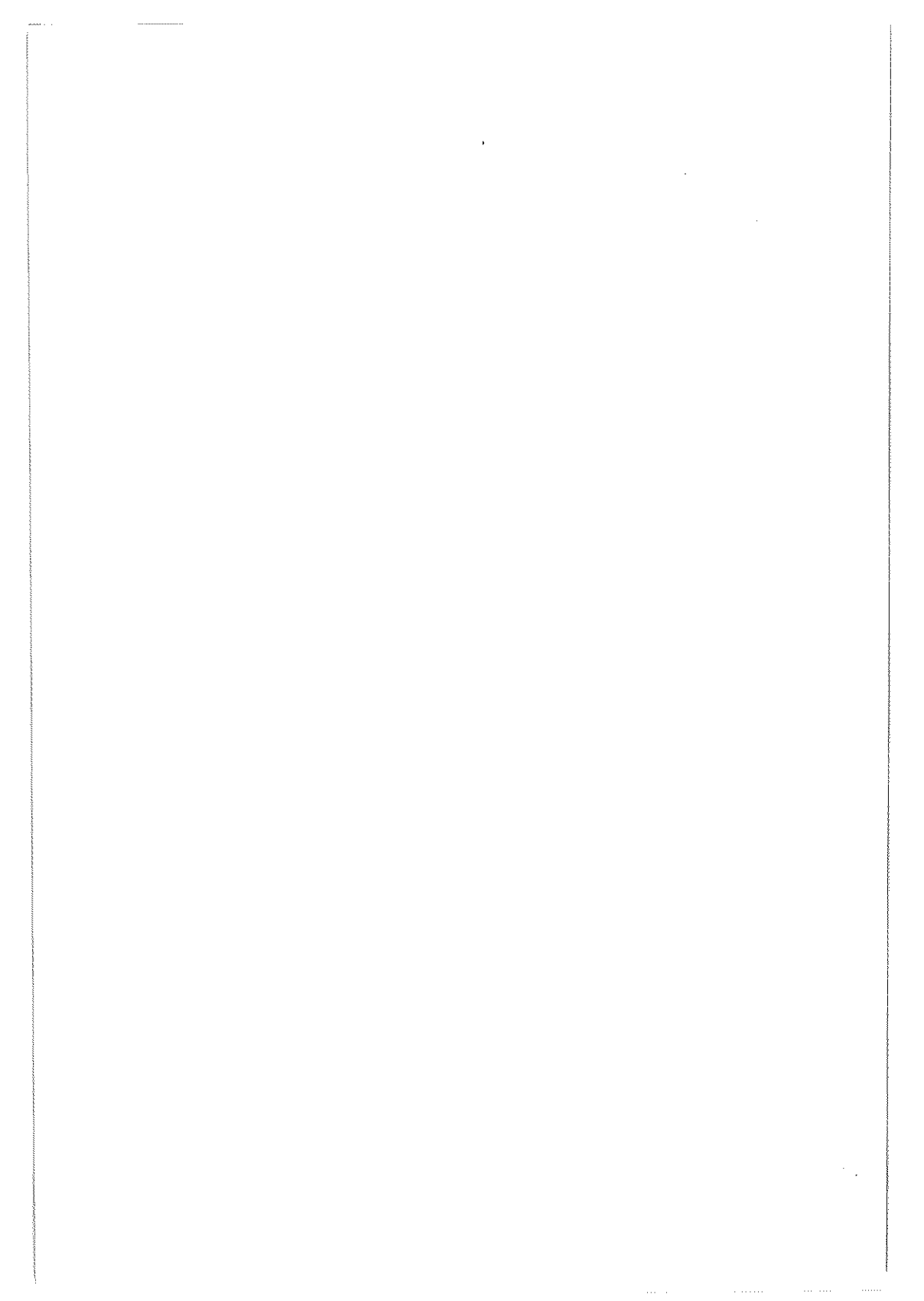*Dª. Amalia Marín Rubiales*

# TOWARDS A HIERARCHY OF SEMANTIC PROTOTYPES IN THE SEMANTIC DOMAIN OF ENGLISH SPEECH ACT VERBS

UNIVERSIDAD DE CÓRDOBA

# Towards a hierarchy of semantic prototypes in the semantic domain of English Speech Act verbs[1]

## 0. Introduction

The role of the lexicon has come to occupy a central role in language description. In fact, this resurgence of interest in the lexicon and its organization is evident even in those linguistic models (cf Chomsky, 1981a,b; 1986) who had first advocated the opposite tack. Today a report published by Standford University states that one of the points of agreement among contemporary grammatical theories is the centrality of the lexicon as a repository of information about sentence structure.

Following this lexical revival, one of the most interesting parameters in lexical organization is that concerned with the semantic architecture of lexical units. As Van Valin (1993:34) remarks, developing a theory of lexical representation implies the development of a theory of semantic classes. In recent research done especially within the MIT Project Group, it has become clear that a complete description of the lexicon must contain this type of information. The semantic classification of predicates (be them verbal, adjectival or nominal) plays an important role in predicate-argument structures. In this regard, Levin (1985:17) states that a semantic classification of verbs could throw light on syntactic problems like the unaccusative/unergative distinction:

«The unaccusative/unergative distinction, though syntactically
motivated, has immediate and far-reaching consequences for work in
lexical semantics. The correlation between the semantic and syntactic
classification of verbs offers a window into the organization of the lexicon
that should be exploited.»

This has been in fact a major area of research for the MIT Lexical Project
in the last few years. In this respect, three major approaches to semantic
classification of verbs have been proposed:
1. Classification in terms of the notion of AktionSart, following Vendler
   (1967).
2. Classification in terms of semantic domains or files.
3. Classification in lexical fields taking definitional structure as a path to
   arrive at these domains, e.g. the Funtional Lexematic Model (hereafter
   FLM).

In this paper, we should like to focus on this third option and present the
