THE REPRESENTATION OF KNOWLEDGE IN THE LEXICAL FIELD OF THE ADJECTIVES OF MOVING/ MOVERSE¹

María José Feu Guijarro Universidad de Castilla-La Mancha

ABSTRACT

This article is a contrastive study of the representation of knowledge in the lexical field of the adjectives of "Moving/Moverse". The theoretical frame that has been applied is the Functional Lexematic Model. The definitions of the lexical entries have been done avoiding circularity and according to onomasiological principles based on structural semantics and on the theory of prototypes. The knowledge representation resultant from the application of the FLM has been interpreted in terms of the Image Schemata Theory.

1. INTRODUCTION

Lexical fields have a psychological reality and are one of the most important means of word organization in our mental lexicon. However, the theory of Lexical Fields has been largely criticized by their vagueness or has been almost ignored. In this article we analyze the Representation of Knowledge in the lexical field of the adjectives of "Moving/Moverse". We attempt at demonstrating how the theory of Lexical Fields, under the scope of a proper interpretation, becomes a real Cognitive Semantic Grammar capable of explaining how languages conceptualize our world and compatible with other Cognitive Grammars.

The theoretical framework of this article is the Functional Lexematic Model (Martín Mingorance, 1984, 1985, 1990; Faber & Mairal, 1994). Martin Mingorance's proposal tries to link structural semantics and prototype theory, given a frame where

semantic dimensions can reflect the structure of conceptual schemata. His functional lexematic model entails the integration of Dik's Functional Grammar (1978), Coseriu's Lexematics (1977) and the main assumptions of Cognitive Grammars².

2. THE LEXICAL FIELD OF THE ADJECTIVES OF MOVING/MOVERSE

This lexical field is made of four dimensions: "Moving/Moverse"; "Not Moving/ No Moverse"; "Moving Quickly/Moverse Rápidamente"; and "Not Moving Quickly/ No Moverse Rápidamente"³.

In order to build up the semantic architecture of these dimensions and to create the definitions of their lexical entries, we have consulted the main lexicographical tradition in both languages⁴.

Every dimension is composed of a superordinate term or prototype (an archilexeme), which is the base meaning of the rest of lexical entries that compose the dimension. The definitions of hyponyms have been carried out following the pattern:

Hyponym definition: archilexeme+ hyponym semes.

For instance, in the bilingual dimension "Not moving/No moverse" the archilexemes or prototypes are the lexical entries "immobile" and "inmóvil" respectively. The definitions of "immobile" and "inmóvil" are: "Not able to move or to be moved" and "Que permanece sin cambiar de sitio". (1) shows a section of the paradigmatic scale of the adjectives of "No Moverse/Not Moving". (1) explains how the hyponym definitions have been done adding to the general meaning of the archilexeme the specific semes brought by the lexical entry itself.

(1)

- 1. Inmóvil: "que permanece sin cambiar de sitio".
 - 1.1. *Quieto*: "inmóvil aplicado a lo que pudiendo cambiar de posición, no cambia".
 - 1.1.1. *Parado*: "quieto aplicado a lo que estando destinado a moverse o moviéndose de ordinario, no lo hace".
 - 1.1.2. Inerte: "quieto aplicado a lo que parece que no tiene vida".
 - 1.1.3. Estático: "quieto aplicado a lo que permanece en equilibrio".

1. Immobile: "Not able to move or to be moved".

- 1.1. *Still*: "Immobile as applied to something/someone that shows no sign of activity (usually quiet)".
 - 1.1.1. *Motionless*: "Still as applied to something/someone incapable of motion".
 - 1.1.2. Inert: "Still as applied to something that appears to be lifeless".
 - 1.1.3. *Static:* "Still as applied to something/someone that stays in the same position keeping its/his balance".

