New perspectives on Contrastive Grammar, Applied Linguistics and Teaching Methodology: the Lexical Constructional Model

Organizers: Francisco Gonzálvez-García (Universidad de Almería) & Rocío Jiménez-Briones (Universidad Autónoma de Madrid)

(a) An overview of the workshop:

The present proposal builds on the achievements of the previous workshops of the Lexical Constructional Model (LCM henceforth) held in 2007 at the universities of Logroño, Spain, as well as at 40th Annual Meeting of the Societas Linguistica Europaea: Functionalism in Linguistics, 29 August - 1 September 2007; University of Joensuu, Finland. The LCM is at this stage emerging as a promising approach bridging the gap between moderate functional proposals, as instantiated in e.g. Van Valin's Role and Reference Grammar, on the one hand, and cognitively-influenced strands of Construction Grammar, such as the Goldbergian one, on the other. In other words, the model aims to integrate the best of two worlds of long-standing tradition in linguistics and seeks to find robust generalizations for a number of crucial theoretical and descriptive aspects. At the same time the LCM intends to avoid what are perceived to be important shortcomings in the models mentioned above, such as the lack of a maximized semantic component, or the absence of detailed fine-grained semantico-pragmatic constraints regulating the fusion of a given verb with a given construction, among others. A necessarily brief listing of the foci of research of the LCM to be further examined in this workshop would, for current purposes, include: (i) the division of labour between verbal semantics and constructional semantics (aka constructional templates) in the encoding and decoding of utterances, (ii) the lexicon-grammar continuum, (iii) the implications of the LCM for morphology, (iv) a fine-grained characterization of the motivation of discourse-motivated phenomena in grammar, with special focus on metaphor and metonymy, etc, (v) the definition of a constructional template, its format and formalization, with a critical eye on the viability of a homogeneous metalanguage for formalization purposes, (vi) the implications of contrastive grammar(s) for the LCM in general and the definition of constructional templates in particular, (vii) the useful implementations of the LCM in the elaboration of pedagogical material, language for specific purposes, or the enrichment of the lexico-grammatical information provided in dictionaries, and (viii) the potential of the LCM as a well-suited model to design a dictionary of constructions, whether monolingual or contrastive (English-Spanish), to mention but a few. With these preliminary considerations in mind, the presentations by the workshop participants can, at least provisionally, be thematically grouped as follows: (I) LCM within the converging evidence scenario invoked by some functionalist, cognitivist and/or constructionist models, (II) Lexical templates: Theoretical and descriptive challenges with special focus on contrastive dictionaries/grammars, pedagogical grammars, and computational implementations, and (III) The syntax-semantics interface revisited from a contrastive, applied perspective.

LEXICOM Webpage:
http://www.lexicom.es

(b) Schedule:

19 September 2008

9.00-9.30: Ricardo Mairal Usón (UNED, Madrid, Spain): "The core grammar component of the Lexical Constructional Model"

9.30-10.00: Francisco José Ruiz de Mendoza Ibáñez (University of La Rioja, Logroño): "Non-argumental constructions: levels of description and forms of interaction"

10.00-10.30: Francisco Gonzálvez-García (Universidad de Almería, Spain): "Construction Grammars and the LCM: Mutual challenges on descriptive and explanatory grounds".

10.30-11.00: Annalisa Baicchi (Università di Pavia, Italy): "The cross-fertilization between the semantic category of Force Dynamics and the Lexical-Constructional Model"

11.00-11.30: Break

11.30-12.00: Rocío Jiménez Briones (Universidad Autónoma de Madrid, Spain) & Mª Beatriz Pérez Cabello de Alba (UNED, Madrid, Spain): "The LCM premises into lexicographic practise".

12.00-12.30: Socorro Bernardos Galindo (Universidad Politécnica de Madrid, Spain). "Some reflections on the computational implementations of LCM templates"

12.30-13.00: Round Table (I): Discussants: Prof. Enrique Bernárdez Sanchís (Universidad Complutense, Madrid, Spain) Prof. Peter Harder (University of Copenhague, Denmark).

LUNCH BREAK

15.30-16.00: Francisco Cortés Rodríguez (University of La Laguna). "Word-formation in the Lexical Constructional Model: Affixal templates and derivational constructions".

16.00-16.30: Johan Pedersen (University of Copenhague, Denmark). "The division of labour between lexical templates and constructional templates. A contrastive perspective".

16.30-17.00: Break

17.00-17.30: Ignasi Navarro i Ferrando (Universitat Jaume I, Castellón, Spain). "Semantic contrasts and internal constraints in lexical templates of perception verbs in English".

17.30-18.00: Carlos Segade (Centro Universitario Villanueva, Universidad Complutense de Madrid, Spain). "The notion of interval applied to nautical verbs of movement".