typology of semantic prototypes which constitute the semantic architecture
of one of the most complex semantic domains, that of Speech Act verbs.
The organization of this paper goes as follows: Section 1 gives an overview
of the FLM; Section 2 is concerned with the dimensional structure of Speech
Act verbs in the English language; Section 3 advances the present writer's
conclusions.

## 1. An outline of the F(unctional) L(exematic) M(odel)

The lexicological model we have used for the encoding of the semantic
architecture of Speech Act verbs is the FLM as propounded by Martín
Mingorance (1984; 1985a,b; 1987a,b,c; 1990; 1995). Under this model it is
asserted that lexical descriptions as presented in dictionaries and in a lexicon
component of a linguistic theory should be much more complex and rich
than they had hitherto been supposed. Then, a FL lexicon is no longer
conceived as a mere storage place for words but as a dynamic, textually-
oriented repository of information about words and their contexts.
The FLM is the successful integration of two linguistic models, viz.
Coseriu's *Lexmematics* and S.C. Dik's (1978, 1989) *Functional Grammar*
(hereafter FG). Let us take a look at the following issues relevant to the
FLM:
a) the functional paradigm adopted for the description of lexical units.
b) the central role of the lexicon within a complete linguistic model.

c) the organization of the lexicon component.

d) the methodological steps used in the construction of this model.

Firstly, the FLM proclaims the functional status of language, thus being in accordance with both FG and Lexematics. This is precisely one of the points of convergence of Lexemantics and FG. Lexematics is structurally functional, that is, the principle of functional oppositions regulate the system of a language (Coseriu, 1981: chapter VIII). On the other hand, FG is teleologically functional, that is, this model is organized in the assumption that language is used as an instrument to achieve an end: verbal interaction (cf. Martín Mingorance, 1990).

Given this functional dimension of language, it is hardly surprising that a FL lexicon be viewed as a repository of information for the speaker and hearer during the act of communication. In this light, it does not suffice to postulate a lexicon filled with a set of formal rules that fail to explain the actual speaker's lexical competence.