3. KNOWLEDGE REPRESENTATION AND LEXICAL FIELDS

The lexical entries of a dimension are organized onomasiologically around a typical instance of their category or a prototype. Applying the Schemata Theory⁵ to the Theory of Lexical Fields, we find that his organization in a scale creates different scenarios or domains of common concepts inside the hierarchy. These scenarios are abstract categorizations consistent with all the members of a category. In the case of lexical fields, the members of a dimension are categorized firstly by the basic meaning of the scale (the meaning of the prototype), and secondly by other schemata or scenarios that appear inside the general concept of the superordinate term. For instance, the schema that underlies the dimension of "No moverse/Not Moving" is "que permanece inmóvil sin cambiar de sitio/not able to move or to be moved". However, if we return again to example (1) we see that there are other schemata or subdomains inside this dimension: "quieto" and "still" open new schemata or subdimensions defined by the concept "inmóvil aplicado a lo que pudiendo cambiar de posición no cambia"/"Immobile as applied to something/someone that shows no sign of activity (usually quiet)". These scenarios have four settings, respectively, conceptualized by the lexical entries "quieto" and "still": on the one hand, "quieto", "parado", "inerte", "estático"; and on the other hand, "still", "motionless", "inert", and "static".

The Schemata Theory applied to lexical fields shows the specific focalizations of the general concept upon which dimensions are built. As this information comes from the own structure of the lexicon, its analysis will make us understand which are the relevant areas of knowledge that the architecture of the lexicon conceptualizes.

The analysis of this lexical field is presented in a bilingual frame, English and Spanish. This type of contrastive analysis helps to prove if the concepts we are dealing with are universal means of language conceptualization, or are only related to the particular cultural backgrounds of each language.

4. THE CONCEPTUAL SCHEMATA OF THE LEXICAL FIELDS OF THE ADJECTIVES OF MOVING/MOVERSE

4.1. MOVING/MOVERSE

The scenario of this dimension is the dimension itself.

Able to move or to be moved mobile/movable/portable

Susceptible de moverse o de ser movido movible/portátil

An important difference between English and Spanish is that in Spanish all the lexemes of this scale can only be referred to things (not to people or to animals). There is not Spanish equivalent to the architexeme "mobile", which can be applied to people:

(2) The old man was not mobile yet.

The rest of the semes has similar settings in both languages:

- (3) They are very cheap and extremely portable.
- (4) Una máquina de escribir portátil.
- (5) The room is divided by movable screens.
- (6) Pantallas movibles.
- 4.2. NOT MOVING/NO MOVERSE Archilexeme definitions: *Immobile*: "Not able to move or to be moved". *Inmóvil*: "Que permanece sin cambiar de sitio".

| <i>Incapacity of motion</i> stationary/unmovable | <i>No sign of activity</i> still/motionless/static/inert/idle |
|---|---|
| Incapacidad de movimiento | Sin signos de actividad quieto/parado/inerte/estático |

This dimension is divided into two scenarios:

4.2.1 "Incapacity of motion" or "incapacidad de movimiento", defined under the concept of "not being able to move or to be moved"/"que permanece sin cambiar de sitio". Their semes add to "immobile" the features of: "applied to vehicles" (stationary), "cannot be moved" (unmovable, fijo); "cargos que no pueden ser quitados" (inamovible), "cosas que permanecen invariables" (estacionario).

- (7) An unmovable pillar.
- (8) Only use your handbrake when your vehicle is stationary.
- (9) Cargo inamovible.
- (10) Estado estacionario.

The fact that the words of these examples have similar spelling in both languages does not entail anything with regard to their meaning. "Stationary" is used mainly for vehicles and "estacionario" has usually the sense "cosas que permanecen invariables sin crecer ni menguar". "Inamovible" is employed in the case of political positions, and a good Spanish translation for "an unmovable pillar" would be "un pilar fijo".

4.2.2. "No sign of activity/Sin signos de actividad" fits the general concept: "immobile as applied to someone or something that shows no sign of activity"/"inmóvil aplicado a lo que o a quien no muestra signos de actividad". It has four schemata shared by English and Spanish: *calmness* ("still", "quieto"), *incapacity of motion* ("motionless", "parado"), *lack of life* ("inert", "inerte") and *in balance* ("static", "estático").

