, but strictly speaking, (i.e., in Vendler's sense) as opposed to *state*.
5. The examples selected in this paper were taken from different sources; some of them illustrate actual usage -those taken from linguistic corpora and monolingual dictionaries-, others are prefabricated examples used by well-known linguists to refine and clarify their explanations about different phenomena. A number of the examples are my own. The source of the example will be indicated in each case. A number of acronyms will be used: LOB= Lancaster-Oslo-Bergen Corpus of edited written British English, BROWN= Corpus of edited written American English, LDCE= Longman Dictionary of Contemporary English, CIDE= Cambridge International Dictionary of English, LD= Longman Dictionary of the English Language, OT= The Oxford Thesaurus.

Noun Phrase + -ing participle.

Ing complements refer to some activity or state as extended in time, perhaps noting the way in which it unfolds (Dixon 1991:237). The use of this pattern with durative verbs is then fully appropriate:

I sit by the window and watch *people walking past.* (CIDE)

There are still two more patterns common to *watch* and *see.* However, formal similarity does not correspond to semantic identity. In the case of *watch*, both syntactic types denote also the type of entity semantically compatible with the durative meaning:

How clause.

Whereas *How-* objects express pure physical perception with *watch*, in the case of *see* they denote a third order entity, so that the meaning of the verb is not purely perceptual:

Watch *how I do it.* (LDCE)
(«my doing of it»)

I did not see *how a great many people could fail to recognise her.* (LOB)
(«I didn't understand the fact that so many people failed to recognise her»)

Noun Phrase.

The Noun Phrase object of *see* typically refers to either first or third order entities, whereas most Noun Phrase objects of *watch* denote second order entities:

He watched *a striptease.*

When the object of a verb of perception is realized by means of a noun, the entity can be modified by different types of attributive restrictors and/or predicative adjuncts (cf. Dik & Hengeveld 1991:251). The type of modification found with *watch* in those cases offers evidence to consider the entity referred to by the noun phrase as a second order entity:

They all watched *us as we ate the beans.* (LOB)

Therefore, we can conclude that the semantic type *par excellence* of the object of *watch* is a second order entity, realized by means of:

(i) BI.

$watch_v\ (x_i)_{Ag}$ (Perf Sim $e_i)_{Go}$ He watched *the woman undress her self.*

(ii) NP + -ing.

$watch_v\ (x_i)_{Ag}$ (Imperf Sim $e_i)_{Go}$ He watched *the woman undressing her self.*

(iii) How-Clause.

$watch_v\ (x_i)_{Ag}$ (Sim $e_i)_{Go}$ He watched *how she undressed her self.*

(iv) NP.

$watch_v\ (x_i)_{Ag}\ (e_i)_{Go}$ He watched *the striptease.*

The requirement of semantic compatibility imposed by the duration component has further consequences for the type of complement with those verbs containing the feature:

On the one hand, the range of possibilities for the formal types of complement of a predicate in each semantic field is restricted by the class in which the predicate is included, i.e., by the incorporation of a classeme, which means that the number of possible realizations of the object will vary in inverse proportion to the degree of specificity of the predicate.

On the other hand, there are some grammatical properties that apply only to a class, also semantically motivated.

	NP	NP +-ed	-ing	BI	To inf	That Cl	How Cl	NP+ Sub Temp Cl	ø[6]
see	+	+	+	+	+	+	+		
watch	+		+	+			+	+	+

Figure 1. Complementation patterns of *see* and *watch.*

6. The symbol ø stands for the presence of no object. Although *see* has also an intransitive use, it refers to visual capability in those cases, being a different verb.

(i) Restrictions.

A comparison of the complement types possibilities with both verbs reveals that *watch* is more limited than its hyperonym *see* (cf. figure 1).

See denotes the bare fact of visual perception, so that it may evoke perception as a cause of knowledge. However, the inclusion of the duration component restricts *watch* for the expression of a meaning other than physical perception.