18.00-18.30: Round Table (II): Discussants: Prof. Enrique Bernárdez Sanchís (Universidad Complutense, Madrid, Spain) Prof. Peter Harder (University of Copenhague, Denmark).

(c) Abstracts:

"The core grammar component of the Lexical Constructional Model"
Ricardo MAIRAL USÓN (Universidad Nacional de Educación a Distancia). rmairal@flog.uned.es

The Lexical Constructional Model (LCM) arises from the concern to account for the relationship between syntax and all facets on meaning construction, including pragmatics and discourse. The LCM has a central module, the *level 1* or *argumental module,* consisting of elements of syntactically relevant semantic interpretation based on the principled interaction between lexical and constructional templates. A *lexical template* is a low-level semantic representation of the syntactically relevant content of a predicate; a *constructional template* is a high-level or abstract semantic representation of syntactically relevant meaning elements abstracted away from multiple lower-level representations. A lexical template consists of a semantic specification plus a logical structure constructed on the basis of *Aktionsart* distinctions proposed in *Role and Reference Grammar* (Van Valin, 2005). Aktionsart regularities are captured by the external variables of the template and by a set of high-level elements of structure that function as semantic primitives. Lexical templates also contain internal variables that are coded in terms of lexical functions that largely resemble those found in Mel'cuk's (1989) research. In the LCM, these variables capture world-knowledge elements that relate in a way specific to the predicate defined by the lexical template.

Constructional templates make partial use of the same metalanguage as lexical templates, since constructions capture structure that is common to a number of lexical items, as is the case of the caused-motion construction, which derives structure from multiple caused-motion predicates.

At the level of core grammar constructional templates "coerce" lexical templates. There are two kinds of constraint on coercion: *internal* and *external*. The former arise from the semantic properties of the lexical and constructional templates, while the latter result from the possibility or impossibility of performing high-level metaphoric and metonymic operations on the lexical items involved in the *lexical-constructional subsumption* process. Internal constrains specify the conditions under which a lexical template may modify its internal configuration. For example, the *lexical class constraint* explains why 'break' verbs may take part in the causative/inchoative alternation (cf. *The child broke the window* and *The window broke*), while 'destroy' verbs may not. The reason is that 'destroy' verbs belong to the lexical class of 'existence' verbs, while 'break' verbs are verbs of 'change of state'.

As an example of external constraint, consider the conversion of 'laugh (at)', an activity predicate, into a causative accomplishment predicate when taking part in the caused-motion construction: *They laughed him out of the room*. This is possible because of the correlation between two kinds of actor and two kinds of object. In the case of causative accomplishments, the actor and object are an *effector* and an *effectee*, i.e. an actor whose action has a direct impact and subsequent effects on the object. With activities, the actor is a mere "doer" of the action experienced by the object. This observation suggests an analysis of the subcategorial conversion process experienced by "laugh" in terms of source and target domain correspondences (EXPERIENTIAL

ACTION IS EFFECTUAL ACTION), of the kind proposed in Cognitive Linguistics (cf. Lakoff, 1993).

REFERENCES

Lakoff, George (1993). "The contemporary theory of metaphor". In *Metaphor and Thought*, 2nd. ed., Ortony, Andrew (ed.), 202-251. Cambridge, Mass.: Cambridge University Press.

Mel'cuk, Ior (1989). 'Semantic primitives from the viewpoint of the Meaning-Text Linguistic Theory'. *Quaderni di Semantica* 10 (1): 65-102.

Van Valin, Robert D. Jr. (2005). *The Syntax-Semantics-Pragmatics Interface: An Introduction to Role and Reference Grammar*, Cambridge: Cambridge University Press.

"Non-argumental constructions: levels of description and forms of interaction"

Francisco José RUIZ DE MENDOZA IBÁÑEZ (Universidad de La Rioja). francisco.ruizdemendoza@unirioja.es

The Lexical Constructional Model (LCM; Ruiz de Mendoza & Mairal, 2007; 2008) is intended to be operational at all levels of linguistic description, including pragmatics and discourse. It has a level 1 or *argumental* module consisting of elements of syntactically relevant semantic interpretation. Then, it has other more peripheral analytical tiers that contain collections of conventionalized constructions or, alternatively, low or high-level situational cognitive models that can be accessed inferentially. Thus, a *level 2* or *implicational module* accounts for aspects of linguistic communication that have traditionally been handled in connection with implicature theory. There is a *level 3* or *illocutionary module* dealing with traditional illocutionary force. Finally, a *level 4* or *discourse module* addresses the discourse aspects of the LCM, with particular emphasis on cohesion and coherence phenomena. Each level is either subsumed into a higher-level constructional configuration or acts as a cue for the activation of relevant conceptual structure that yields an implicit meaning derivation.