- (11) His hands were never still.
- (12) Nunca tenía las manos quietas.
- (13) Rudolph remained motionless.
- (14) Permaneció parado.

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4.3. NOT MOVING QUICKLY/NO MOVERSE RÁPIDAMENTE

Archilexeme definitions:

Slow: "To move along or to perform something without very much speed". *Lento*: "Que invierte mucho tiempo en ir de un sitio a otro".

| Slow and calm | Slow over a long period of time |
|---------------------------------|---------------------------------|
| gentle/lazy/unhurried/leisurely | gradual/creeping/progressive |
| Attitudes | Very slow |
| deliberate/moderate/ponderous | sluggish |

Lento y tranquilo sosegado/calmoso/reposado/suave Muy lento Insensible/moroso/estantío/tardo

Actitudes cachazudo/pachón/parsimonioso/cansino/lánguido/acompasado/ manso/lerdo/zorronglón.

This dimension presents four scenarios in the English scale and three in the Spanish one. This asymmetry is due to the Spanish lexemes "gradual" and "progresivo", which are not considered in Spanish Dictionaries as synonyms of "lento". It seems that "gradual" and "progresivo" are defined in Spanish only in terms of time rather than in spatial coordinates. We will consider these lexemes as cases of overlapping. The other three scenarios are the same for both languages:

4.3.1. *Slow and calm/Lento y tranquilo* have the semes: *calmness* ("gentle", "sosegado"), *indolence* ("lazy", "calmoso"), *without rush* ("unhurried", "leisurely", "reposado", "suave").

- (15) The gentle rocking of his mother's chair
- (16) El suave mecer de sus brazos
- (17) Her voice was calm and unhurried.
- (18) Su voz era tranquila y reposada

4.3.2. Attitudes/Actitudes. There is not correspondence between English and Spanish in this scenario. Either the Spanish lexicographical tradition compiles a longer list of lexical entries for the concept "actitudes del que invierte mucho tiempo en ir de un sitio a otro", or, for cultural reasons, this conceptual schema is more relevant in Spanish than in English. These are their semes in Spanish: *imperturbability* ("cachazudo", "pachón" (only applied to men), *taking his/her time* ("parsimonioso"), *looking tired* ("cansino"), *without energy* ("lánguido"), *moving rhythmically* ("acompasado"), *applied to nature* ("manso"), *applied to animals* ("lerdo"), *reluctant* ("zorronglón").

- (19) Paso acompasado.
- (20) Parsimonioso, se dispuso a leer.
- (21) Movimiento cansino.

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The English lexemes of this scenario: *deliberate* ("carefully"), *moderate* ("nor large nor small") and *ponderous* ("great weight") have their possible Spanish synonyms either in other dimensions ("cuidadoso", "moderado") or in other scenarios of its own dimension; "ponderous" can be translated by "tardo" ("muy lento y pesado").

4.3.3. Very Slow/Muy Lento. There are four settings in Spanish for this scenario: difficult to perceive ("insensible"), moving with difficulty ("moroso"), almost without movement ("estantio"), and with great weight ("tardo"). This is another example of how the schemata of "Not Moving Quickly" are more relevant in Spanish than in English. The opposite case will be found in the following dimension, "Moving Quickly".

- (22) A sluggish liver.
- (23) Curso moroso del río.
- (24) Una laguna estantía.
- (25) El tardo despertar del sol.

4.3.4. Slow over a long period of time

(26) It is a process of gradual development."Un proceso de desarrollo gradual"⁶.(27) A progressive disease."Una enfermedad progresiva".