As for the scope of the lexicon, the FLM assings a prominent role to the lexicon component of a linguistic theory in the sense that it is stated that the lexicon of a language should be seen as a grammar, capable of accounting for the full potentiality of a speaker's lexical competence. In this regard, the lexicon propounded within the FLM follows the spirit of the following passage:

> «(...) a lexicon by itself generates the set of grammatically well-formed sentences in a language: each word is marked with contextual features which can be seen as well-formed conditions on trees, and a well-formed sentence is any configuration of words for which of all these well-formedness conditions are satisfied. (...). Consequently *a fully specified lexicon is itself a grammar*, even if it is not associated with a single grammatical rule.» (Starosta, 1988:1) [my own emphases].

Thus, the FLM postulates a fully-specified lexicon/dictionary which is in itself a grammar. The word, being the central unit of our description, will be furnished with all the syntactic, morphological, semantic and pragmatic properties that it embodies.

Finally, with regard to its organization, the FL lexicon is seen as a network of lexemes with both a micro- and macrostructure. Microstructurally, lexemes will be characterized as complexes of phonological, syntactic, semantic, pragmatic and phrase structural information. On the level of macrostructure, lexical entries will be characterized as interconnected by cohesive, associative and enciclopedic functions. In this regard. the FL lexicon/dictionary is

237

provided with a macrotextual orientation.

Thus, there are reasonable grounds to postulate a relational structure for the lexicon. In other words, a FL lexicon would be conceived as firstly being articulated onomasiologically[2]. This structure is incorporated in models like S.C. Dik's FG under the name of *Stepwise Lexical Decomposition*, which has the advantage of comprising both paradigmatic and syntagmatic information within a formalized systematic description.

The initial hypothesis of this model was to construct a formalized grammatical lexicon, onomasiologically organized, which would cover the core vocabulary of a language consisting of primary lexemes and productive affixes (Martín Mingorance,1990:229). In doing so, the following methodological steps should be undertaken:

1. Distinction between primary and derived lexicon. Lexical units (non-derived by word formation rules) form the central core of the primary lexicon. In contrast, the derived lexicon constitutes a separate component and runs paralel to the grammatical one.
2. Organization of the lexicon in lexical fields following the dictates of Coseriu's Lexematics. This in turn implies the elaboration of an inventory of lexical fields, the development of a system of definitions based on semantic hierarchies, the definition of archilexemes through the factorization of meaning components using dictionaries as texts that embody our general shared knowledge about words, and the arrangement of lexical fields into constellations and dimensions in order to account for both inter- and intralinguistic lexical relations.
3. Analysis of the complementation pattterns that a lexeme subcategorizes for using predicate frames as integrated formulae.
   3.2. The establisment and organization of that grammatical information relevant for the correct use of a lexeme in syntactic constructions.

---

2. This contrasts with the alphabetical structuralization of the lexicon in certain grammatical models. Then, this type of lexicon is semasiologic, that is, it exhibits the various meanings of a given expression. It is not onomasiologic in the sense that a certain meaning is given and the various ways of expressing it are assigned. We believe, however, that the relevant interrelation between words emerge from an onomasiological point of view. Then, the meaning of the expression is the starting point of analysis and is therfore in the foreground. A semasiologic point of view groups entries together which are alphabetically or syntactically similar. The order which results from this type of lexicon is therefore trivial, and usually not very informative about its internal semantic structure (Martín Mingorance, 1984; 1990).

3.3. Adopting predicate frames as a notational device that can encapsulate both the grammatical information as well as the semantic definitions of lexemes.
4. Classification of a hierarchy of semantic and syntactic prototypes in accordance with the dimensions of the field. In connection with this, the FLM formulates a typology of predicate conceptual schemata which are in themselves microstructural representations of field-lexical grammars.

These programmatic tasks form the backbone of the FL lexicon. In this regard, task (2) falls under the scope of the paradigmatic axis. Task (3) is the major concern of the syntagmatic and finally task (4) pertaining to the cognitive axis.