The relation between the different types of entity and the formal patterns realizing each type is shown in the figure below:

	NP	-ing	BI	To inf	That
1st order	+	+			
2nd order	+	+	+		
3rd order	+			+	+

Figure 2. Relation complementation patterns-entity type.

Since *To-inf* and *That* clauses denote mental constructs, it follows that *watch* will be restricted for complements of this form:

*I watched *that they were obnoxious.* (Bolinger 1974:67)[7]
I saw (observed, noticed) *that they were obnoxious.*

*I watched *them to be obnoxious.*
I saw *them to be obnoxious.*

A further restriction for *watch* marking the contrast with *see* is the possibility of having a past participle modifying the NP object, denoting the state of the entity referred to by the NP, although the present participle is frequent:

*I watched the wrestler naked. (Dik & Hengeveld 1991:251)
I saw the wrestler naked.

Once more, this restriction is semantically motivated since the meaning

7. In a few cases, *watch* may take a *that* complement, but with a quite different meaning from the indirect knowledge sense of *that* with *see*. A *that* clause with *watch* relates to the fact of some event, with an instruction to ensure that it does or doesn't take place (cf. Dixon 1991:252): *You watch that the soup doesn't boil.*

of the complement with a past participle modification clashes with the duration lexicalized by *watch*.

The stronger restrictions for the type of complement that can be selected suggest that *watch* is semantically more specific. Verbs having the strongest and most demanding meanings are probably restricted to the pragmatically strongest complement choice. In contrast, the most frequently occurring verbs in a type -those with the most general, superordinate meanings- have the widest syntactic possibilities, a tendency that is found in all languages (Dixon 1985).

(ii) Exclusiveness.

The NP object of *watch* is often modified by an adverbial temporal clause, denoting a State of Affairs (henceforth SoA) simultaneous with the SoA denoted by the main predication:

They all watched *us as we ate the beans*. (LOB)

This property, which distinguishes *watch* from its hyperonym, is also semantically motivated by the feature of duration: the duration contained in *watch* suggests a continuation of the action, which makes the adverbial temporal modification -denoting a dynamic SoA- more appropriate than that of a past participle.

Intransitive examples with a Subordinate Temporal Clause are also frequent:

> Bonner watched helplessly *as the ball sneaked in at the near post*. (CIDE)
> I went in after him and watched *while he got the dislodged teeth out of his face*. (LOB)
> He stood there watching *until it had gone from his sight*. (BROWN)

In these cases, the subordinate clause has a function similar to that of a temporal object. This realization leaves the SoA unbounded, which contributes to the expression of duration. Once again, the use of this pattern with durative verbs is semantically motivated.

The exclusivity of this construction with *watch* is symptomatic of its inclusion within a class, which provides the lexeme with certain semantically motivated syntactic properties not shared by its hyperonym.

Therefore, two more patterns which contribute to the expression of the type of entity semantically most compatible with a durative verb, a «temporal» entity, have to be added to the former list:

(v) NP + Adverbial Temporal Clause.

e_i: [*watch*$_v$ [$(x_i)_{Ag}$ $(x_j)_{Go}$] (e_i)] (Sim e_j: [$Pred_\beta$ $(Ax_j)_{Ag}$] (e_j))$_{Circ}$

He watched *the woman as she undressed.*

(vi) Adverbial Temporal Clause.

e_i: [*watch*$_v$ [$(x_i)_{Ag}$] (e_i)] (Sim e_j: [$Pred_\beta$ $(x_j)_{Ag}$] (e_j))$_{Circ}$

He watched *as she undressed.*

Transitive						Intransitive
Formal realization of Od	NP	-ing	BI	How	NP+ Adv Temp Cl	Adv Temp Cl
Entity type	2nd order	2nd order	2nd order	2nd order	2nd order	2nd order

Figure 3. Syntactic-semantic characterization of the object of *watch.*

The type of complement with *watch* is semantically motivated by the duration classeme.

Nevertheless, *watch* is only one lexeme classified as durative within a semantic domain. If the properties found in *watch* define the durative class, other durative lexemes within perception should behave alike.