4.4. MOVING QUICKLY/MOVERSE RÁPIDAMENTE

Archilexeme definitions: *Quick*: "To move or to perform actions with great speed". *Rápido*: "Que dura o se hace en poco tiempo".

| Attitudes towards being quick | Quick and without delay |
|------------------------------------|--------------------------|
| fast/expeditious/brisk/perfunctory | immediate/summary/prompt |

Quick and unexpected sudden/precipitate/short/abrupt

Very quick speedy/instantaneous/express/rapid

Too Quick (not enough time) hurried/hasty/feverish/rushed

Actitudes hacia la rapidez rápido, ligero, pronto, presto, expreso acelerado Rápido y sin el tiempo necesario apresurado/precipitado/presuroso

Muy Rápido veloz/raudo/febril Demasiado Rápido vertiginoso y rabión

There is an asymmetry between the scenarios of both languages that resembles the semantic architecture of "Not Moving Quickly"; however, the case here is the opposite. English is more lexicalized than Spanish in this dimension: it has two specific schemata that Spanish lacks: "quick and without delay" and "quick and unexpected", and, in general, it has more lexical entries.

As there is not a constant correlation between scenarios and lexical items in both languages, we will describe first the specific focalizations of English and Spanish, and afterwards we will give some possibilities of translation.

4.4.1.a. *Attitudes towards being quick: nature* ("fast"), *efficiency* ("expeditious"), *full of life* ("brisk") and *carelessly* ("perfunctory").

b."Actitudes hacia la rapidez": nature (ligero), readiness (pronto, presto), destiny (expreso) and increasing the speed (acelerado).

4.4.2. Quick and without delay: without delay ("immediate"), without delay and no attention to formalities ("summary"), always ready to act ("prompt").

4.4.3. Quick and unexpected: unexpected ("sudden"), sudden and faster ("precipitate"), repeated several times ("short"), changing at the end ("abrupt").

4.4.4.a. Very quick: very quick ("speedy"), very quick and immediate ("instantenous"), applied to services ("express"), applied to succession ("rapid").

b. Muy rápido: very quick ("veloz"), readiness ("raudo"), agitated ("febril").

4.4.5. a. Too quick: too quick ("hurried"), with a bad result ("hasty"), with agitation ("feverish"), with excessive bussiness ("rushed").

b. Without enough time: too quick ("apresurado"), without thought ("precipitado"), as applied to legs, feet and wings ("presuroso"), losing one's own head ("vertiginoso"), applied to rivers ("rabión").

(28) Un corredor ligero.

(29) A fast runner.

(30) Mary was prompt to dismiss any suspicion I might had.

(31) María estaba pronta a rechazar cualquier sospecha que pudiera tener.

- (32) All this meant a precipitate advance to socialism.
- (33) Esto significa un avance precipitado.
- (34) An inadequate and hurried lunch

(35) Una comida apresurada e inadecuada.

(36) A hasty departure.

(37) Una salida apresurada.

- (38) There was a kind of feverish excitement in his voice.
- (39) Había una clase de excitación febril en su voz.

Cases of overlapping are the Spanish lexemes "repentino", "abrupto" and "instantáneo", which are synonyms of the following English examples respectively:

(40) A sudden drop in the temperature

(41) It came to an abrupt end

(42) She has the instantaneous certainty that must be Boylan downstairs.

A general analysis of the concepts or scenarios of this lexical field gives us a first image of how our knowledge of moving is represented through adjectives in English and Spanish. "Moving or being moved" is understood as a positive ability that entities may have, that is why "mobile, movable, portable" or "movible" and "portátil" have all positive connotations. On the contrary, the incapacity of motion or being moved, as a permanent quality, is considered negatively: "cargo inamovible". This negativity is well reflected by the metaphorical extensions of these lexical entries: "ideas inamovibles", "estado estacionario", "an inert marriage", etc.

The reasons for the absence of movement are not only found in the inner qualities of entities themselves, but also in particular features of their behavior. An entity that has the ability of moving but is not moving can be conceptualized or qualified with the following concepts: *calmness* ("still", "quieto", "parado"), *lack of life* ("inert", "inerte"), *lazyness* ("idle"), *incapacity* ("motionless"), or *being in a state of balance* ("static", "estático").

