

# SYNTAGMATIC RELATIONS AND THE INTERCONNECTION SYNTAX-LEXICON



M<sup>a</sup> Carmen Portero Muñoz  
Universidad de Almería

My aim in this paper is to encourage the reader to question the traditional tendency to set clear-cut boundaries between the lexicon and syntax. Admittedly, the lexicon contains the set of lexical units available in a language, listing all idiosyncratic properties, whereas syntax is concerned with the way those units are combined into larger units in the speech chain. However, the acknowledged separation between both components of a linguistic description is not clear. On the one hand, combinatorial units can not always be considered within syntax, since there are complex lexical units. On the other hand, lexemes can be said to have their own syntax; the postulation of abstract semantic components accounting for generalizations in the syntactic behaviour of groups of semantically specific lexemes helps to bridge the gap between the lexicon and syntax.

## 1. INTRODUCTION

The Lexicon has traditionally been regarded as an appendix of the grammar, a list of the basic irregularities. This view conforms to the ideal lexicon, a lexicon that contains the minimum information necessary, providing a record of just the idiosyncratic information associated with each lexical item.

Lexemes are combined into larger units which Saussure defined as «a combination of elements based on the extent, so that they always consist of two or more consecutive units».

Both components of a linguistic theory are not as clearly and sharply distinguishable as the division implied by the former definitions might suggest. The lack of clear-cut boundaries between syntax and the lexicon is already acknowledged by Saussure in various passages of his *Course*.

When talking about the division of grammar, Saussure puts forward his disagreement with the traditional view and admits the interconnection between grammar and lexicology:

A première vue les mots, tels qu'ils sont enregistrés dans le dictionnaire, ne semblent pas donner prise à l'étude grammaticale, qu'on limite généralement aux rapports existants entre les unités. Mais tout de suite on constate qu'une foule de ces rapports peuvent être exprimés aussi bien par des mots que par des moyens grammaticaux. Ainsi en latin *fit* et *facio* s'opposent de la même manière que *dicor* et *dico*, formes grammaticales d'un même mot. [...] On voit donc qu'au point de vue de la fonction, le fait lexicologique peut se confondre avec le fait syntaxique (1978: 186-187).

Later, Saussure refers to the subject in relation to his distinction between *langue* and *parole*.

In his view, linguistic science should be concerned with the study of *langue*, «a story-house filled by the members of a given community through their active use of speaking, a

grammatical system that has a potential existence in each brain, or, more specifically, in the brains of a group of individuals». On the contrary, speaking (*parole*) is an individual act, wilful and intellectual, although the speaker must use the linguistic code to express his thought.

The stock of smallest meaningful units or morphemes, with values determined by paradigmatic contrasts, make up the language system or *langue*. However, when we speak, we combine morphemes into sequences, to build larger units (words, phrases, sentences). Syntagmatic facts present the linguist with a dilemma regarding the identification of the phenomena as socially systematic, i.e. belonging to *langue*, or individually free, i.e. belonging to *parole*. Saussure is not unaware of this problem and declares that not all *syntagms* are of the same kind:

On pourrait faire ici une objection. La phrase est le type par excellence du syntagme. Mais elle appartient à la parole, non à la langue; ne s'ensuit-il pas que le syntagme relève de la parole? Nous ne le pensons pas. Le propre de la parole, c'est la liberté des combinaisons; il faut donc se demander si tous les syntagmes sont également libres (1978: 172).

Freedom to combine words is a matter of degree. There are chains which are newly created by the speaker on one occasion, proper *combinations*, but there are also strings of words which resist change, phrases whose component words are not independent as grammatical constituents, namely *compositions*: *time after time*, *easier said than done*, *last but not least*, etc.

Saussure's statement is relevant in connection with the syntax-lexicon interface since it implies that although all syntactic facts belong to the syntagmatic realm, not all syntagmatic facts can be included within syntax, i.e. syntagmatic relations encompass both syntactic and lexical facts.

According to Saussure, any complex lexical unit, i.e. one that is analysable into smaller parts cannot be distinguished from a syntactic fact since «the disposition of the component sub-units obeys the same fundamental principles as word-groups formation». However, ascribing a phenomenon to the lexicon or to syntax is a function of the degree of freedom a given combination enjoys: the more freedom, the farther we move from the lexicon pole towards the realm of syntax. The distinction between a «lexical» chain and a «syntactic» chain can be illustrated by something like *decide on a boat* (meaning “choose to buy a boat”), which Chomsky calls «close construction», and *decide on a boat* meaning “make a decision while on a boat”, to which he refers as «loose association». In the first case, we find a fixed association of words in which syntax cannot operate (cf. *\*decide at a boat*); in the second, a sequence of lexical units liable to syntactic modification, which must be subject to concord (cf. *decide on the boat / in the library / after lunch / at three o'clock / quickly / immediately / reluctantly*, etc).

A further point in support of the connection between the lexicon and syntax is the fact that syntax is partly a matter of word meanings: for instance, it is implicit in the meaning of *hit* that it can take an object. Once a word is chosen, the selection of units which might follow it is to a certain extent constrained by the syntax of the lexeme.

## 2. SYNTACTIC COMBINATION AND SEMANTIC «MOTIVATION»: THE «PROJECTION» OF FEATURES

The lexicon can reach a syntagmatic dimension when the lexical unit is complex. Nevertheless, combinatorial systematicity resulting from lexical collocations or fixed associations of words is not due to semantic motivation, since they cannot be predicted but must be learned by the speaker of a linguistic community.