The BI and *-ing* complements are also possible (not required, though) with other durative perceptual lexemes:

> Don't stare *at me eating*. (Bolinger 1968:125)
> He (the bird) stands on his perch and stares (glances) *at us eat*. (Bolinger 1974:88)

An adverbial temporal clause simultaneous with the SoA expressed by the matrix predicate is also frequent with other durative perceptual verbs:

> He just stood and gaped *as the building began to crumple.* (LD)
> The people were powerless to do anything but stare *as the lava engulfed the city.* (OT)
> Annette gazed admiringly at Warren *as he spoke.* (CIDE)

The expression of second order entities is then also common for the object of other durative perceptual verbs. They are subject to the same kind of restrictions as well.

However, according to the definition of classeme, the feature is semantic domain- independent, so that some of the properties of the durative class in the perceptual domain should be applicable to other semantic domains.

Verbs belonging to the semantic domain of cognition have a second argument which denotes typically a third order entity, i.e., a propositional content:

$think_{v}\ (x_1)_{wExp}\ (X_1)_{Goal}$

I think *that he has arrived.*

Due to the difference in semantic domains, the type of entity denoted by the object will be different as well: the object of physical perception is a simultaneous SoA, whereas the object of cognition exists only as a result of the action denoted by the verb. This fact explains a number of restrictions concerning the formal manifestation of the object, such as the possibility of the BI in the first case, but not in the second, and the possibility of a *that* clause for lexemes included in cognition.

In spite of these differences, both semantic domains interfere when duration is a semantic component of the lexeme:

The verb *think* has a dynamic counterpart which takes a prepositional object denoting a second order entity:

I 'm thinking *about his arrival.*

	That Cl	Prep Obj
3rd order	+	
2nd order		+

Figure 4. Syntactic-semantic characterization of the complement of *think*.

Durative lexemes within cognition are also dynamic, being restricted for the expression of third order entities and, consequently, for the pattern realizing them (e.g. *That clause)*:

Successive committees have pondered *over this problem* without finding

a solution.
*Successive committees have pondered *that*...

	That Cl	Prep Obj
think	+	+
ponder		+

Figure 5. Complementation patterns of *think* and *ponder*.

Not only in the semantic domain of perception but also in cognition, the semantic feature of duration conditions the type of entity denoted by the object and hence the formal realization of that object. Therefore, concerning argument structure, there are certain properties common to the durative class. The first conclusion about the classematic character of duration can be formulated as follows:

I. Transitive Durative predicates have typically an object denoting a second order entity.

2.2. Modification by aspectual operators.

The duration component, being related to aspectual elements, shows up again when the predicate is modified by aspectual operators, either restricting or favouring that modification:

Restrictions.

(i) Complement of *finish.*

Durative lexemes cannot be modified by the aspectual operator *finish*:

*John finished staring at his neighbours.
*John finished watching TV.

However, this restriction is due to the non-telicity presupposed in durative predicates, not being a distinctive property, since any non-telic predicate exhibits the same kind of behaviour:

*John finished looking at the picture.

The restriction is particularly strong in the case of durative predicates,

though.

According to Dowty (1979:61), it is difficult to find a verb denoting activity which cannot express accomplishment in any special context:

> I have finished looking at your essay.

Look at can express duration, but not necessarily, since duration is not inherent to it. This fact renders the lexeme freedom to express telic and non-telic SoAs .

In contrast, in cases where the feature is lexicalized, the lexeme is restricted for the possibility of a telic use:

> *I have finished staring at the page.

The inherently durative meaning of those verbs justifies their interchangeability with the progressive form, which reveals in the non-requirement of the progressive form in certain contexts:

Coordination with simultaneous progressive SoAs:

> He *gazed* out of the window and *was thinking* that...
> cf. *?He looked out of the window and was thinking that...*

Durative adverbial modification:

> He *mused* for hours.
> ?He *thought* for hours.