All the entities that can move can do it quickly or not. Either if they are moving quickly or not, we categorize their movement according to certain signs that come from their behavior. "Not Moving Quickly" can be due to a state of calmness and relax: "gentle", "sosegado", "reposado", "unhurried", etc.; to a particular attitude of the entity itself: "imperturbability" ("pachón"), "tiredness" ("cansino")... or to a particular relationship with time ("very slow", "too slow or slow throughout a long period of time"). The case of "Moving Quickly" is quite similar: it can be due to a state of agitation ("febril", "rushed", "feverish"... etc.); to the particular attitudes to the entities themselves: *full of life* ("brisk"), *without paying attention to formalities* ("expeditious), *easiness* ("ligero"), *readiness* ("prompt", "presto", "pronto"); *and/or to a specific relationship with time* ("very quick", "too quick", "quick and unexpected").

Time, space, and an axiological scale of good and bad⁷ are the constant parameters that build up this lexical field. However, although the presence of both is part of every concept, it seems that time has more weight than space, especially in certain scenarios. We are referring to those schemata which in the axiological scale are categorized as "Very quick-very slow" or "Too quick-too slow". "Very quick" and "muy rápido" are positive concepts in general, like "quick" and "rápido". Nevertheless, "very quick" and "muy rápido" become negative schemata as soon as time is not enough. In these terms is understood "Too quick/demasiado rápido"; this scenario shows the settings: *too quick* ("hurried", "apresurado"), *with a bad result* ("hasty"), *without thought* ("precipitado"), *losing one's own head* ("vertiginoso"), etc., all of them showing how moving quickly and the lack of sufficient time bring bad consequences to our mind and body.

Before taking into account the Cognitive Axis and analysing its relationship with the knowledge representation already described, there remains something to say about differences between languages.

It can be asserted from the perspective of the characterization attempted that, in general terms, English and Spanish share the same system of representation of knowledge with regard to the adjectives of Movement. However, it is interesting to emphasize another type of data related to the specific cultural background of languages. English and Spanish show a difference which can be supported in both cases by a large cultural tradition: Spanish focuses particularly on the scenarios of "Not moving quickly", and English is more concerned with the schemata referring to "Moving quickly". The contrastive study of knowledge representation through the structure of the lexical fields of two languages reveals the universal concepts upon which both languages have been built, and the particular differences between languages brought about by their respective cultures.

5. THE COGNITIVE AXIS OF THE LEXICAL FIELD OF THE ADJECTIVES OF MOVING/MOVERSE

In the previous section we have analyzed the adjectives of "Moving/Moverse" paying attention only to their group. In this section we will study them according to their relationships with other dimensions or lexical fields.

The FLM interprets the concept of lexical creation in terms of "a process by which we understand and structure one domain of experience in terms of another domain of a different kind" (Johnson, 1987). Applying this view to the Theory of Lexical Fields, the FLM studies metaphors attending to their source domain (SD) and to their target domain (TD). We understand by SD the original cognitive domain or lexical field (or dimension) of the metaphor, and by TD or TDs the conceptual fields of the lexical creation. For instance, in the case of the metaphor "unmovable ideas", its SD is the lexical field of the adjectives of "Moving/Moverse", and its TD the lexical dimension of "ideas" or the lexical field of [COGNITION].

First of all, we will enumerate the principal metaphors of the lexical field of the adjectives of "Moving/Moverse", explaining their SDs and their TDs. We shall try to analyze later the relationships posited between domains in terms of the Theory of Image Schemata (Johnson, 1987).

The main connections of the adjectives of the lexical field of [MOVING/MOVERSE] are with the lexical fields of: [COGNITION], in concrete with its dimension [ideas] and [intelligence]; [ATTITUDES], [TIME], [SPACE], [WEIGHT], [SPEECH ACTS] and [MENTAL AND PHYSICAL DISTRESS].