The existence of rules governing the type of subject or object occurring with a particular verb, namely *selection restrictions* induce to consider the possibility of semantic motivation: *collide* requires a plural subject (hence \**The car collided*); *scatter* and *disperse* require a plural subject or object (\**The man scattered*, \**Police dispersed the rioter*). These rules, being similar to strictly syntactic rules, are different to rules of concord in that they do not imply two elements sharing the same feature, but an element «projecting» a necessary feature over a different element, if this is to be used meaningfully. What is at issue in the examples above is “plurality” as a semantic feature rather than as a strictly grammatical feature, as proves the possibility of a singular collective as a substitute for the plural noun (*Men scattered / The crowd scattered*, *Police dispersed the rioters / Police dispersed the mob*).

Similarly, the differences between *believe*, *request* and *inquire*, which, in Chomsky’s view, would be explained in terms of strict subcategorization features (*believe* [+V, ... + -that S], *request* [+V, ... + -that S], *inquire* [+V, ... + -whether S]), could instead be explained by the fact that *believe* has a feature <Assertion> which *request* lacks, hence the possibility of having the nouns *story*, *rumor* as objects, having both the inherent feature [Assertion], and the difficulty for building *believe* —but not *request*— with nouns object lacking that feature, such as *chair* or *rehearsal*; *request* has the feature <Command>, probably identical to the feature making up imperatives; *inquire* has the feature <Question>, probably identical to the feature responsible of indirect questions.

Sometimes, there seems to exist a positive conditioning of the lexeme for certain patterns, so that some combinations are found repeatedly with specific lexical items. Thus, durative perception verbs are happier with an adverbial temporal clause instead of an object (e.g. He sat up and watched *as they pulled themselves over the stern*); certain manner-of-speaking verbs, specifically those denoting loud sound, tend to select a marked type of indirect object (e.g. She shouted *at us* for spoiling her lovely evening). The existence of a large number of examples that illustrate a specific syntactic pattern makes freedom of combination doubtful and might lead to suspect the existence of semantic motivation. Semantic motivation is not to be confused with regularity of pattern. However, since combinatorial regularity matches semantic regularity in the class of units occurring in those combinations, the possibility of a relative motivation cannot be denied.

Attributing combinatorial possibilities to the existence of motivation implies the postulation of abstract semantic features, one of two alternative approaches to the combinatorial phenomenon. In the «lexical» approach, supported by a number of British linguists, co-occurrence restrictions are a function of particular lexical units, not of their meanings (cf. Firth 1951 & Halliday 1966). Firth pointed out that «one aspect of the meaning of a word is the set of other words it collocates with.»<sup>1</sup> The concept does not refer to semantic relations at all. They just assert that particular lexical items co-occur frequently, so that collocations are treated as if the combinatorial processes of a language were completely

<sup>1</sup> Later, Firth (1957) extends the scope of collocational phenomena to sets of words, and he speaks of “formal scatters”, “colligations”. In this respect, Halliday (1966) asserts -regarding cases like *a strong argument*, *the strength of the argument*, *he argued strongly*, *his argument was strengthened*- that it is possible to formulate a rule for collocations at a more general level than the words involved in that collocation: «after a grammar has accounted for the formal linguistic patterns, there will still remain patterns which can be accounted for in formal linguistic terms but whose nature is such that they are best regarded as non-grammatical, in that they cut across the type of relation that is characteristic of grammatical patterning» (i.e. “lexical statements or rules”).

arbitrary, a view that does not explain the mechanism that might govern the selection of some terms instead of others. Bolinger (1968: 102) cites the British linguist T. F. Mitchell regarding combinations of this kind:

[...] Not only are good works *performed* but cement works are *built* and works of art *produced* [...] Why do builders not *produce* a building or authors not *invent* a novel, since they do invent stories and plots? No reason, as far as dictionary definitions of words are concerned. We don't say it because we don't say it.

On the contrary, a different branch of linguists contend that combinatorial restrictions are a function of the *meaning* of the lexeme, and collocations reflect that fact, so that they shouldn't be postulated for isolated lexical units, but for some type of semantic features of abstract nature. The existence of semantic features «projected» over other elements in a word-chain is one of the facts proving the lack of clear-cut boundaries between the lexicon and syntax. Syntax can in those cases be considered semantically motivated.

This division of views is not mutually exclusive, though: admitting the existence of abstract semantic features serving for the establishment of combinatorial «rules» does not imply denying the existence of cases where a certain combination is arbitrarily restricted to a specific lexeme. Restrictions differ in degree of generality: along the generality scale, selectional restrictions (or grammatical collocations) occupy the higher position, affecting lexical classes, whereas collocational restrictions (or lexical collocations) should be placed in the less general pole, affecting individual lexical items. In this respect Coseriu (1967) distinguishes three types of lexical solidarities, *affinity*, *selection* and *implication*, according to whether the feature implied is a classeme, an archilexeme or a seme, respectively. The three different cases are distinguished in terms of the degree of generality: an implication, a lexically-determined combination, i.e. one that is specific to a particular lexeme (e.g. *shrug-shoulders*) is far more idiosyncratic than an affinity (e.g. *boy-apologized*), classematically-determined, i.e. affecting a whole class of lexemes. The possibilities of prediction for a combination will vary in direct proportion to the generality of the feature. The grammatical consequences of the phenomenon will also depend on the scale of generality<sup>2</sup>.

