

THE ROLE OF CONTEXT IN THE INTERPRETATION OF ACADEMIC AND PROFESSIONAL COMMUNICATION

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ABSTRACT. This paper deals with the main elements that form part of academic and professional communication, namely the role of context, the conception of communication itself, the discursive academic strategies and conventions, and other notions such as background knowledge or common shared knowledge. In the first section, we focus our attention on the relationship between the context in which the text unfolds and its typology, i.e. the social environment and the functional organisation of language. Next, the role of context in cognition is highlighted, to continue with the interaction of participants in the act of communication and the analysis of the relationship between communicative intention, strategies and interpretation. Finally, we present various applications of linguistic context with the cognitive interface.

KEY WORDS: Language context; Cognitive linguistics; Sociolinguistics; Genre analysis; Discourse analysis.

1. INTRODUCTION

The special role that language has taken on in the ever evolving knowledge society has increased the interest of linguists in the study of contextual aspects of language use. This is probably one of the reasons why languages for specific purposes (LSP) theorists and practitioners have recently turned to the analysis of specific contextual aspects of communication within the various academic and professional realms.

From the last decades, much of the theoretical interest in academic literacy, according to Johns (2002), has taken a contextual approach in which the writer is viewed as a social being, and texts are viewed as communicative events. Genre theory, for example, has considered the discourse communities, their communicative purpose, and the pragmatic and socio-linguistic conventions of genres the determinant elements of language use within the academic context (Swales, 1990). And, more recently, taking

into account the effects of globalisation and the network society, Swales (2004) defends the need for all researchers to know the socially accepted conventions of academic and research writing in order to be effective communicators.

There are several elements encompassed within the concept of ‘context’ that condition discourse and its textual manifestations, such as situation, interpersonal factors, participants, and appropriateness. According to Downing and Locke (1992: 3), context does not only refer to the extra-linguistic reality that exists in the real world, but rather to the way it is conceptualised by the speaker and, similarly, it can also be added, to how it is interpreted by the hearer. Hence, context can also be viewed as a mental construct that influences communication. In addition, Hymes’ (1972) idea of communicative competence goes further than just grammatical knowledge and includes psychological and socio-linguistic factors that address the fact that communication takes place in a context. We can, therefore, say that communication is a social event that is included in a context, and that the context, taken in its wider sense, becomes a fundamental element in the interpretation of information, specially with reference to specific academic and professional contexts (Durán, Aguado and Roldán, 2005).

Likewise, Eckert (2004: 44) refers to the notion of “the community of practice”, stating that: “is a prime locus of stylistic construction. Every speaker participates in a variety of communities of practice, or collections of people who engage together in a particular enterprise – a garage band, a family, a gang, a car pool, an office. This is also known as the shared members’ knowledge that people experience in the various environments (loci) that conform everyday life. Thus, referring only to the linguistic context turns out to be insufficient. The purpose of this paper is to highlight the main elements that form part of academic and professional communication, namely the role of context in cognition, the conception of communication itself, the participants, the strategies and conventions of academic discourse leading to interpretation, and other notions such as background knowledge or common shared knowledge. Moreover, various examples of application of linguistic context to the cognition interface are examined in the last section. We will begin by analysing the relationship between text and context both at the level of register and at the level of genre.

2. CONTEXT, TEXT TYPE AND GENRE

The early approaches to ESP studies focused mostly on discourse features rather than on deeper contextual discourse patterns. They were based on the belief that scientific text was driven by rhetorical functions like ‘description’, ‘definition’, and ‘argumentation’, which are fundamentally text-oriented (Trimble, 1985). They highlighted the surface features of special purpose languages by focusing mainly on the linguistic aspects of text (i.e. discourse analysis as description) rather than on the explanation of the reasons “why members of a specialist community write the way they do” (i.e. discourse analysis as explanation) (Bhatia, 1993: 1). Thus, the understanding of linguistic genres shifts the emphasis towards the importance of the discourse community and communicative intention, and text-type conventions related to particular ‘communicative events’ (Swales, 1990). However, the determining relationship between the social environment and language use was not new. In the late 1970s, Michael Halliday (in Halliday and Hasan, 1985) affirmed that there is a connection between social context and text meanings, but ESP theory had not merged yet with the then prevalent trends in applied linguistics, for historical reasons, as later interdisciplinary work did and still does today. Halliday pointed out that