At the pragmatic and discourse levels, *subsumption* takes the form of parametrization processes of the variable elements of non-argumental constructions, which differ from level-1 constructions in that they are essentially *idiomatic* in nature, i.e. they consist of a combination of fixed and variable elements. A case in point is the level-2 *What's X Doing Y?* configuration (cf. Kay and Fillmore, 1999), which conveys the idea that the state of affairs denoted by the non-interrogative content of the sentence is either incongruent or bothers the speaker (e.g. *What's the child doing in the swimming pool?*). The construction has fixed elements that cannot be changed without altering its meaning implications and variable elements that can be parametrized in constrained way. For example, the X variable in the level-3 requestive *Can You X?* construction must contain a predicate that expresses the addressee's control of the state of affairs (cf. *Can you close the window?* vs. *Can you see the window?*). In a similar way, the level-4 construction *Just Because X Doesn't Mean Y* is used to indicate that the content of Y does not necessarily follow from X (Holmes and Hudson, 2000). Finally, *cueing* or *cued inferencing* is a form of constraining non-explicit meaning on the basis of lexical and constructional clues. It takes places at all levels of meaning construction as an alternative to subsumption. Thus, at the level of core grammar, it accounts for inferences obtained by making contextual adjustments on the meaning of some predicates (e.g. *He drinks [alcohol]*; *She's ready [for the party]*). At other levels it accounts for meaning implications based on potential conceptual connections between propositions (the case of discourse), or on metonymic activations or high-level (for illocution), and low-level (for implicature) situational models or scenarios. For example,

the discourse connection between *It can't sound good; it's not digital*, which is one of conclusion-evidence, differs from the connection between *It doesn't sound good; it's not digital*, which is simply of cause-effect. The difference lies in the use of "can't" indicating (i.e. cueing) a deduced impossibility in the case of the conclusion-evidence pattern.

REFERENCES

Holmes, Jasper and Richard Hudson. 2000. "Just Because X Doesn't Mean Y". Paper delivered at the Linguistics Association of Great Britain, Spring Meeting. University College London.

Kay, Paul and Charles J. Fillmore. 1999. "Grammatical constructions and linguistic generalizations: The 'What's X doing Y' construction". *Language* 75: 1-33.

Ruiz de Mendoza Ibáñez, Francisco José and Ricardo Mairal Usón. 2007. "High-level metaphor and metonymy in meaning construction." In *Aspects of Meaning Construction.* Radden, Günter, Klaus-Michael Köpcke, Thomas Berg, and Peter Siemund (eds.), 33-51. Amsterdam/Philadelphia: John Benjamins.

Ruiz de Mendoza Ibáñez, Francisco José and Ricardo Mairal Usón. 2008. "Levels of description and constraining factors in meaning construction: an introduction to the Lexical Constructional Model." *Folia Linguistica* vol. 42, forthcoming

"Construction Grammars and the LCM: Mutual challenges on descriptive and explanatory grounds"

Francisco GONZÁLVEZ-GARCÍA (Universidad de Almería). fgonza@ual.es

This paper takes a cursory look at some of the most relevant aspects concerning descriptive and explanatory adequacy in the Goldbergian strand of Construction Grammar (Goldberg, 1995, 2006) in the light of some proposals pointed out in Boas (2006, 2008a, b) as well as in the Lexical Constructional Model (Ruiz de Mendoza Ibáñez and Mairal Usón, 2007a, b, 2008a, b). The main focus of this paper is on the import of the inherent meaning and form properties in the encoding and decoding of English subject-related and object-related depictive complements/attributes of the type italicized in (1)-(2) below (see also Gonzálvez-García, 2008):

(1) I get home, as I said, to find your mother *in tears*, Cassie *screeching on about Jack being dead* and your dog *being to blame for it* and you *well out of sight* (ICE-GB, W2F-001-43)

(2) You've got your arms and legs *missing* and you've got a squint as well (ICE-GB, S1B-049-48).

Special attention will be devoted to instances in which the depictive complement cancels the conventional implicature of the preceding V + NP sequence (cf. (2) above). The main conclusion ensuing from our investigation is that a fine-grained, explanatorily adequate semantico-pragmatic account of the distribution of depictives in English needs to be implemented with a syntactic representation that dispenses with the distinction between complements and adjuncts, understood in binary terms (i.e. optional vs. obligatory). Rather, such a syntactic distinction needs to be reconsidered as a gradient instead of as an all-or-none property.

REFERENCES

Boas, H. C. (2006). "A Frame-Semantic Approach to Identifying Syntactically Relevant Elements of Meaning". In: Steiner, P., Boas, H. C., Schierholz, S., (Eds.), *Contrastive Studies and Valency*. Frankfurt and New York: Peter Lang. 119-149.

Boas, H. C. (2008a). "Resolving Form-Meaning Discrepancies in Construction Grammar". In Leino, J. (Ed.), *Constructional Reorganization*. Amsterdam/ Philadelphia: John Benjamins. 11-36.