Conversely, the use of the progressive is necessary in other contexts:

When there is an indication of a temporal point, this point marks the beginning of the SoA denoted by the matrix predicate, which seems to be applicable to any non-stative SoA:

> When I came into the room, he looked out of the window.
> (I PASTcome into the room, THEN he INCH PASTlook out of the window)

However, a punctual inchoative interpretation is not compatible with the meaning of durative verbs, resulting in semantically anomalous sentences:

?*When I came into the room, he watched TV.*
(?«When I came into the room, he started to watch TV»)
?*When we arrived, he pondered.*
(?«When we arrived, he started to ponder»)

Modification.

There is a marked tendency for the use of these verbs in the progressive and/ or for the modification by means of aspectual operators insisting upon the duration of the SoA (e.g. *sit/ stand/ stay/ lay + -ing):*

He *stood watching* the girl, wondering what was coming next. (BROWN)
He *kept watching* me all the time incredulously. (LOB)

2.3. Combination with Satellites.

Combinatorial restrictions.

Adverbial Temporal Modification.

Durative predicates express non-telic SoAs, which means that there will be a restriction for those predicates to be combined with temporal satellites of the kind «in x time»:

*John watched television *in two hour*s.
*John stared at the page *in two hours.*
*John pondered *in two hours.*

Although this restriction derives from the negative telicity inherent to durative predicates, in the case of simply non-telic predicates there is sometimes a possibility to reinterpret the predicate as telic (Dowty 1979:61):

John looked at the paper in two hours.

Durative collocations.

The semantic effects of duration can not only be stated in terms of combinatorial restrictions but also in terms of positive conditioning of the lexeme for the combination with specific satellites.

The presupposed negative telicity of durative predicates conditions the lexeme for a durative adverbial modification. Following Dik's (1978:50-

52) proposal for the introduction of slots for such satellites as Manner by means of expansion rules operating on nuclear predications with specified properties, a similar rule could be stated for duration:

given: some nuclear predication specifying a state of affairs with the property[-telic];
required: extension of the nuclear predication with a constituent $(y_1)_{Duration}$

$Pred_v[(x_1: <...> (x_1))]_{Activity/Dynamism}$ $(y_1$: **<for X-time>** $(y_1))_{Duration}$

I pondered on the problem *for hours.*
I watched TV *for hours.*

?I thought that it was not a good idea *for hours.*
?I saw Mary *for hours.*

However, this combinatorial possibility extends to all non-telic predicates:

I was thinking about the problem *for hours.*
I was looking out of the window *for hours.*

Therefore, the possibility to be combined with durative satellites, being theorically valid for any non-telic predicate or predication, is not a distinctive property of durative predicates.

A distinction does exist, though, concerning the frequency of distribution of durative modification with this type of predicates: combination with durative satellites is just a *possibility* for any non-telic predicate, whereas in the case of durative predicates there is a strong *tendency* to make explicit the duration already existent in the meaning of the verb. To put it differently, with durative predicates the combination with durative satellites has a *collocational* character, so that the inherently durative verb and its satellite make up a sort of «prefabricated unit».

In spite of Dik's (1978:49-51) statement that satellites are typically sensible to the nature of the SoA defined by the nuclear predication, rather than to the nature of the predicate, a certain degree of responsibility for combinatorial possibilities should be granted to the lexicon. That certain satellites are «implied» by the nuclear predication (e.g. Durative satellites by non-telic SoAs) is not in question, but the degree of the implication is higher when duration is a meaning component of the lexeme.

The semantic status of such modification is different in each case:

When duration is included as a component of the meaning of a basic predicate, the feature will be represented in its semantic definition:

watch def SEE_v (y_1: <for a long time> (y_1))$_{Duration}$

Since there is a tendency to make explicit such duration, the feature will exist both *paradigmatically*, as an integral part of the meaning which distinguishes the lexeme from its hyperonym, and *syntagmatically*:

$Pred_v$ [(x_1: <...> (x_1))]$_{Activity/Dynamism}$ **(y_1: <for a long time> (y_1))$_{Duration}$**
def $Pred_v$ (y_1: <for a long time> (y_1))$_{Duration}$

Any verbal predicate negatively specified as to telicity can be modified by durative satellites, but only for those predicates whose definitions contain the Duration component can this modification be considered *intensive*, since it is not additional but reduplicated information which serves a specific communicative purpose.