A different issue related to the hypothetical semantic motivation in the combinatorial phenomenon concerns the intra or extra-linguistic nature of such motivation. Coseriu defines what he labels as *syntagmatic lexematic structures* as «solidarities between lexemes motivated by their linguistic value». Starting from Porzig's notion (1934, 1950), Coseriu reformulates it taking into account certain notions from his Lexematics, such as lexeme, archilexeme and classeme, and he criticizes Porzig's failure to clearly distinguish strictly linguistic lexical solidarities (i.e. those combinations motivated by the semantic content of lexemes) from those combinations determined by the knowledge of objective properties of extralinguistic reality.

Similarly, Coseriu disagrees with Pottier in his attribution of normal and frequent combinations in the use of lexemes (where the category of *virtuème* is implied) to the set of intralinguistic phenomena. Thus, the frequency of the combination *mouette blanche*

<sup>2</sup> Coseriu's distinction between *affinity*, *selection* and *implication* corresponds to Bierwisch's (1970: 17 ff.) distinction between *general* and *idiosyncratic* restrictions, Kastovsky's (1980: 77) distinction between *inherent* and *contextual* features and Cruse's (1986: 107) discrimination between *selective* and *collocational* features. In all cases, they tackle the issue of syntagmatic semantic relations in which implied features exhibit different degree of generality.

(«white gull») is, according to him, a «linguistic fact». In Coseriu's view, such combinations are not «linguistic facts», as they are not linguistically determined but are due to objective properties of things, and not to linguistic values, since *blanche* has no distinctive feature «for gulls». The relations implied in lexical solidarities concern the level of meaning, not of reference.

Bally's "associative fields" are, in Coseriu's opinion, another example of «fields» based on thing-related associations. A similar tendency can be observed in McCawley's interpretation of selection restrictions (cf. McCawley 1968: 267). He speaks of *lexical presupposition*, in the sense of «assumptions about extralinguistic referents», so that selection restrictions have no independent status in linguistics but belong to pragmatics<sup>3</sup>. He contends that many cases of what some authors consider violations of a selection restriction derive from extralinguistic factors, linguistically irrelevant, so that some peculiar sentences correspond to what in the appropriate circumstances would be possible messages:

My toothbrush is alive and is trying to kill me<sup>4</sup>.

The difficulty involved in adscribing combinatorial phenomena to the linguistic system or to speech was already acknowledged by Saussure:

Mais il faut reconnaître que dans le domaine du syntagme il n'y a pas de limite tranchée entre le fait de langue, marque de l'usage collectif, et le fait de parole, qui dépend de la liberté individuelle. Dans une foule de cas, il est difficile de classer une combinaison d'unités, parce que l'un et l'autre facteurs ont concouru à la produire, et dans des proportions qu'il est impossible de déterminer (1978: 173).

Notwithstanding the involvement of both parole and langue factors in syntagmatic relations, the linguist should be concerned with investigating those aspects belonging to the system of language. Trujillo (1976) has underlined the linguistic nature of combinations, defining them as

el conjunto de propiedades que regulan la aparición de los signos en el contexto, *siempre que ésta esté condicionada lógicamente por el valor mismo de los signos y no por factores externos* a la identidad misma de éstos. Se trata de la influencia sintáctica del valor semántico de los signos individuales, ya que éstos tienen su propia sintaxis

A distinction should then be drawn between syntagmatic relations contingent on factors alien to the linguistic system and syntagmatic relations liable to systematization.

<sup>3</sup> This reinterpretation of selection restrictions as presuppositions, so that syntagmatic relations would be a reflection of knowledge of the world has been adopted by many linguists, such as Bierwisch (1970), Lakoff (1971), Fillmore (1972), Leech (1974), Muraki (1974), Allan (1986) y Nuyts (1988).

<sup>4</sup> McCawley considers the strangeness of those sentences is derived from our knowledge of the world, since, linguistically speaking, they are completely normal: «There is nothing wrong with it from a linguistic point of view: a person who utters sentences such as this one should be referred to a psychiatric clinic, not to a remedial English course. While one might suggest that a paranoid who says it has different selectional restrictions from a normal person, it is pointless to do so, since the difference in selectional restriction will correspond exactly to a difference in beliefs as to one's relationships with inanimate objects.» «I thus conclude that in many sentences which various authors have wanted to exclude as "selectional violations", the peculiarity of the sentence is completely a consequence of extralinguistic factors and that the sentence indeed corresponds to a "message" which a person will have occasion to express under appropriate circumstances.»

### 3. THE POSTULATION OF SEMANTIC COMPONENTS AND THE SYNTAX-SEMANTICS INTERFACE: THE NOTION OF CLASSEME

McCawley (*ibid. cit.*) adopts a radical position by attributing many combinatorial possibilities to extralinguistic factors, which hampers systematization. For him, selection restrictions encompass the whole set of properties entering lexical representation, which implies the need of an enormous number of features. Distinguishing two kinds of features, strictly semantic (e.g. <dog> for the first argument of *bark*), or syntactic-semantic (e.g. <+human> for the first argument of *speak*) is a necessary condition for the establishment of the social and systematic side of language<sup>5</sup>.

The existence of certain semantic features more general and linguistically more relevant has been a recurrent issue in the work of linguists devoted to the study of semantics. Hjelmslev's «content figurae» (1943), Katz and Fodor's *markers* and *distinguishers* (1963), or their *selection restrictions*, Pottier's *semes* and *classèmes* (1964), Chomsky's *selectional features* (1965), or Weinreich's *transfer features* (1966) are different disguises under which the distinction has appeared.

According to Hjelmslev (1943), we should be able to describe the content of an unlimited number of signs by means of a limited number of «figurae»: «the lower we can make the number of content-figurae, the better we can satisfy the empirical principle in its requirement of the simplest possible description».