Boas, H. C. (2008b). "Identifying Syntactically Relevant Units of Meaning". Plenary delivered at the 26th AESLA Conference. University of Almería, Spain. April, 2008.

Goldberg, A. E. (1995). *Constructions. A Construction Approach to Argument Structure*. Chicago & London: University of Chicago Press.

Goldberg, A. E. (2006). *Constructions at Work: The Nature of Generalization in Language*. New York: Oxford University Press.

Gonzálvez-García, F. (2008). "The family of object-related depictives in English and Spanish: Towards a usage-based, constructionist analysis". *Language Sciences* doi:10.1016/j.langsci.2008.01.003.

Ruiz de Mendoza Ibáñez, F. J. and Mairal Usón, R. (2007a). "Levels of semantic representation: where lexicon and grammar meet". *Interlingüística*, 17.

Ruiz de Mendoza Ibáñez, F. J. and Mairal Usón, R. (2007b). "High-level metaphor and metonymy in meaning construction". In: *Aspects of Meaning Construction*. Radden, G., Köpcke, K. M., Berg, T., and Siemund, P., (Eds.), Amsterdam/Philadelphia: John Benjamins. 33-51.

Ruiz de Mendoza Ibáñez, F. J. and Mairal Usón, R. (2008a). "Levels of description and constraining factors in meaning construction: an introduction to the Lexical Constructional Model". *Folia Linguistica*, 42.

Ruiz de Mendoza Ibáñez, F. J. and Mairal Usón, R. (2008b). "Challenging systems of lexical representation". *Journal of English Studies* 4.

"The cross-fertilization between the semantic category of Force Dynamics and the Lexical Constructional Model"

Annalisa BAICCHI (Università di Pavia). annalisa.baicchi@unipv.it

This paper is concerned with the connections between the Lexical Constructional Model (LCM henceforth) and the semantic category of Force Dynamics (Talmy 1988), with special focus on the English caused-motion construction (Goldberg 1995; Boas 2003; Ruiz de Mendoza & Mairal 2007). More specifically, instances of this construction, such as "I blew the ant off the plate" (Talmy 1985: 229; see also Goldberg 1995: 152) will be argued to play a crucial role in the LCM in at least two non-trivial ways. In the LCM, lexical and constructional templates, which interact in a constrained way, allow for a representational system for verbs in their constructional use (Faber & Mairal 1999; Van Valin 2005), without having to make recourse to linking algorithmic rules (Ruiz de Mendoza & Mairal 2006; Gonzálvez-García & Butler 2006). Second, many aspects of transitivity in grammar are conceptually grounded either in high-level metaphor or in high-level metonymy (Ruiz de Mendoza & Mairal 2007; Baicchi 2007). This paper demonstrates the importance of Force Dynamics to better understand the motivation of all instances of the caused-motion construction and allow for the performance of cognitive operations on them (Radden & Panther 2004; Radden *et al.* 2007). More specifically, the onset causing of action is shown to be one of the prototypical Force Dynamics categories which are well-suited to represent the complexity of this construction, which can in turn be viewed as a change-of-state force-dynamics pattern. This pattern licenses both concrete and metaphorical motion. Thus, exertion of force can be physical ("She knocked him into the thorny bed of roses"),

psychological ("He stared me into a half-confusion"), and intra-psychological ("I duped myself into thinking I could be part of the crew team").

REFERENCES

Baicchi, A. (2007) "The subsumption process of the intransitive-transitive migration". In M. Dossena, D. Torretta, A. Sportelli (eds.), *Migrations of Forms, Forms of Migration,* Bari.

Boas, H.C. (2003) *A Constructional Approach to Resultatives*. Stanford Monograph in Linguistics. Stanford, California

Faber, P. & R. Mairal 1999. *Constructing a Lexicon of English verbs*. Berlin / New York: Mouton de Gruyter.

Goldberg, A. (1995). *A Construction Grammar Approach to Argument Structure*. Chicago: U.C.P.

Gonzálvez-García, F. & C. Butler (2006). Mapping Functional-Cognitive Space. In *Annual Review of Cognitive Linguistics 4*. Amsterdam: Benjamins: 39-96

Radden G., K.M. Köpcke, T. Berg & P. Siemund (eds.) (2007). *Aspects of Meaning Construction*. Amsterdam: Benjamins.

Radden, G. & K.U. Panther (2004). *Studies in Linguistic Motivation*. Berlin, Mouton de Gruyter.

Ruiz de Mendoza, F. & R. Mairal. (2006). "Levels of semantic representation: where lexicon and grammar meet". *Revista Interlingüística* 17.

Ruiz de Mendoza, F. & R. Mairal Usón (2007). "High-level metaphor and metonymy in meaning construction". In G. Radden *et al*. (eds.): 33-49.