The first three steps complete the linguistic architecture of a given language. Once this is done, it is claimed that the convergence of both the paradigmatic and the syntagmatic axis gives rise to a number of predicate conceptual schemata, which in turn form what we have termed the cognitive axis of the lexicon[3]. In the following section we should like to focus on the hierarchy of semantic prototypes as encoded in the domain of Speech Act verbs.

## 2. The semantic hierarchy of Speech Act verbs

If we consider verbs of SPEECH, we can see the great variety of cognitive and encyclopedic information encoded in dimensional structure. In the FLM, this field has ten dimensions, each of which highlights the act of speaking from a different perspective, and provides a different type of focus.

Dimension 1: *Speaking as a communication process.*
   This dimension presents *speaking* as a process. In this sense it is a type of movement in which words/information go/pass from the speaker to the receiver. As a matter of fact, certain verbs in this dimension have double field membership with that of causative movement (*to cause sth to go*).
   1.1.   to make sth known/to give sb information: *transmit, contact, signal, convey.*

---

3. For a complete description of the FLM we refer the reader to Martín Mingorance's cited works and Faber and Mairal (1994; fc).

<u>Dimension 2:</u>  *Speaking as an activity*

Dimension 2 contains the superordinate terms, *say*, *speak*, and *tell*. Here, *speaking* is an activity in which something is done or shown to others. Just as all the other speech verbs are defined in terms of these, all the dimensions that follow will be variations of this one.

2.1.   to show sth (prototypically ideas and feelings) in verbal form: *express*, *put*, *word*, *phrase*.

2.2.   to do sth (speaking as an activity): *speak*, *talk*, *say*, and *tell*.


<u>Dimension 3:</u>  *To say sth in a certain way (manner of speaking)*

Manner-of-speech is intrinsically perceptual. Due to the nature of the field, the parameters involved are auditory (loudness, duration, pitch). This dimension overlaps with that of SOUND.

3.1.   [formal realization]: *pronounce, enunciate, articulate, accentuate, sound*

3.2.   [brevity]: *mention, indicate, refer, quote*

3.3.   [courtesy]: *thank*

3.4.   [friendliness]: *greet, receive, welcome*

3.5.   [pragmatic features: informality]: *converse, gossip, chat*

3.6.   [formal context + audience]:  *address, lecture.*

3.7.   [formal context + definiteness]: *state, declare, claim, contend, proclaim, pronounce, profess, avow, resolve, affirm, allege, maintain, assert, aver*

3.8.   [firmness + intensity]: *insist, emphasize, stress, underline.*

3.9.   [precision]: *specify*

3.10.   [repetition]: *repeat, reiterate, recapitulate, echo, quote, chant, rephrase, restate*

3.11.   [pride + intensification]: *boast, brag, crow*

3.12.   [physical difficulty]: *stutter, stammer, lisp*

3.13.   [velocity + continuity + incomprensibility]: *chatter, natter, babble, gabble, jabber*

3.14.   [immediacy + loudness/emphasis + strong emotion]: *exclaim, shout, yell, cry out, scream, shriek, screech, bark, call, ejaculate*

3.15.   [softness]: *whisper, murmur, mumble, mutter*

3.16.   [rudeness]: *insult, revile, abuse, snap*

3.17.   [anger]: *snarl*

3.18.   [unhappiness]: *complain, moan-2, wail-2, lament,*

*bemoan, bewail, moan-1, wail-1*

3.19.   [use de special devices/instruments]: *telephone, phone, ring*

<u>Dimensions 4-5:</u>   *Speaking as doing something (realization of speech acts).*

<u>Dimension 4:</u>   *To say yes / sth is true / positive things*

<u>Dimension 5:</u>   *To say no / sth is not true / negative things*

Dimensions 4 and 5 express the good/bad polarity inherent in this field. In these fields, axiological evaluation is presented in three different ways.

(1)   A message can either be accepted or rejected.