In terms of Image Schemata (Johnson,1987), ideas are understood as entities that can move or be moved. Ideas are entities with time and space referentiality, linked to the same axiological scale of the adjectives of [MOVING/MOVERSE]. "Not moving" is negative, having "unmovable ideas", "static ideas", "posturas inamovibles" or "estáticas" is negative as well; however, as the ability of moving is a positive quality, "having progressive ideas" is also positive. The same type of analysis can serve for another dimension of [COGNITION] linked to the lexical field of [MOVING/MOVERSE]: [intelligence]. A boy can be "quick or slow", "ser rápido, lento o un lerdo". "Being quick" or "rápido" is positive in a metaphorical sense, and "being slow" or "lerdo" is negative, as it is also for a car "being quick or slow".

We categorize [ATTITUDES] in terms of movement as well: "gentle", "lazy", "sosegado", "calmoso", "tranquilo", are metaphors from the lexical field of [ATTITUDES] ("una persona sosegada, tranquila"; "he is very gentle"...). The way we move shows something from our character or behavior: if "someone has never his hands still" is because he is a nervous person, but if he has "paso tranquilo", it is because he is "tranquilo" at that time. It is interesting to notice how in this conceptual dimension of [ATTITUDES] the axiological scale is different to the cases mentioned before. "A fast woman" or "una mujer ligera" are instances of moving quickly, but do not have positive connotations at all. [WEIGHT] and [SPEECH ACTS] are lexical fields related also to [MOVEMENT].

(43) Una maleta ligera.(44) The conversation was leaden and awkward.(45) A summary of the findings was published.(46) The action was taken in its express order.(47) Tren expreso.

Movement can be weighed, and Speech Acts are entities that move fast.

Another connection displayed by the adjectives of [MOVING/MOVERSE] is related to the lexical field of [PHYSICAL AND MENTAL DISTRESS].

- (48) A feverish excitement.
- (49) Un hombre muy acelerado.
- (50) Una actividad febril.

Moving too quickly makes us lose our head.

Image Schemata are central structures for meaning comprehension which organize our mental representation of the world. In terms of these structures, the following can be said about the qualifying of movement:

The capability of motion or of being moved is energy within bodies. Those entities that are incapable of moving or being moved lack this energy. The energy inside our bodies takes the shape of our emotional state, making our movements akin to our moods. Movement can look "calm", "sosegado", "hurried", "rushed" or "inert", according to the type of energy that moves our bodies: *movements are signs of our inner activity*. As the energy that makes us moving is embodied, it can be weighed; therefore, *movements are weighed*: moving quickly means low weight and not moving quickly means great weight ("un abrigo muy ligero", "una conversación pesada").

As human beings are composed of mind and body, it is not only our body that moves: our mind moves as well, and its result can be measured and categorized in terms of movement. [Ideas], [Intelligence] and [Speech acts] are the outcome of the movements of our minds. "Unmovable ideas" or "progressive ideas" are cases of not moving quickly and moving quickly respectively. The same can be said of "un chico lento" o "un chico rápido". [Speech Acts] are understood as part of "moving quickly" as well: language is the most rapid way to reach something.

There is also a relationship between our movements, our emotional states, and time. As has been pointed out by Lakoff and Johnson (1980), time is a limited valuable resource. It has to provide a balance between our emotional state, time, and the energy that makes our bodies move. These are the cases of "quick", "fast", "speedy", "rápido", "muy rápido", etc. However, when this balance is broken, usually for temporal reasons, our mind and body suffer the consequences. If time is not enough, the energy inside our minds and bodies has to run faster than it should, and the resultant movement is categorized as: *bad result* ("hasty"), *without thought* ("precipitado"), *without sufficient time* ("apresurado", "hurried"). If time diminishes too much and we have to increase the speed, our mind and body become sick: "actividad febril",

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"feverish excitement", "un encuentro vertiginoso", o "el descenso rabión del río".