Talmy, L. (1985). "Lexicalization patterns: Semantic structure in lexical forms". In Shopen, T. (ed.), *Language Typology and Syntactic Description*. Vol.3. Cambridge: C.U.P.

Talmy, L. (1988). Force dynamics in language and thought. *Cognitive Science*, 12:49-100.

Van Valin, R.D. Jr. (2005). *The Syntax-Semantics-Pragmatics Interface*. Cambridge: C.U.P.

"The LCM premises into lexicographic practise"

Rocío JIMÉNEZ BRIONES (Universidad Autónoma de Madrid). rocio.jimenez@uam.es
Mª Beatriz PÉREZ CABELLO DE ALBA (Universidad Nacional de Educación a Distancia). bperez-cabello@flog.uned.es

The aim of this paper is to present the *Diccionario sintáctico y semántico del español actual* ('A Semantic and Syntactic Dictionary of Present-Day Spanish'), provisionally termed DISSE, which has been conceived by the LEXICOM group (www.unirioja.es/lexicom) as a lexicographic work based on the principles of the Lexical Constructional Model (LCM henceforth) (Mairal Usón & Ruiz de Mendoza 2006; Ruiz de Mendoza & Mairal Usón 2007, 2008). It aims to help fill a gap in the Spanish lexicographic tradition, i.e. a dictionary organized into coherent semantic classes together with a fine grained description of the morphosyntactic properties of all the different senses of each lexical entry. Its strength and novelty, thus, lie in the fact that it has been devised not only to DECODE but also to CODE meaning.

In this paper we will look at how DISSE is being compiled. The dictionary has an onomasiological layout whose entries are arranged in semantic classes. For each entry, a list of its different senses is worked out and the syntactic patterns of every sense singled out. This enables us to elaborate the definition of each sense more thoroughly. In order to arrive at those definitions, we look for the nuclear meaning shared by all the

senses, avoiding false polysemy and facilitating its use. The definitions also incorporate information about register, selection restrictions and most frequent collocations, all in a consistent way. However, the main objective of DISSE is to promote the semantic motivation of the syntactic complementation in the definition; in other words, the DISSE definitions are set out to explain the semantic regularities underlying the different syntactic complementation of each sense. For instance, in the 1st sense of the Spanish verb *considerar* ('consider'), the definition *valorando la posibilidad/necesidad de algo o llevar a cabo una acción* ('judging the possibility/necessity of something or to carry out an action) motivates the complementation with an infinitive clause.

Finally, since DISSE will be implemented into electronic format, it will allow us to incorporate powerful search tools to render the dictionary highly productive and user-friendly at the same time. It will also make it possible to implement the dictionary into work benches for automatic translation systems as well as other tools related to linguistic solutions. DISSE is addressed to students of Spanish as a foreign language, linguists, translators, and anybody interested in a dynamic use of the Spanish lexicon.

REFERENCES

Mairal Usón, R., and F. J. Ruiz de Mendoza. 2006. "Internal and external constraints in meaning construction: The lexicon grammar continuum." *Estudios de Filología Inglesa: Homenaje a la Dra. Asunción Alba Pelayo*. Eds. L. Alba Juez and T. Gibert. Madrid: UNED. Forthcoming.

Ruiz de Mendoza Ibáñez, F. J. and R. Mairal Usón. 2007. "Levels of semantic representation: Where lexicon and grammar meet." *Interlingüistica* (17): 26-47.

Ruiz de Mendoza Ibáñez, F. J. and Mairal Usón, R. 2008. "Challenging systems of lexical representation". *Journal of English Studies* 4. Forthcoming.

"Some reflections on the computational implementations of LCM templates"
Socorro BERNARDOS GALINDO (Universidad Politécnica de Madrid)
sbernardos@fi.upm.es

The relation between computer science and the Lexical Constructional Model (LCM henceforth) (Mairal Usón & Ruiz de Mendoza 2006; Mairal Usón & Faber 2007; Ruiz de Mendoza & Mairal Usón 2007, among others) is twofold. On the one hand, linguists and researchers in the LCM field can use computers to electronically store the lexical templates and the grammatical constructions they elaborate and, on the other hand, linguistic engineering can be benefited from that electronic warehouse to develop different kinds of applications.

With regard to the first point, computer technicians/scientists can develop editing tools that help the linguist to write and introduce the templates and constructions by, for example, presenting/displaying the alternatives/possible options depending on the context, the data that have already been introduced and the decisions that have already been made. These tools would also store these data and let the users manage them.

This storage is crucial to allow the management or any other computational use of the data, that is, it enables the second point. In order to be able to handle the stored information, this has to be as defined, structured and delimited as possible. Regarding this aspect, we have already been able to obtain a formalization of the templates that clearly describes which are their main components and the structure of each one. The kind of storage (database, knowledge base, ontology) is also very important: the more reusable it is, the better for our second purpose.