Katz & Postal (1964: 14) distinguished *markers*, a type of semantic component which is systematically exploited in language, expressing general semantic properties (such as [±HUMAN], [±MALE]), and being implied in the analysis of many lexemes and in syntactic rules and selection restrictions, and *distinguishers*, which represent «what is idiosyncratic about the meaning of a lexical item».

Pottier's introduction of *classèmes* in semantics coincides, chronologically at least, with Katz & Postal's distinction. He defines them as «une caractérisation d'appartenance de sémèmes à des classes générales sémantico-fonctionnelles: animation, continuité, transitivité». (cf. Pottier 1964: 124-125)<sup>6</sup>

Later on, Coseriu sketches his classematics, taking Pottier's term and redefining classemes as very general values which function throughout series of lexical fields (Coseriu

<sup>5</sup> Kastovsky (1980: 76) declares: «[...] the establishment of these essential properties is basically the task of a structural semantics, i.e. an analytical approach as is exemplified in Coseriu's analysis of lexical fields, classes, and solidarities. Only the results of such an analysis can put the syntactic description of semantic collocabilities in terms of selectional restrictions on a sound empirical basis without confusing the distinction between meaning and reference.»

<sup>6</sup> Cf. also Pottier (1964, 1965 & 1985): «Le classème, ou ensemble des classes conceptuelles générales [...]», «Le classème est l'ensemble des indices de classes de comportement.», «Toute forme se trouve située au croisement de deux mouvements sémantiques. L'un la met en relation avec ses composantes particulières (les sèmes); l'autre avec des classes sémantiques très générales, révélées par des comportements distributionnels (classèmes).» «Les sèmes dénotatifs sont soit *spécifiques*, lorsqu'ils permettent de distinguer deux sémèmes voisins (ex.: /deux/ dans *biréacteur* en face de *triréacteur*), soit *génériques*, lorsqu'ils indiquent l'appartenance à une catégorie générale (ex.: /matériel/ pour *biréacteur*, *triréacteur*, ...). De même le sème /vision d'intériorité/ sera un sème spécifique si l'on oppose *chaise* à *fauteuil* (cf. "s'asseoir sur une chaise", "s'asseoir dans un fauteuil"), alors que /discontinuité/ sera un sème générique. Nous proposons la terminologie suivante: L'ensemble des sèmes spécifiques est le *sémantème*. L'ensemble des sèmes génériques est le *classème*. L'ensemble des sèmes connotatifs est le *virtuème*.»

1966: 212, 1968: 11, 1977: 135, 175), «der Inhaltszug, durch den eine Klasse definiert wird» (Coseriu 1967: 295, 1977: 147). *Classemes* are *general determinations in the vocabulary*, so that one is inclined to regard this classification as a kind of grammar of the vocabulary (cf. Geckeler 1981: 396).

The structural distinction between *semes* and *classemes* roughly corresponds to that between distinguishers and markers of the generative paradigm, although the first dichotomy is based upon lexical field theory, to which the second distinction is alien. Lyons (1977: 327) has also pointed out that *classemes* and markers seem to be more similar than *semes* and distinguishers. The former share a systematicity which makes them appropriate to account for selectional restrictions and semantically-based determination of syntagmatic relations; the latter are distinguished in that *semes* are based on minimal functional oppositions, whereas distinguishers represent the residual part of lexical meaning.

As to *selectional restrictions*, the term was originally introduced by Katz and Fodor (1963), in connection to their suggestions for a semantic theory: «[...] Each reading in the dictionary entry for a lexical item must contain a selection restriction, i.e. a formally expressed necessary and sufficient condition for that reading to combine with others. Thus, the selection restriction attached to a reading determines the combinations with the readings of other lexical items into which that reading can enter when a projection rule is applied.» The selectional restrictions they propose are semantic, in contrast with Chomsky's, who as late as 1965 still considered lexical combination a matter of syntax, «constraints on the level of deep structure», a syntactical device to block the generation of ungrammatical sentences, so that a selectional restriction had to be postulated for each construction in which a lexeme could be used<sup>7</sup>.

Weinreich's *transfer features* are an improved version of selectional restrictions, since they permit a given word A to collocate with word B not only if a feature "c" found in the meaning of word A is also present in the meaning of word B but also when the feature "c" can be transferred from A to B without causing a clash of features in B. Their more dynamic and less restrictive character makes them a useful tool to explain semantic interpretation of unusual lexical combinations, such as metaphorical processes, thus being appropriate to describe actually occurring phenomena in natural languages<sup>8</sup>.

In what follows, focus will be on the duplex nature of those features, paying special attention to *classemes*, whose relevance for a theory of lexical description and analysis was strongly emphasized by Martín Mingorance (1987). In his view, the distinction of two types of features is plainly justified:

<sup>7</sup> In his *Aspects* model, Chomsky distinguishes four mechanisms to account for sentence (un)grammaticality: «strict subcategorization features», which specify verbs and adjectives as transitive or intransitive, i.e. determine the possibility for a verb to be followed by a nominal phrase, «selectional features» (or «inherent syntactic features»), which refer to the possibility of certain syntactical features, such as [±ABSTRACT], [±COUNT] [±ANIMATE], [±HUMAN] in the subject or object of the verb, «rule features», which mark the lexical unit as to its behaviour regarding certain transformations, and «projection rules», which account for semantic anomalies arising from contradictory or redundant semantic features contained in lexical units within a sentence.