The context of situation, the context in which the text unfolds, is encapsulated in the text, not in a kind of piecemeal fashion, not at the other extreme in any mechanical way, but through a systematic relationship between the social environment on the one hand, and the functional organization of language on the other. If we treat both text and context as semiotic phenomena, as modes of meaning, so to speak, we can get from one to the other in a revealing way (Halliday and Hasan, 1985: 11-12).

Thus, we can say that it is generally accepted that discourse is socially situated and also designed to achieve certain rhetorical goals, and that context has to do with the events that are going on when people speak and write (Halliday, 1991:5). Moreover, within the languages for academic purposes (LAP) tradition, a close relationship between purpose and text structure has been recognised and the rhetorical and linguistic features of various types of academic writing have been studied. These recent discussions of text types and genre have also paid special attention to the complex interplay between texts and their social contexts (Freedman and Medway, 1994), as we are going to argue.

Traditionally, text linguists have taken into account contextual aspects of language, but the analysis of context can also be approached from other complementary

perspectives, such as the socio-pragmatic approach of genre analysis. A text is generally understood as functioning in a context, where it may be said to operate at two levels: at the level of register (where field, tenor and mode determine the text), and at the level of genre. Considering oral and written texts from a discursual approach, academic context refers not only to a physical place, or a particular publication, “but to all of the nonlinguistic and nontextual elements that contribute to the situation in which reading and writing are accomplished” (Johns, 1997:27).

Considering the changing notions of genre in ESP, according to Samraj (2002: 163-165), there has been a shift in the view of context from merely rhetorical to a broader conceptualisation including both rhetorical situation and context of situation. Rhetorical situation includes purpose, audience and occasion, and context of situation refers both to socio-cultural environment and to pragmatic aspects of context. In this last sense, contexts can be viewed as “socio-cultural conventions from which the online pragmatic processing of language takes its bearings, but they do not determine what course it takes” (Widdowson, 2004:54).

Furthermore, studies on academic discourse have traditionally related textual features to broader facets of the context, such as academic institution, discipline, concrete tasks, and student background. Samraj calls these ‘layers of context’ (2002: 165). As academic and professional environments develop and change, new situations and approaches to language use will be developed. Texts are shaped by the conventions of a discipline and, subsequently, such texts influence other coming texts. Therefore, the idea of ‘shared knowledge’, present in any coherent communication, goes beyond the traditional concept of ‘discourse community’ to encompass many other situational variables, such as academic acts and different professional environments, that are being studied by researchers. Thus, the acquisition of communicative skills in university that ESP proposes should be viewed both as an individually-oriented cognitive process and as an acquired response to the discourse conventions that arise from the way in which particular communities create and communicate knowledge according to situation. These conventions, encompassing all the surrounding circumstances of the communication act, will determine language use and its coherent and meaningful interpretation (Durán, 2004). Focusing our attention on the role of context in cognition will allow us to understand how factors determinant of special context affect the transmission of specialised knowledge.

3. THE ROLE OF CONTEXT IN COGNITION

We start from the idea that the study of cognition goes far beyond psychological and mental processing factors, since humans are social beings that need to interact in communication and to limit human experience to the analysis of individual minds would be utterly restrictive. Moreover, the literature on cognition that meshes social interaction with cultural, pragmatic and discursive matters appears to be in constant progression (Lakoff, 1987; Sweetser 1991; Edwards 1997; Fauconnier 1999; Fillmore and Atkins, 2000; White 2001; Úbeda 2003; Roldán 2004; Cuadrado 2004; Vass 2004; Van Dijk 2006). In this sense, Fauconnier argues:

Methods must extend to contextual aspects of language use and to non-linguistic cognition. This means studying full discourse, language in context, inferences actually drawn by participants in an exchange, applicable frames, implicit assumptions and construal... It is only in rich contexts that we see the full force of creative on-line meaning construction (Fauconnier, 1999: 1).