The possible (computer) applications that can benefit from the use of templates and constructions are so many that, in this paper, we will merely point out those that seem more relevant to us, namely, education/learning and Natural Language Processing (NLP) applications. Therefore, the aim of this work is to deal with (a) computer-aided learning of a language (lexicon and grammar) and (b) computer-aided learning of the LCM itself, as uses related to education/learning applications; and (c) syntactic and lexical ambiguity resolution and (d) (idiomatic) machine translation, as uses related to NLP applications.

REFERENCES

Mairal Usón, R. and P. Faber. 2007. "Lexical templates within a functional-cognitive theory of meaning". *Annual Review of Cognitive Linguistics* (5): 137-172.

Mairal Usón, R. and F. J. Ruiz de Mendoza. 2006. "Internal and external constraints in meaning construction: The lexicon grammar continuum." *Estudios de Filología Inglesa: Homenaje a la Dra. Asunción Alba Pelayo*. Eds. L. Alba Juez and T. Gibert. Madrid: UNED.

Ruiz de Mendoza Ibáñez, F. J. and R. Mairal Usón. 2007. "Levels of semantic representation: Where lexicon and grammar meet." *Interlingüistica* (17): 26-47.

"Word-formation in the Lexical Constructional Model: Affixal templates and derivational constructions"
Francisco J. CORTÉS RODRÍGUEZ (University of La Laguna). fcortes@ull.es

The Lexical Constructional Model (LCM; Ruiz de Mendoza & Mairal 2007) seeks to account for the interrelation of semantic and syntactic aspects in the construction of semantic structures. The LCM posits that the core semantic structure of a clause is the output of a lexical-constructional subsumption process which explains the integration of a lexical unit within a construction. LCM semantic representations or *templates* are highly formalized structures which integrate components from different sources: they consist of (i) logical structure descriptions based on the *Aktionsart* classification of predicates proposed by Van Valin (2005), and (ii) a semantic module which combines Mel'cuk's (1989) Lexical Functions and the semantic primitives proposed by the Natural Semantic Metalanguage (Goddard & Wierzbicka 2002). The LCM core grammar establishes two types of templates: *Lexical templates*, i.e. low level semantic representations of specific predicates, and C*onstructional templates* or higher-level (i.e. abstract) semantic representations of constructions.

My aim in this presentation is to further extend the LCM proposal of meaning construction to the realm of lexical creation. There are important parallelisms between the construction of the semantic content of a clausal structure and that of a derived word. In fact, the meaning of a derived lexical unit can also be explained by a subsumption process that involves three templates: an affixal template, a base word template and a derivational constructional template. There are two assumptions in this proposal: (a) affixes are lexical predicates, being different from other lexical units only in terms of their distributional features; (b) word-formation patterns (e.g. causative verb formation) are *constructions*, i.e. high-level semantic structures inferred from the common features of all its low-level lexical instantiations.

On most occasions, lexical-constructional subsumption in word-formation does not just involve combining the meaning of the lexical units within a given morphological construction. To the contrary, it is often the case that some semantic content is either lost or added. Consider, for instance, the difference between the causative-locative derivatives *encage* and *varnish*. The first builds a causative event

around a base noun which refers to the location entity in the structure, whereas the second derivative builds a similar event from a *locandum* entity. To account for such differences, it is necessary to posit a set of semantic redundancy rules that will mediate in the lexical-constructional subsumption processes. Furthermore, enriching the semantic component of lexical templates is also essential: my proposal is to do so by looking at Pustejovsky's (1995) generative lexicon and more in particular to its *qualia* theory, since the *qualia* features encoded in the lexical template of the base word can trigger many of the semantic parameters added by redundancy rules.

REFERENCES

Goddard, C. and A. Wierzbicka. 2002. *Meaning and Universal Grammar: Theory and empirical findings.* Amsterdam/Philadelphia: John Benjamins.

Mel'cuk, I. 1989. "Semantic primitives from the viewpoint of the Meaning-Text Linguistic Theory". *Quaderni di Semantica* 10 (1): 65–102.

Pustejovsky, J. 1995. *The Generative Lexicon*. Cambridge MA: The MIT Press.

Ruiz de Mendoza, F. J. and R. Mairal Usón. 2007. "High-level metaphor and metonymy in meaning construction". In *Aspects of Meaning Construction.* Radden, G, Köpcke, K. M., Berg, T. y Siemund, P. (eds.). Amsterdam/Philadelphia: John Benjamins; 33-51.

Van Valin, R.D. 2005. *Exploring the Syntax-Semantics Interface*. Cambridge: Cambridge University Press.