<sup>8</sup> According to Chomsky, if the feature X is in unit A, the feature X must be in unit B: if *neigh* contains the feature <horse>, the subject must also contain that feature, so that a sentence like *\*The cat neighed* would be unacceptable; this same rule would make us consider *The animal neighed* unacceptable, since the feature present in *neigh* is missing in *animal*. In contrast, to Weinreich only the former case is unacceptable, since only in that case is there a feature-incongruency.

From the lexicographic perspective, it could be stated that if *semes* and *semantic classemes* are postulated as having an equal status, simply constituting differentiating features, there are some features that are more «equal» (i.e. more general and universal) than others, with a higher degree of semantic relevance.

The larger generality or systematicity of *classemes* tends to correlate with other features, such as: (i) Wider universality through languages. (ii) Increased syntactic relevance, together with a possibility to get grammaticalized or lexicalized<sup>9</sup>. (iii) Wider distribution through vocabulary (Lyons 1977: 328).

It is the second of these attendant characteristics which makes *classemes* both an interesting and controversial kind of feature. On the one hand, due to their syntactic-semantic nature, they behave as distinctive features and have a number of effects in syntactical aspects, creating selection restrictions projected from the lexicon.

On the other hand, this grammatical character is responsible for the confusion about the identity of those features. Coseriu himself is not clear about the status of *classemes*: their function seems to be limited to their role as a distinctive feature in one of the types of lexical solidarities he postulates; however, this strictly semantic function of *classemes* is partly inconsistent with the syntactic-semantic character attributed to them in his definition of *lexical class* (Coseriu 1967: 294):

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.

All the confusion triggered by the two-sided nature attributed to *classemes* is just a reflection of the traditional tendency to establish a clear-cut borderline between semantics and syntax in linguistics<sup>10</sup>. Although the existence of syntactically-relevant semantic features is generally a point of agreement among supporters of semantic decomposition, the duplicity results in the establishment of a dichotomy of features.

Thus, in the generative paradigm a distinction is drawn between *subcategorization*, and *selectional restrictions* to refer to the syntactic and semantic side of combinatorial phenomena, respectively.

Katz & Fodor (1964: 517-18) distinguish between *syntactic* and *semantic* markers, pointing out that both kinds of features seem to overlap, as in the case of Male, Female, Human, Animal, Animate, Concrete, Abstract. They conclude that they are theoretical constructs of a different type, concerning different types of selection and expressing different aspects of linguistic structure: *grammatical markers* mark the formal differences on which the distinction between well-formed and ill-formed chains relies, whereas the function of *semantic markers* is to give each well-formed chain the conceptual content which

<sup>9</sup> Pottier (1985: 73) illustrates the lexicalization of *classemes* «humain vs non-humain» and «mâle vs femelle» with the pairs *bouche / gueule* and *cheval / jument*, respectively; the oppositions *qui est-ce qui / qu'est-ce qui* and *chat / chatte* are examples of grammaticalization.

<sup>10</sup> cf. Weinreich (1972 [1966]): «One of the sources of difficulty of KF, it seems, was its assumption that semantics begins where syntax ends [...] the construction of a [...] fundamentally a-syntactic semantic theory (KF) has contributed virtually nothing to the explication of the semantic competence of language users.»



allows them to be represented in terms of the message they communicate to the speaker in normal circumstances. As a consequence, when it seems that a marker is common to semantics and grammar, there are in fact two different markers with the same name.

Of the four mechanisms that Chomsky distinguishes to account for sentence ungrammaticality, *strict subcategorization features*, *selectional features* (or *inherent syntactic features*), and *rule features* are grammatical properties of lexical units, i.e. syntactical features, whereas *projection rules* are semantic features which characterize the semantic content of lexical entries. According to him, semantic features belong to a well-defined set and are characterized by the fact that «they are not referred to by any rule of the phonological or syntactic component [...] thus begging the question of whether semantics is involved in syntax» (cf. Chomsky 1965: 88, 142). However, a case like *\*He is a spinster* seems to contradict his assertion, which is due to the fact that certain syntactic phenomena, such as gender concord between possessive or personal pronouns and their nominal antecedents involve semantic properties, i.e. inherent features like [ $\pm$ MALE].

Coseriu himself –not satisfied with his distinction between semes and classemes– draws a further distinction between *lexical classemes* (e.g. [ $\pm$ ANIMATE], [ $\pm$ HUMAN], [ $\pm$ MALE]), which govern purely-lexical co-occurrences and *grammatical classemes* (e.g. [ $\pm$ TRANSITIVE], [ $\pm$ OBJECT DELETION], [ $\pm$ PASSIVE]), which determine grammatical constructions (cf. Coseriu 1967: 295)<sup>11</sup>. Curiously enough, he criticizes generative linguists for introducing in grammar selectional restrictions based on what he considers semantic features, such as HUMAN<sup>12</sup>. However, his own inclusion of syntactic properties as transitivity among classemes is inconsistent with his notion of classeme, unless transitivity is considered a distinctive feature belonging to semantic definitions.

Kastovsky (1980: 86) considers Coseriu's distinction between semes and semantic classemes as well as Chomsky's between semantic and syntactic features as weakly convincing, and he declares that the distinction is quantitative rather than qualitative, so that it would only be appropriate to speak of classemes in the case of syntactic classemes, which correspond to the strict subcategorization features and the rule features of generative-transformational grammar. In his own words, «classemes would only contain *those features specifying the grammatical behaviour of lexemes*».