Figure 1. Activation of mental constructs

This broader view of cognition creates an adequate setting to handle the notion of context as mental constructs consciously and deliberately created by people, usually through social acquiescence that puts constraints on agents and actions. In a conference environment, for example, participants need to be aware of certain protocols imposed by the conference context that restrain their behaviour, e.g. they are not expected to sing or to dance when a presentation occurs and, instead, they are supposed to listen to speakers attentively or to ask questions when appropriate. This does not mean, however, that contexts are like outer containers where people behave in a certain way, but rather that depending on the context, we have the possibility of activating presupposed internalised knowledge accordingly. As a matter of fact, contexts seem to “represent relevant aspects of situation and society and directly interfere in the mental processes of discourse production and comprehension” (Van Dijk, 2006: 6). As a matter of fact, many can be

the correlations between contextual discourse and cognition or vice versa; Van Dijk enumerates the following:

(the) integration of a cognitive account in discourse analysis, for instance in order to be able to describe and explain such diverse discourse phenomena as anaphora, metaphors, topics, local and global coherence, abstract schemas, argumentation, speech acts, recipient design, intentions, cooperation, negotiation, and more in general the ‘unobservable’ properties of meaning and interaction (Van Dijk, 2006: 3).

Thus, in order to understand the ‘unobservable properties of meaning and interaction’ better, we will next focus on the interlocutors involved in the act of communication and their interaction.

4. THE PARTICIPANTS

From a socio-cognitive viewpoint, we may say that the main objective of language is communication and that any communicative act entails participants -speaker and hearer, writer and reader- that need to share at least part of common knowledge as well as some presupposed implicit knowledge. These participants are involved in a social verbal exchange in which various components can be identified: the mental constructs, the interaction between the participants and the circumstances surrounding the communication act. The mental constructs consist of schematic structures stored in our minds and available to be activated according to the context or situation.



Figure 2. Some constructs need to be shared for communication

In addition, the participants of the communicative act are inserted in a physical ‘here and now’ space that must be considered too. Thus, the temporal and spatial context is closely related to the idea of ‘expectedness’ seemingly connected with the

mental knowledge associated with it, i.e., context activates specific mental constructs and influences communication. As seen above in the conference example provided, the degree of 'expectedness' of the messages delivered has to do with the appropriateness of the communication in that specific context, as well as with the communicative strategies selected by the participants (Roldán 2004: 38-40). Both aspects form part of the interaction that exists between the speaker/ writer and the hearer/ reader, who can choose from a number of discourse strategies that can be conscious or unconscious, depending on their degree of intentionality. In this sense, Van Dijk (2006) adds that contexts not only explain what people say, but also *how* they say it, implying that lexical choice, syntax, and many other properties of the 'formal' style' are present, as we shall see in the next section.

5. COMMUNICATIVE INTENTION, STRATEGIES AND INTERPRETATION

In the academic context, language use can perform various functions such as informative, expressive or directive, among others. The informative function, i.e. the description of phenomena or facts of the world appears to prevail within the academic scientific context, although in general linguistic communication, an intersection of various functions tends to occur, including the academic case. Similarly, even though the language of science tends to be impersonal, it may contain value judgements which connote demonstrations, criticism and agreement, with traces of hidden emotions, admiration, or irony. We can also detect an effort to create empathy between reader and writer by means of opinion and information sharing on the subject. Obviously, in academic communication, both spoken and written forms of language co-exist and, consequently, the participants of communicative acts can choose from several different areas of language which include modality, intonation and attitudinal lexical elements that are also dependent upon contextual factors.