(2)   Truth can either be affirmed or denied.

(3)   A message itself can either be positive or negative as regards its referent.

These three possibilities link the field of SPEECH to other fields. For example, in (1), the action of acceptance or rejection is typical of the field of POSSESSION. The message is conceptualized as an object which is to be given to someone. The opposition is between 'taking' and 'not taking' it. Obviously, the act of 'not accepting' is negatively evaluated, just like the act of 'not having' in the field of POSSESSION.

In (2), the opposition is between truth and falsehood. As we shall see, this is a direct link with COGNITION because in order to say that something is true/false, it must first be evaluated as such in one's mind. The speaker's certainty of the truth or untruth is in direct contrast to dimension 6, in which the dominant feature is lack of certainty.

In (3), there is another type of axiological evaluation which is related to FEELING. The verbs in this subdimension necessarily express the positive/negative feelings of the speaker regarding the person/thing he is speaking about.

<u>Dimension 4:</u>  **TO SAY YES/ THAT STH IS TRUE/POSITIVE THINGS**

4.1.   **TO SAY YES** [Acceptance of an affirmation with a positive answer]. Emphasis on the following features:

4.1.1.   [acceptance of a message]: *accept, agree-1, consent, assent, approve, pass, legislate, enact, ratify, endorse, acquiesce, applaud, bet, wager, gamble, back, agree-2, concur, second*

4.1.2.   [acceptance of a message + willingness]: *offer, volunteer*

4.2. **TO SAY THAT STH IS TRUE** [explicit affirmation of the truth of sth]: *acknowledge, admit, confess, concede, allow, confirm, assure, reassure*

4.3. **TO SAY STH TO CAUSE SB TO THINK/DO STH**: *persuade, coax, wheedle, proselytize, cajole, dissuade, deter*

4.4. **TO SAY THAT STH WILL HAPPEN** [prediction]: *foretell, forecast, predict, prophesy*

4.5. **TO SAY THAT STH BAD MAY HAPPEN** [warning of sth possible]: *warn, alert, threaten, menace, blackmail, caution, admonish*

4.6. **TO SAY THAT STH BAD WILL HAPPEN** [warning of sth certain]: *doom*

4.7. **TO SAY THAT STH IS CERTAIN OR WILL BE DONE** [Speaker's guarantee of truth]: *promise, vow, swear-1, pledge, guarantee, vouch for*

4.8. **TO SAY POSITIVE THINGS ABOUT SB/STH**: *praise, commend, compliment, congratulate, applaud, extol, laud, celebrate, plug, flatter*

4.9. **TO SAY THAT STH (POSITIVE) OUGHT TO BE CONSIDERED**: *suggest, propose, advise, counsel, recommend, advocate, urge, extol*

## Dimension 5: **TO SAY NO/ THAT STH IS NOT TRUE/NEGATIVE THINGS**

5.1. [refusal to do sth]: *refuse, reject, dismiss, disown, scorn, decline, deny, dissent, renounce, resist*

5.2. [refusal to accept sth as true]: *rebutt, argue, dispute, quarrel, row, feud, bicker, squabble, wrangle, defend*

5.3. [negative evaluation of sb/sth (actions or words)]: *criticise, reprimand, reproach, rebuke, reprove, scold, chide, upbraid, censure, satirize, attack, denounce, disparage, denigrate, impugn, condemn, decry*

5.4. [blame]: *accuse, blame, charge, prosecute*

5.5. [blame + laughter]: *ridicule, laugh at, make fun of, tease, kid, scoff, mock, deride, slander, besmirch, malign, defame, vilify*

5.6. [insult]: *jeer, taunt, swear, curse, blaspheme*

5.7. [intentional falsehood]: *lie, fib, exaggerate*

<u>Dimension 6</u> **TO SAY STH WITHOUT KNOWING THAT IT IS TRUE**
[correlative with verbs of COGNITION]: *guess, conjecture, speculate, reckon*