In this turmoil, it is not surprising that many generativists abandoned the distinction between subcategorization and selectional restrictions, deeming all selectional restrictions as basically semantic or even pragmatic. Among them, Bierwisch (1970: 17 ff.) held that no distinction should be drawn between syntactic and semantic features, so that the violation of selectional restrictions is a purely semantic phenomenon, a contradiction derived from a clash in the feature specification of two lexemes or lexeme-combinations linked by a selective feature. Nevertheless, the strictly semantic nature of selectional restrictions do-

<sup>11</sup> Coseriu (1977: 176) also draws a distinction between *lexical* and *grammatical* classes: «En lo que se refiere a las clases, se puede plantear la cuestión de si pertenecen al léxico o a la gramática. A nuestro parecer, hay clases que pertenecen evidentemente al léxico, ya que implican combinaciones léxicas que les son propias y se distinguen de las clases gramaticales propiamente dichas.» His conception of class is vague, since he defines belonging to a class in terms of identity in *grammatical and lexical* behaviour of certain lexemes.

<sup>12</sup> With Coseriu, other linguists have considered mistaken Chomsky's attempt to bring a semantic phenomenon within the realm of syntax. Among them, Leech gives various reasons why selection restrictions have to be treated as a semantic rather than as a syntactic aspect of language (Leech 1974: 142).

es not imply that a distinction cannot be drawn between *general* restrictions, which limit well-formedness of semantic structures (as in *\*Politeness slanders the lawyer*) and *idiosyncratic* restrictions, which prohibit lexicalization of well-formed semantic structures, i.e. lexical insertion (as in *\*Peter's briefcase is blond*)<sup>13</sup>.

Weinreich (1972: 25) declares that the addition of semantic markers corresponds in form and motivation to the addition of syntactic markers in that they prevent (i.e. mark as anomalous) expressions like *I burned the ball* (= «gala affair»). If subcategorization rules, such as

VP → V<sub>t</sub> + NP

V<sub>i</sub>

V<sub>t</sub> → liked

V<sub>i</sub> → waited

are required to prevent the sentences *\*Tom liked* and *\*Tom waited Bill*, semantic markers (for example, Event and Object) need to be added to explain the ambiguity of *I observed the ball* or mark the anomaly of

\*I attended the ball (Object)

\*I burned the ball (Event)

According to Weinreich, the existence of syntactic and semantic markers with identical names (Male, Female, Abstract, etc) is a strong argument to suspect that the distinction between both kinds of markers is not well founded, and he concludes that, contrary to Katz and Fodor's opinion, the distinction is not based on the functions of these entities, so that the only possibility would be to base it on content: certain denotative content could be adscribed to semantic markers, whereas syntactic markers would have none. However, this implies resorting to extraverbal correlations to explain intralinguistic semantic phenomena, which in Weinreich's view contradicts the spirit of the theory, so that he finally concludes that Katz and Fodor's distinction between grammatical and semantic markers does not exist and that their conclusion about such distinction «only begs the question; [...] the distinction between grammatical and semantic anomalies is still unexplained. Instead of being dispelled, the confusion that has been generated in the study of language by the search for a line between grammar and semantics is only increased by the disguised circularity of Katz / Fodor argument.»

The latest proposal concerning the distinction between syntactic and semantic features consists in giving up categorial selection features (c-selection) (the old subcategorization features), since these properties are derived and can be predicted from selectional features, from the aspect of lexical representation related to the argument structure of the predicate (cf. Chomsky 1986: 86-90, Chomsky & Lasnik 1993: 515-17). Thus, a verb with no thematic role (Ē -role) to assign to a complement won't be able to take a complement; similarly, a verb with obligatory semantic roles to assign will have to occur in a configuration with enough arguments (possibly, including complements) to receive those semantic roles. Selectional restrictions on the arguments will be also partly determined by thematic properties: in order to receive a particular thematic role (e.g. experiencer), the inhe-

<sup>13</sup> «Selektionsbeschränkungen» vs «Voraussetzungen», which correspond to Kastovsky's «inherent» vs «contextual» features (1980: 77).

rent semantic features of the argument must be compatible with that role (i.e. if the argument is experiencer, it must be [+animate] as well).

Nevertheless, the assumption that syntactic properties can be derived from semantic features goes back to 1969, when Bierwisch (1969: 182) already declared:

it is obvious that much of the syntactic behaviour of dictionary items, in particular with respect to their strict subcategorization as proposed by Chomsky (1965), can be predicted on the basis of certain aspects of their internal, semantically motivated structure, primarily as a consequence of the number and the categorization of variables occurring within their readings.

Weinreich (1972: 113) was also a pioneer in supporting the existence of a deep interpenetration between the domains of syntax and semantics. Concerning Chomsky's sub-classification of transitive verbs, he pointed out that it is based upon relatively superficial features of syntactic context, so that the differences between *believe*, *request* and *inquire* would be shown by means of strict subcategorization features: *believe* [+V, ... + -that S], *request* [+V, ... + -that S], *inquire* [+V, ... + - whether S]. In his opinion, the variety of conjunctions is a matter of surface structure, and there are more semantically significant facts which Chomsky ignores in his analysis, such as the fact that *believe* has a transfer feature <Assertion> which *request* lacks, *request* has a transfer feature <Command>, and *inquire* has a transfer feature <Question>. However, he declares that Chomsky's introduction of the concept of feature into syntax increased the probability of the integration of grammatical and lexical studies.

Nevertheless, we are still a long way from reaching a consensus regarding the link between these two subcomponents. In fact, syntactic predictability from lexico-semantic properties is one of the parameters used in the distinction of major syntactic theories nowadays.