"The division of labour between lexical templates and constructional templates. A contrastive perspective"

Johan PEDERSEN (University of Copenhagen). jhp@hum.ku.dk

The Lexical Constructional Model (LCM) (Ruiz de Mendoza Ibáñez & Mairal in press) and similar frameworks, e.g. Construction Grammar (CXG) (Goldberg 1995), suggest that there are basically at least two ways that clausal core information is organized: in lexical templates, and in schematic constructional templates. In addition, clausal expressions are, according to other CXG-frameworks (Croft 2001), supposed to be built on language specific construction types.

This paper hypothesizes on the basis of contrastive data that languages may differ systematically regarding the level of constructional specificity at which the clausal core information is organized. English tends to organize principal clausal information in schematic constructional templates, leaving secondary information for lexical (verbal) specification. Spanish seems to organize it in verbal templates, leaving secondary information for schematically organized specification (see Pedersen: forthcoming).

I will argue that this hypothesis leads to a reinterpretation of Talmy's (2000) descriptive typology of macro-events. Particularly, it solves a serious flaw in Talmy's typology due to his exclusive focus on lexicalization patterns. Moreover, it explains characteristic differences in communicative expressions between English and Spanish. Mismatches between the semantics of the verb and the communicative meaning are very productive in English, opposed to Spanish that only allows them sporadically (Martínez Vázquez 2003).

An important insight provided by the construction grammar framework is that English tends to organize the basic clausal information in schematic argument structure constructions, and that this information is specified in lexical constructions, particularly by the verb:

(1)   **[**Peter **[**fought**]** his way out of the restaurant**]**

Schematic way-construction: [SUBJ$_i$ V POSS$_i$ *way* OBL] / 'X moves Y by creating a path'

Verbal construction: [fought] / 'means of motion'

In (1) none of the lexical items have *per se* a central role in the encoding of the basic meaning of the *way*-construction. In particular, the basic meaning of moving by creating a path is not predictable from the verb meaning. A schematic form, a *way*-construction, carries its characteristic meaning: 'the subject moves somewhere by creating a path', which cannot be derived from its lexical constituents. The verb specifies the means of this motion event. Spanish differs systematically from English in this respect:

(2) Pedro se **[abrió]** camino (**[**a codazos**]**) para salir del restaurante

for himself opened a way by using elbows to get out of the restaurant

Verbal construction: [SUBJ, DAT, **abrir,** OBJ, ADV] **/ '**X moves Y by creating a path'

Schematic adverbial construction: [ADV construction] / 'means of motion'

In the Spanish version, the basic meaning of moving by creating a path is always predictable from the inherent meaning and argument structure of the verb: **abrir**se camino para…'open for himself a way in order to move somewhere'/ **hacer**se camino para… 'make for himself a way in order to move somewhere'. The means of motion may be added as a specifying adverbial construction (*a codazos*).

Example (2) suggests that Spanish, opposed to English, organizes the 'moving by creating a path'- expression lexically by the verb, by means of its syntactic and semantic valence structure, while supplementary information may be provided by means of an added schematic (adverbial) construction.

REFERENCES

Croft, W. 2001. *Radical Construction Grammar*. Oxford: Oxford University Press.

Goldberg, A. E. 1995. *Constructions. A construction grammar approach to argument structure*. University of Chicago Press, Chicago.

Martínez Vázquez, M. (ed.). 2003. *Gramática de Construcciones. Contrastes entre el inglés y el español*. Universidad de Huelva.

Pedersen, J. (forthcoming). "Lexical and constructional organization of argument structure. Typological differences." In Jordan Zlatev, Marlene Johansson Falck, Carita Lundmark & Mats Andrén, *Studies in Language and Cognition*. Cambridge: Cambridge Scholars Publishing.

Ruiz de Mendoza Ibáñez, F. J. & Mairal Usón, R. 2008. "Levels of description and constraining factors in meaning construction: an introduction to the Lexical Constructional Model". *Folia Linguistica*; in press.

Talmy, L. 2000. *Toward a cognitive semantics*. Vol.1 and 2. MIT Press, MA Cambridge.

"Semantic contrasts and internal constraints in lexical templates of perception verbs in English"

Ignasi NAVARRO I FERRANDO (Universitat Jaume I). ignasi.navarro@ang.uji.es

This paper aims at investigating the nature of semantic contrasts in lexical templates for English verbs of visual and aural perception – for example, "see", "look", "observe", "gaze", "watch", "spot", "sight", "peep", "peer"; "hear", "listen", "overhear", "eavesdrop", "listen in", "hear out", "attend" (i.e. pay attention), "heed" – within the Lexical Constructional Model (LCM; Faber & Mairal Usón 1999; Ruiz de Mendoza & Mairal Usón 2006; Mairal Usón & Ruiz de Mendoza 2007). In the LCM,

lexemes are organized into a hierarchy of domains and subdomains. Thus, the visual perception domain is dominated by a general verb like "see" – **see'** (x,y) –, defined as a primitive, which is subsumed by more specific subdomain verbs, like "look" – [INTENT, CONT] **see'**(x,y) – which is in turn subsumed by "watch" – [MANN$_{(close/attentive)}$ & INTENT, CONT^{lng}] **see'**(x,y).