<u>Dimension 7</u> **TO SAY STH THAT YOU HAVE COME TO KNOW**
[correlative with verbs of COGNITION]: *reach a conclusion, deduce, reason, infer, conclude, surmise, calculate, estimate reckon*

<u>Dimension 8:</u> **TO SAY THE MAIN POINTS OF** [the communication of the essential part of the message]: *outline, summarize, sum up, recapitulate, recap*

<u>Dimension 9:</u> **TO SAY MANY THINGS (TWO 0R MORE SPEAKERS) USU. EXPRESSING SEVERAL POINTS OF VIEW** [multiple participants + multiple viewpoints]: *discuss, confer, bargain, argue, haggle, debate, defend*

<u>Dimension 10:</u> **TO SAY STH FOR A PARTICULAR PURPOSE / WITH A SPECIFIC RESULT** [specific purpose].

10.1. **TO SAY STH TO SB SO THAT THEY WILL DO IT**
[order schema] [speaker in position of authority over hearer/receiver]: *direct, instruct, command, boss, call, summon, enjoin, charge, recall, forbid, prohibit, ban, procribe, order, prescribe, dictate, decree, ordain.*

10.2. **TO SAY STH TO SB TO PUT AN IDEA IN THEIR MINDS.**
[suggestion schema]: *suggest, imply, propose, hint, insinuate, intimate*

10.3. **TO SAY STH TO SHOW THAT YOU ARE NO LONGER ANGRY ABOUT OR WISHING TO GIVE PUNISHMENT TO SB.**
[verbal explicitation of forgiveness schema]: *forgive, excuse, pardon, absolve.* [Correlative with verbs of ACTION].

10.4. **TO SAY STH IN ORDER TO OBTAIN STH.**
[inverse of order schema (subdimension 10.1)] [receiver in position of authority over subject]: *ask, request, petition, sue, appeal, apply, solicit, canvas, charge, invite, challenge, beg, implore, entreat, pray, demand, call for, claim, requisition, require, levy, consult.*

10.4.1 **TO SAY STH IN QUESTION FORM IN ORDER TO OBTAIN THE ANSWER**. [Same schema as 10.4 + goal of obtaining information]: *ask, inquire / enquire, question-1, query, question-2, interrogate, grill, cross-examine, poll, interview*

10.5. **TO SAY STH IN RETURN TO A QUESTION**. [Answer schema (complement of 10.4)]: *answer, reply, retort, rejoin, respond*

10.6. **TO SAY NOT IN ANSWER TO ANYTHING**. [Addition of subjective information to information already given]: *remark, comment, observe, add*

10.7. **TO SAY STH TO SB SO THAT THEY WILL KNOW IT**. [Modification of information possessed by hearer/receiver]: *inform, notify, announce, advertise, promulgate, sound, present, brief, reveal, disclose, divulge, blab*

10.8. **TO SAY STH TO SB SO THAT THEY WILL REMEMBER IT**. [Verbal explicitation of dimension in COGNITION (to cause to remember): *remind, prompt*

10.9. **TO SAY STH TO SB TO GIVE AN ACCOUNT OF IT**. [Communication/transmission of information with focus on detail]: *describe, explain, illustrate, interpret, elaborate, define, expound, picture, present, overstate, understate, narrate, recount, relate, confide, report, cover, count, spell*

10.10. **TO SAY STH ALOUD**. [Communication/transmission of information with focus on vocalization: *dictate, recite, intone*

10.11. **TO SAY STH IN A DIFFERENT LANGUAGE**. [Interlinguistic communication]: *translate, interpret*

10.12. **TO STOP SPEAKING**. [Terminal phase of communication act]: *conclude*

10.13. **TO CAUSE SB TO STOP SPEAKING**. [Causative subdimension of 10.12]: *silence, interrupt.*

244

## 3. Conclusion

In this paper we have presented the typology of semantic prototypes as encoded within the FLM. This semantic hierarchy together with a typology of syntactic prototypes form the backbone of what has been termed the cognitive axis of the FL Lexicon. The predicate conceptual schemata formulated in this axis constitute the epistemological basis of lexical-field grammars, which are in the process of elaboration.