Van Valin & Wilkins (1993) discriminate two schools of thought on the basis of the former criterion. In their view, HPSG (Head-driven Phrase Structure Grammar), LFG (Lexical Functional Grammar), & Jackendoff (1972, 1976, 1983) do not use the lexicon as a source for the prediction of syntactic facts, so that lexical entries only list categorization syntactic frames, prepositions and complements with which predicates can occur. This set could be extended with models such as Functional Grammar (or FG), which is sceptical about the existence of such connection as reveals Dik's statement that the definiens of meaning definitions is not directly accessible to the operation of syntactic rules (cf. Dik 1978).

In contrast, GB (Government-Binding Theory, Chomsky 1981, with its «Projection Principle»), RRG (Role & Reference Grammar, Dowty 1979, Foley & Van Valin 1984) are included among the set of syntactic theories which support the possibility of partly predicting syntactic facts from the lexico-semantic structure. Again, new models could be added to that group, such as Martín Mingorance's Functional-Lexematic model of lexical description and analysis, whose postulation of classemes is an apologia of the syntactic predictability from lexical-semantic properties (cf. Martín Mingorance 1990). Too optimistically, Van Valin even asserts that if syntactic properties of a predicate can be predicted from certain semantic components making up their meanings, ideally only semantic representation should be required in their lexical entry (cf. Van Valin 1993: 509).

In this panorama, we are trapped between two poles: either no generalization is allowed or we suffer the risk of overgeneralization. One must bear in mind that, no matter which perspective is underlying, linguistic theories should aim at generalization. Thus, when lexical decomposition is involved, each element in the decomposition should ideally

be the access of that unit to rules of more general purpose. But, it is important not to exaggerate the power of semantics, and be aware that syntactic specifications cannot be completely eliminated in favour of semantic ones. To illustrate the latter assertion, the verb *ask* selects «semantically» a question as object; but it would also be required to specify that it selects «syntactically» a clause or a nominal phrase (I asked *what time it was*, I asked *the time*) if this is to be distinguished from *wonder*, whose object is also semantically a question, but syntactically only a clause (I wondered *what time it was*, but \*I wondered *the time*) (cf. Grimshaw 1979).

#### 4. FINAL REMARKS

Syntagmatic relations encompass two kinds of phenomena, properly syntactic and lexical facts; in limbo lies the lexical-syntactic mirage, semantically-motivated syntactic facts or syntactic facts dictated by the conditions of use of lexemes and, mainly, lexical classes. If lexemes have their own syntax and if it is possible to identify syntactical patterns across semantically-related lexical sets, there is a chance for «lexical regularity». Lexicon and syntax are not mutually exclusive poles, the former representing idiosyncratic linguistic properties and the later accounting for regularities.

No matter how they are called, the search for features capable of syntactic predictability remains a challenge to linguists interested in lexical description and analysis, since syntactic transparency, i.e. their involvement in syntagmatic relations is what renders them linguistically relevant.

#### WORKS CITED

- Allan, Keith 1986: *Linguistic Meaning*, London: Routledge & Kegan Paul.
- Bach, Emmon & Robert T. Harms eds. 1968: *Universals in Linguistic Theory*. London (etc): Holt, Rinehart & Winston.
- Bazell, C. E., J. C. Catford, M. A. K. Halliday, & R. H. Robins 196: *In Memory of J. R. Firth*. London: Longman.
- Bierwisch, Manfred 1969: On certain problems of semantic representations. *Foundations of Language* 5: 153-184.
- 1970: Selektionsbeschränkungen und Voraussetzungen. *Linguistische Arbeitsberichte* 3. Leipzig: Karl Marx Universität. 8-22.
- Bolinger, Dwight 1968: *Aspects of Language*. New York [etc: Harcourt, Brace & World.
- Chomsky, Noam 1965: *Aspects of the Theory of Syntax*. Cambridge, Mass.: MIT Press.
- 1981: *Lectures on Government and Binding*. Dordrecht: Foris.
- 1986: *Knowledge of Language: Its Nature, Origin and Use*. New York: Praeger.
- Chomsky, Noam & H. Lasnik 1993: The theory of principles and parameters. > Jacobs, J., A. von Stechow, W. Sternefeld, & Th. Vennemann eds. 506-569.
- Coseriu, Eugenio 1966: Structure lexicale et enseignement du vocabulaire. *Actes du premier colloque international de linguistique appliquée*. Nancy. 175-217.
- 1967: Lexikalische Solidaritäten. *Poetica* 1: 293-303.
- 1968: Les structures lexématiques. > Elwert, W. Th. ed. 3-16.
- 1977: *Principios de semántica estructural*. Madrid: Gredos.