Lexical entries for verbs are subject to both internal constraints (meta-linguistic units encoded in a lexical representation, as illustrated in the lexical templates above) and external constraints (higher conceptual and cognitive mechanisms like metaphorical and metonymic mappings) as for subsumption with constructions in order to produce semantic interpretations. Crucial to our purposes here is positing a number of trial tests in order to determine how these constraints, particularly internal constraints, characterise the subsumption process, while also accounting for the feasibility of actual expressions in the particular languages under scrutiny – in our case English. For instance, examples like "I've been seeing you", with the verb 'see' in the progressive form need the addition of a constraint to the basic lexical template of that verb. However, other perception verbs are not used in the same constructions as the verb 'see', and our purpose is to unveil the constraints that determine such differences in subsumption processes. With that purpose we look at sets of occurrences of a series of perception verbs in the BNC and identify the particular constructions they appear in. In a second phase, the lexical templates of such verbs are checked in relation to the constructional templates of the constructions found. This analysis should allow for hypothesis about the type of constraint needed for making subsumption possible in such cases.

REFERENCES

Faber, P. & R. Mairal Usón. (1999) *Constructing a Lexicon of English Verbs*, Berlin/New York, Mouton de Gruyter

Ruiz de Mendoza, F. J. & R. Mairal Usón (2006) "Levels of semantic representation: where lexicon and grammar meet", *Revista Interlingüística*, 17: 26-47.

Mairal Usón, R. & F. J. Ruiz de Mendoza (2007) "Challenging Systems of Lexical Representation" *Journal of English Studies* 4, University of La Rioja. Forthcoming.

'The notion of interval applied to nautical verbs of movement'

Carlos SEGADE (Centro Universitario Villanueva, Universidad Complutense de Madrid). csegade@villanueva.edu

The notion of interval, as developed by Guest and Mairal (2005) within the boundaries of the Role and Reference Grammar (RRG; Van Valin and LaPolla 1997, Van Valin 2005) may offer several possibilities of application at the time of designing lexical entries for ontologies following both the principles of the Lexematic Functional Model (Faber and Mairal 1999) and RRG.

The contribution of some of the principles of the fuzzy logic to computational linguistics (Guest and Mairal 2005) has improved the descriptive potential of RRG by introducing new metalinguistic features. The description of the semantic charge of a lexeme achieves a high degree of exactness that exceeds the limits of the RRG lexical templates, even though the lexemes belong to terminological subdomains. Despite the fact that RRG shows a wide reliability, the notion of interval helps diminishing the descriptive ambiguity found in the cognitive description of terms.

In order to have a clear view of how intervals are applied, we will first show how new definitions of nautical terms are made up through a lexicological analysis of entries of general and specialised dictionaries. After that, we will develop lexical

templates following the logical structures of RRG on the basis of the terms previously defined. However, and in spite of the fact that lexical templates get along enough information to complete the requirements of an ontology, the codification of attributes for the verbs of movement demands a certain kind of flexibility in order that the disjunction (+) / (-), referred to the existence of a quality in a term, is surpassed. Fuzzy sets, however, convey that flexibility more accurately. The immediate advantage of the fuzzy sets is that they can be expressed through operators apt to be included in the attribute fields of an ontology. It can be demonstrated that the use of intervals can be decisive to define hyponyms and hypernyms in a subdomain.

We are offering a selection of examples and a general overview of the various linguistic theories that support both the analysis and definition of the terms and their application to the ontology.

REFERENCES

Faber, P. and Mairal Usón, R. 1999. *Constructing a Lexicon of English Verbs*. Functional Grammar Series 23. Berlin/New York: Mouton de Gruyter.

Guest, E. and Mairal, R. 2005. *Lexical Representation based on a Universal Semantic Metalanguage*. Revista Electrónica de Lingüística Aplicada, nº 4: 125-173. [Available at: http://dialnet.unirioja.es/servlet/articulo?codigo=1426954]

Segade, C. 2006. *Enfoque Lexicológico-Funcional de la Terminología Verbal Náutica Inglesa*. Unpublished Ph.D. dissertation: UNED.

Van Valin, R.D. and R. J. LaPolla. 1997. *Syntax: Structure, Meaning and Function*. Cambridge (UK): Cambridge University Press.

Van Valin, R.D. 2005. *A Summary of Role and Reference Grammar*. [Available at: http://linguistics.buffalo.edu/research/rrg/RRGsummary.pdf].