Let us consider some discourse strategies that clearly reflect intention. The organisation of message, for example, that includes the focus of information –given (theme) and new (rheme) information-, responds both to thematic progression (beginning or end of the sentence) and to cognitive and meta-cognitive (e.g. background knowledge) strategies. Other typical features of scientific English, like the use of modality for the expression of attitude, or assigning focus through the active-passive

alternative, are communicative strategies at the disposal of the scientific community. These discourse strategies can be conscious or unconscious and can be studied both at linguistic and metalinguistic levels. At the same time, these strategies are applied to affect somehow the interpretation made by the recipient of the communication. Interpretation is thus another important part of the academic or any other type of communicative event. Croft and Cruse point out how different it can be to find an isolated linguistic item or to find the same linguistic item in context when interpreting it. As they put it: it is “similar to our recognition of a familiar face” (Croft and Cruse 2004: 99). The interpretation of expressions trigger our past and present knowledge as well as all the possible clues we can get from the moment and circumstances where the expression is being uttered. Thus, the interpretation of “There is a crane in the park” may greatly differ depending on situational and contextual information, i. e. as a type of bird or as a building device. Consequently, there are a number of factors (mentioned in Croft and Cruse 2004: 102-103), that can constrain the interpretation of an utterance notwithstanding the strategy being used, which are developed in figure 3.