- Cruse, D. A. 1986: *Lexical Semantics*. Cambridge: CUP.
- Davidson, D. & G. Harman 1972: *Semantics of Natural Language*. Dordrecht: Reidel.
- Dik, Simon C. 1978: *Stepwise Lexical Decomposition*. Lisse: The Peter de Ridder Press.
- 1989: *The Theory of Functional Grammar. Part I: The Structure of the Clause*. Dordrecht: Foris.
- Dowty, David R. 1979: *Word Meaning and Montague Grammar. The Semantics of Verbs and Times in Generative Semantics and in Montague's PTQ*. Dordrecht: Reidel.
- Eikmeyer, H. J. & H. Rieser eds. 1981: *Words, Worlds and Contexts. New Approaches in Word Semantics*. Berlin / New York: Walter de Gruyter.
- Elwert, W. Th. ed. 1968: *Probleme der Semantik. Beiheft 1 (Neue Folge) Zeitschrift für französische Sprache und Literatur*. Wiesbaden.
- Fillmore, Charles J. 1972: Subjects, speakers and roles. > Davidson, D. & G. Harman eds. 1-24.
- Firth, J. R. 1951: Modes of meaning, in: *Essays and Studies*. The English Association: London. Also > Firth, J. R. ed. 1957.
- ed. 1957: *Papers in Linguistics 1934-1951*. London: Oxford University Press.
- Fodor, Jerrold A. & J. J. Katz eds. 1964: *The Structure of Language. Readings in the Philosophy of Language*. Prentice-Hall: MIT.
- Foley, William A. & R. D. Van Valin, Jr. 1984: *Functional Syntax and Universal Grammar*. Cambridge: University Press.
- Geckeler, Horst 1981: Structural semantics. > Eikmeyer, H. J. & H. Rieser eds. 381-413.
- Grimshaw, Jane 1979: Complement selection and the lexicon. *Linguistic Inquiry* 10 (2): 279-326.
- Halliday, Michael A. K. 1966: Lexis as a linguistic level. > Bazell, C. E., J. C. Catford, M. A. K. Halliday, & R. H. Robins eds. 148-62.
- Hjelmslev, Louis 1953 (1943): *Prolegomena to a Theory of Language*. Bloomington, Ind.: Indiana University Press.
- Jackendoff, Ray S. 1972: *Semantic Interpretation in Generative Grammar*. Cambridge, Mass.: MIT Press.
- 1976: Toward an explanatory semantic representation. *Linguistic Inquiry* 7: 89-150.
- 1983. *Semantics and Cognition*. Cambridge, Mass.: MIT Press.
- Jacobs, J., A. von Stechow, W. Sternefeld, & Th. Vennemann eds. 1993: *Syntax: an International Handbook of Contemporary Research*. Berlin: Walter de Gruyter.
- Kastovsky, Dieter ed. 1980: *Perspektiven der lexikalischen Semantik*. Beiträge zum Wuppertaler Semantikkolloquium vom 2-3 Dezember 1977. (Schriftenreihe Linguistik 2). Bonn: Bouvier.
- 1980. Selectional restrictions and lexical solidarities. > Kastovsky ed. 70-92.
- Katz, Jerrold J. & J. A. Fodor 1963: The structure of a semantic theory. *Language* 39: 170-210. Also > Fodor, J. A. & J. J. Katz eds. (1964). 479-518.
- Lakoff, George 1971: Presupposition and relative well-formedness. > Steinberg, D. D. & L. A. Jakobovits eds. 329-340.
- Leech, Geoffrey 1974: *Semantics*. Harmondsworth: Penguin.
- Lyons, John 1977: *Semantics*, 2 vols., Cambridge: University Press.

- Martín Mingorance, Leocadio 1987a: Classematics in a Functional-Lexematic grammar of English. *Actas del X Congreso de la Asociación Española de Estudios Anglo-Norteamericanos*. Zaragoza: Publicaciones de la Universidad. 377-382.
- 1987b: Semes, semantic classemes, and dimensions: the lexicological and lexicographic perspectives. Paper read at the *XIVth International Congress of Linguists*. Berlin. 1987. 10-15.
- 1990: Functional Grammar and Lexematics in lexicography. > Tomaszczyk, J. & B. Lewandowska eds. 227-253.
- McCawley, James D. 1968: The role of semantics in a grammar. > Bach, E. & R. T. Harms eds. 124-169.
- Muraki, M. 1974: Presupposition in cyclic lexical insertion. *Foundations of Language* 11: 187-214
- Nuyts, Jan 1988: *Aspekten van een cognitief-pragmatische taaltheorie*. PhD dissertation: University of Antwerp.
- Porzig, Walter 1934: Wesenhafte Bedeutungsbeziehungen. *Beiträge zur Geschichte der deutsche Sprache und Literatur* 58: 70-97.
- 1957 (1950): *Das Wunder der Sprache*. Bern.
- Pottier, Bernard 1964: Vers une sémantique moderne. *Travaux de Linguistique et de Littérature* 2 (1): 107-137.
- 1965: La définition sémantique dans les dictionnaires. *Travaux de Linguistique et de Littérature* 3 (1): 33-39.
- 1985 (1974): *Linguistique générale: théorie et description*. Paris: Klincksieck.
- Saussure, Ferdinand de. 1978 (1916): *Cours de linguistique générale*. Édition critique préparé par Tullio de Mauro. Paris: Payot.
- Sebeok, Th. A. ed. 1966: *Current Trends in Linguistics*. Vol. III. The Hague: Mouton.
- Steinberg, D. D. & L. A. Jakobovits 1971: *Semantics. An Interdisciplinary Reader in Philosophy, Linguistics and Psychology*. Cambridge: University Press.
- Tomaszczyk, J. & B. Lewandowska eds. 1990: *Meaning and Lexicography*. Amsterdam: John Benjamins.
- Trujillo, Ramón 1976: *Aspectos de semántica lingüística*. Madrid: Cátedra.
- Van Valin, Robert D., Jr. ed. 1993: *Advances in Role and Reference Grammar*. Amsterdam / Philadelphia: John Benjamins.
- Van Valin, Robert. D., Jr. & D. P. Wilkins 1993: Predicting syntactic structure from semantic representations: *remember* in English and Marntwe Arrernte. > Van Valin ed. 1993.
- Weinreich, Uriel 1966: Explorations in semantic theory. > Sebeok, Th. A. ed., vol. III. 395-477. Also > *Janua Linguarum series* 89. 1972. The Hague: Mouton.