3. Concluding remarks.

The semantic feature of duration not only distinguishes lexemes *paradigmatically,* but also *syntagmatically* it plays a direct role in the building up of predications. Therefore, semantic definitions will allow us to make combinatorial predictions concerning not just strictly semantic phenomena such as satellite distribution, but also syntactic aspects of the kind of argument structure.

If certain features of semantic definitions have some kind of effect on the type of constructions in which a predicate can occur, Dik's statement that the structure of meaning definitions is not directly accessible to the operation of syntactic rules cannot be sustained any longer.

The postulation of classemes is of theoretical significance as to the type of information that should be included in lexical representation. A semantic representation of the meaning of a verb through a predicate decomposition should be linked to the lexical syntactic representation, since some aspects of the latter are a projection of certain semantic components captured in semantic representation. A great deal of empirical research is needed, but if some syntactic properties of a predicate can be predicted from its meaning, ideally only the verb's semantic representation should be required in its lexical entry (cf. Van Valin 1993:509).

REFERENCES

Bolinger, D. (1968) «Entailment and the meaning of structures». In *Glossa 2:2*, 119-127.

Bolinger, D. (1974) «Concept and percept: two infinitive constructions and their vicissitudes». In: *World Papers in Phonetics: Festschrift for Dr Onishi's Kijer Phonetic Society of Japan,* Tokio: 65-91.

Coserin, E. (1967) «Lexikalische Solidaritäten». *Poetica* 1, 293-303 (Traducción española en Coserin 1977).

Coserin, E. (1977) *Principios de Semántica Estructural.* Madrid: Gredos.

Chomsky, N. (1981) *Lectures on Government and Binding*. Dordrecht: Foris.

Chomsky, N. (1986) *Knowledge of Language. Its Nature, origin and use.* New York: Praeger.

Dik, S.C. (1978) *Stepwise Lexical Decomposition.* Lisse: The Peter de Ridder Press.

Dik, S.C. & K. Hengeveld (1991) «The hierarchical structure of the clause and the typology of perception-verb complements.» In: *Linguistics 29*, 231-259.

Dixon, R.M.W. (1984) «The semantic basis of syntactic properties.» In: *Berkeley Linguistics Society Proceedings 10,* 583-595.

Dixon, R. M. W. (1991) *A New Approach to English Grammar, on Semantic Principles.* Oxford: Clarendon.

Dowty, D.R. (1979) *Word Meaning and Montague Grammar*. Dordrecht: Reidel.

Foley, W.A. & R.D. Van Valin, Jr. (1984) *Functional Syntax and Universal Grammar*. Cambridge: Cambridge Univ. Press.

Kastovsky, D. (1980) «Selectional Restrictions and Lexical Solidarities.» In: D. Kastovsky (ed.) (1980) *Perspektiven der lexicalischen Semantik*. Bonn: Bouvier.

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

Martín Mingorance, L. (1988) «Classematics in a Functional-Lexematic grammar of English.» In: *Actas del X Congreso Nacional de AEDEAN,* 377-382, Zaragoza.

Martín Mingorance, L. (1990) «Functional Grammar and lexematics in

lexicography.» In: Jerzy Tomaszczyk & Barbara Tomaszczyk-Lewandowska (eds.) *Meaning and lexicography (Linguistic and Literary Studies in Eastern Europe 28)*, 227-253. Amsterdam: Benjamins.

Van Valin, R.D. Jr. & David P. Wilkins (1993) «Predicting Syntactic Structure from Semantic Representations: Remember in English and its Equivalents in Mparntwe Arrernte.» In: Van Valin, Robert D. (ed.) *Advances in Role and Reference Grammar*. Amsterdam: Benjamins.