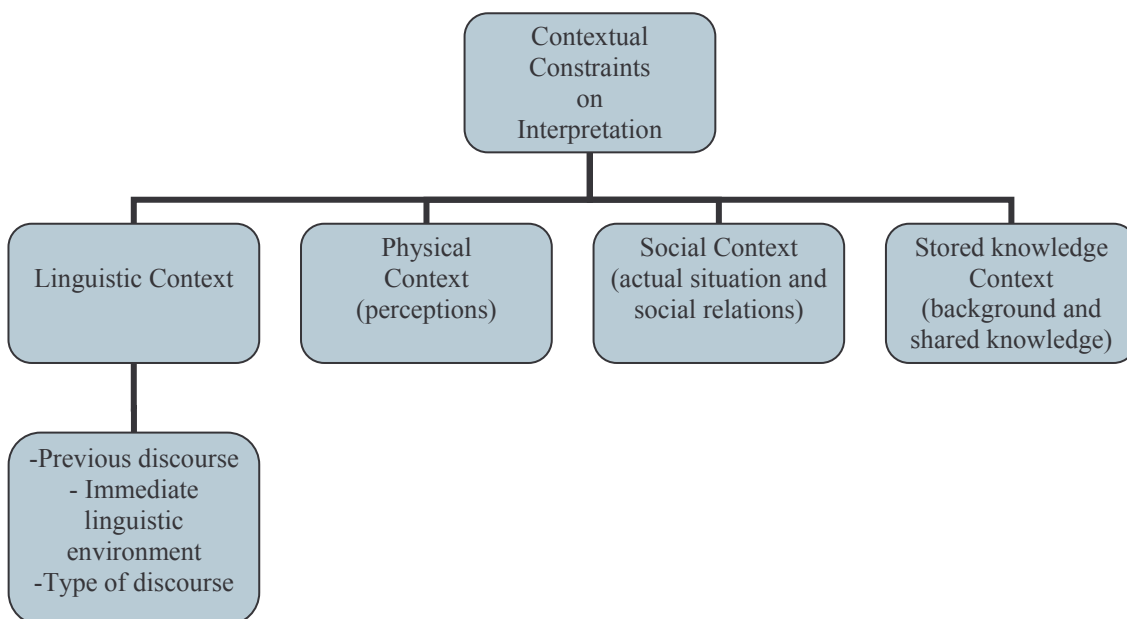


Figure 3. Constraints on interpretation as imposed by context

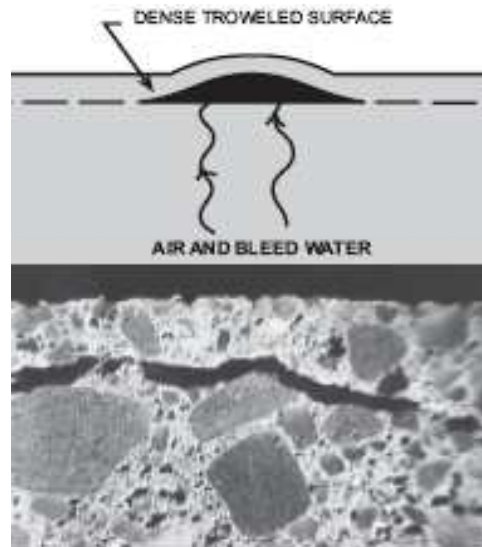
The linguistic context can influence communication, taking into account what was said before (previous discourse), the actual linguistic environment where the expression is uttered, and also the type of discourse, i.e. the type of genre; the type of register typology (formal or informal); and the field of discourse (medical, economic,

engineering, etc.). What the participants in the communicative event can perceive through their senses (see, hear, smell) is considered as the physical context. Similarly, the social context that includes what is happening in the situation itself and the social relations between participants makes another constraint. Last but not least, the previous knowledge context that the participants have or share may influence how the expressed utterance is understood.

6. APPLICATIONS OF CONTEXT AND COGNITION INTERFACE

The usual way to obtain contextualised linguistic samples is by gathering corpora of spoken or written forms. Despite the variety of corpora and of criteria for obtaining them, they are generally required to be representative and to have a finite size that can be used in software, with some exceptions, like the Cobuild project, where data are constantly incorporated and therefore there is not a limited number of data. Lately, the application of a corpus-based approach to cognitive features like conceptual metaphor and metonymy has provided research results on the interface between context and cognition, as proved by the current existence of metaphor and metonymy data banks on the Internet (quoted in the web references). Deignan (2005), in an enlightening recent book on corpus linguistics and metaphor, presents the potential of this approach from different angles, for example to identify linguistic clusters by analysing samples of metaphor and collocation.

A further example in engineering and scientific discourse, from a cognitive linguistics perspective, is the recurrence of polysemy as a phenomenon responding to specific metaphorical mappings. As can be seen in the case of “bleed” below (fig.4), contextual clues help to disambiguate this concept in the discourse community of civil engineering.



Blisters may form on the surface of fresh concrete when either bubbles of entrapped air or bleed water migrate through the concrete and become trapped under the surface, which has been sealed prematurely during the finishing operations. These defects are not easily repaired after concrete hardens.

Figure 4. Contextual disambiguation of “bleed”

Likewise, when categories like “fracture, fatigue, stress, bleeding, and pathology” are used in this engineering field, the mapping STRUCTURES ARE HUMAN is being activated. Hence human characteristics from the source domain are projected onto the target (engineering structures) domain. This projection from a source domain onto the target domain (usually from the concrete to the abstract) is a thoroughly accepted convention of engineering language governing language use. There is no ambiguity, since senses can be easily elucidated through context as well as through resorting to background knowledge. This mechanism can also occur in other disciplines, as has been shown in business English (White, 2001) and in colloquial English (Nerlich, 2002).

Another category frequently presented in metaphor literature is “virus” (Fauconnier, 1997: 21). Originally borrowed from biology by computer science, its use has now become so widespread in computer science in different languages that a whole battery of novel categories related to virus has appeared. Examples of this are “immunity, disinfectant, quarantine, anti-virus, vaccine”, etc., which have emerged forming new mappings based on previous ones. Although “virus” is used in different disciplines with its own characteristic sense, they all share the basic schema of “intruder that is doing some type of harm”. This latter sense constitutes precisely the mapped meaning being projected in different contexts.

Depending on the case, the process of categories acquiring new senses in science and technology language can take place either by extension or by shrinking (specialization) of meaning (Ungerer and Schmid, 1996). Cross-linguistic analysis of polysemous engineering categories in English and Spanish may point out additional issues. As shown in figure 4, whereas “to bleed” is the category used in English meaning ‘loss of water in concrete and cement’, in Spanish “*sudar*” (to sweat) is used. Both categories are polysemous, both started from metaphorical mappings highlighting “losing liquid”; however, a different mapping appears in each language. It is in cross-linguistic analysis that different cultural and historical factors are more noteworthy. If following a cognitive stance, we admit that conceptual and, hence, linguistic categories are primarily empirical, i.e. based on our world knowledge, experience and perception, then the function of context becomes crucial.