## BIBLIOGRAPHY

- **Chomsky, N.** (1981a). «On the Representation of Form and Function». *The Linguistic Review,* pp. 3-40.

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

- **Chomsky, N.** (1986). *Knowledge of Language: Its Nature, Origin and Use.* New York: Praeger.

- **Coseriu, E.** (1977). *Principios de semántica estructural.* Madrid: Gredos.

- **Coseriu, E.** (1981). *Lecciones de lingüística general.* Madrid: Gredos.

- **Demonte, V.** (1991). *Detrás de la palabra. Estudios de gramática del español.* Madrid: Alianza.

- **Dik, S.C.** (1978a). *Functional Grammar.* Dordrecht: Foris Publications.

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

- **Dik, S.C.** (1989). *The Theory of Functional Grammar. Part I: The Structure of the Clause.* Dordrecht: Foris Publications.

- **Faber, P. and Mairal, R.** (1994). «Methodological underpinnings for the construction of a functional lexicological model». *Miscelánea. A Journal of English and American Studies.* Universidad de Zaragoza, pp. 193-217.

- **Faber, P. and Mairal, R.** (forthcoming). *The semantic, syntactic, pragmatic architecture of the English verbal lexicon.*

- **Levin, B.** (1985). «Lexical Semantics in Review». In Levin, B. (ed.) *Lexical Semantics in Review.* Center for Cognitive Science. MIT Cambridge Mass..

- **Martín Mingorance, L.** (1984). «Lexical Fields and Stepwise Lexical Decomposition in a Contrastive English-Spanish Verb Valency Dictionary». In Hartmann, (ed.). (1984), *op. cit.*, pp. 226-236.

- **Martín Mingorance, L.** (1985a). «La semántica sintagmática del adjetivo. Parámetros para la organización de un lexicón inglés/español de valencias adjetivales». *Actas del II Congreso Nacional de la Asociación Española de Lingüística Aplicada.* Sociedad General Española de Librería: Madrid, pp. 329-340.

- **Martín Mingorance, L.** (1985b). «Bases metodológicas para un estudio contrastivo del léxico derivado». *Revista Española de Lingüística Aplicada.* 1, pp. 37-54.

- **Martín Mingorance, L.** (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, pp. 377-382.

- **Martín Mingorance, L.** (1987b). «Semes, Semantic Classemes, and Dimensions: The Lexicological and Lexicographic Perspectives». Paper read at the XIVth International Congress of Linguists. Berlin, pp. 10-15. August, 1987.

- **Martín Mingorance, L.** (1987c). «Pragmatic Features in the Lexicon of a Functional Grammar». Paper read at the International Pragmatics Conference. Antwerp, pp. 17-22. August, 1987.

- **Martín Mingorance, L.** (1990). «Functional Grammar and Lexematics». In Tomaszczyk, J. and Lewandowska-Tomaszczyk, B. (eds.). *op. cit.*, pp. 227-253.

- **Martín Mingorance, L.** (1995). «Lexical logic and structural semantics. Methodological underpinnings in the structuring of a lexical database for natural language processing». In *Panorama der Lexikalischen Semantik.* Gunter Narr. Tübingen, págs. 461-474.

- **Starosta, S.** (1988). *The Case for Lexicase. An Outline of Lexicase Grammatical Theory.* London/New York: Pinter.

- **Tomaszczyk, J. and Lewandowska-Tomaszczyk, B.** (eds.). (1990). *Meaning and Lexicography.* Amsterdam/Philadelphia: John Benjamins.

- **Van Valin, R.** (1993). «A Synopsis of Role and Reference Grammar». In R.D. Van Valin (ed.). *Advances in Role and Reference Grammar.* Amsterdam: John Benjamins, pp. 1-164.

- **Vendler, Z.** (1967). *Linguistics in Philosophy.* Cornell University: Ithaca.