It seems that [Moving] is an important way of qualifying entities. According to Faber (1998), one of the largest and most complex domains of the lexicon is [MOVE-MENT]. Although this study is referred only to adjectives, it is obvious how important this lexical field is in order to categorize our perceptual experience. Faber says about the lexical field of [MOVEMENT] that, although it is structured in terms of space and time, its primary macroestructural pattern is space, due to the medium in which [MOVE-MENT] is perceived to take place (go, come, flow, fly, walk,etc.). However, because of the evaluative nature of adjectives, it appears that the most important structuring principle is time rather than space in this particular case.

6. CONCLUSIONS

Whorf (1989) pointed out the possibility of knowing part of our conceptual system studying the way we talk about the world. The kind of analysis we have proposed in this article attempts to reach this goal. The study of knowledge representation brings about a fascinating contradiction of human beings: our language, that instrument that we use every day, knows more about us than we do ourselves.

Notes

- This article was carried out within the framework of the project "Desarrollo de una lógica léxica para la traducción asistida por ordenador a partir de una base de datos léxica inglésespañol-francés-alemán multifuncional y reutilizable" funded by the DGICYT (PB 94/ 0437).
- 2. Langacker (1987), Johnson (1987).
- 3. Longman Lexicon of Contemporary English.
- 4. In order to make definitions avoiding synonymy or circularity we have consulted: Oxford Advanced Learner's Dictionary, Webster's Ninth New Collegiate Dictionary, Longman Dictionary of Contemporary English, The Oxford Thesaurus, Gran Diccionario de sinonimos y antónimos, Diccionario de la Real Academia Española. However, the most helpful dictionaries have been Collins Cobuilt in English and in Spanish el Diccionario de uso del español de María Moliner.
- 5. Langacker, R. (1987).
- 6. Cases of overlapping.
- 7. Krzeszowski (1990).

Work Cited

Coseriu, E. Principios de semántica estructural. Madrid: Gredos, 1977. Dik, S.C. Functional Grammar. Dordrecht: Foris, 1978.

Faber, P. & R. Mairal. "Methodological Underpinnings for the Construction of a Functional Lexicological Model." *Miscelánea: A Journal of English and American Studies*.15 (1994): 184-217. Faber, P. "Semantic Prototypes and Knowledge Representation." *Estudios sobre léxico, sintaxis y traducción: un homenaje a Leocadio Martín Mingorance.* Eds. M.J. Feu & S. Molina. Ciudad Real: Universidad de Castilla La Mancha. [Forthocming].

Johnson, M. The Body in the Mind. Chicago: The U of Chicago P, 1987.

- Krzeszowski, T. "The Axiological Aspect of Idealized Cognitive Models." *Meaning and Lexicography*. Eds. J. Tomaszczyk & B. Lewandowska-Tomaszczyk. Amsterdam: Benjamins, 1990. 135-65.
- Lakoff, G. & M. Johnson. Metaphors We Live By. Chicago: U of Chicago P, 1990.
- Langacker, R. Foundations of Cognitive Grammar. Standford: Stanford UP, 1987.
- Longman Lexicon of Contemporary English. Hong Kong: Longman, 1981.
- Martín Mingorance, L. "Lexical Fields and Stepwise Lexical Decomposition in a Contrastive English-Spanish Verb Valency Dictionary." *Lexeter '83 Proceedings*. Ed. R. Hartmann. Tübingen: Max Niemeyer, 1984. 226-236.
- Martín Mingorance, L. "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*. 1985. 329-340.
- Martín Mingorance, L. "Functional Grammar and Lexematics." *Meaning and Lexicography*. Eds. J. Tomaszczyk & B. Lewandowska-Tomaszczyk. Amsterdam: Benjamins, 1990. 227-253.

Moliner, M. Diccionario de uso del español. Madrid: Gredos, 1986.

Whorf, B. Language, Thought and Reality. Cambridge, Mass.: The MIT P, 1989.