Consequently, LSP tertiary education researchers and teachers need to be aware of all cognitive, sociolinguistic, pragmatic, and semantic aspects of language use in academic and professional settings. This involves getting into the essence of communication and understanding how specialised knowledge is represented in different disciplines and contexts. It also entails becoming familiar with the strategies needed for organising texts, with the social contexts and environments in which language manifestations take place, with the discourse community that shapes them, and with how previous experiences and knowledge filter perceptions and influence linguistic communication.

7. CONCLUSION

In this paper we have focused on the main elements that take part in the interpretation of academic and professional communication, namely the role of context in cognition, the conception of communication itself, the participants involved, the academic discourse strategies and conventions leading to contextual interpretation, as well as notions such as background knowledge or common shared knowledge. In the last section, cases of polysemous categories and the growing use of contextual corpora are dealt with as examples of applications of context and cognition interface. We began by recalling the existing relation between the context in which the text unfolds and its

characteristics, that is, the relationship between the social environment and the functional organisation of language, to show how present research on genre is focusing on the successive contextual layers that determine texts. We also focused our attention on the role of context in cognition and on the interaction of participants in the act of communication, which represent a new perspective in cognitive linguistics research.

We hope that by highlighting the communication intention, the discourse strategies and the contextual interpretation that are involved in any particular exchange of information, we have contributed to raising contextual awareness both in text and genre analysis and in the interpretation of special academic and professional information..

WORKS CITED

- Bhatia, Vijay 1993: *Analysing Genre. Language Use in Professional Settings*. London: Longman.
- Croft, W. & A. Cruse 2004: *Cognitive Linguistics*. Cambridge: Cambridge University Press.
- Cuadrado, Georgina 2004. "Metáfora, ciencia y cultura: Propuesta de una nueva tipología para el análisis de la metáfora científica", *IBÉRICA* 7: 53-70.
- Deignan, Alice 2005: *Metaphor and Corpus Linguistics*. Amsterdam: John Benjamins.
- Downing, Angela & Peter Locke 1992: *A University Course in English Grammar*. Hemel Hempstead: Prentice Hall.
- Durán, Pilar 2004: "Exploring Cognition Processes in Second Language Acquisition: the Case of Cognates and False-friends in EST", *IBÉRICA* 7: 87-106.
- Durán, Pilar, Guadalupe Aguado & Ana Roldán (Eds.) 2005: *Reflections on Language Use in the Academic Context*. Madrid: Fundación Conde Valle de Salazar, UPM.
- Eckert, Penelope 2004: "The Meaning of Style." *Texas Linguistics Forum*. Eds. Chiang Wai-Fong, Elaine Chun, Laura Mahalingappa, Siri Mehus. 11. 47: 41-52.
- Edwards, Derek 1997: *Discourse and Cognition*. London: Sage Publications.
- Fauconnier, Gilles 1997: *Mappings in Thought and Language*. Cambridge: Cambridge University Press.
- Fauconnier, Gilles 1999: "Methods and generalizations." *Cognitive Linguistics: Foundations, Scope, and Methodology*. Eds. T. Janssen & G. Redeker. Berlin: Mouton de Gruyter. 95-129 <http://cogweb.ucla.edu/Abstracts/Fauconnier_99.htm>.
- Fillmore, Charles & Susan Atkins 2000: "Describing polysemy: the case of crawl." *Polysemy: Linguistic and Computational Approaches*. Eds. Yael Ravin & Claudia Leacock . Oxford: Oxford University Press.

- Freedman, A. & P. Medway, 1994: *Genre and the New Rhetoric*. London: Taylor & Francis.
- Halliday, Michael 1991: "The Notion of 'Context' in Language Education." *Language Education: International Development*, Vietnam, pp. 4-26.
- Halliday, Michael. & R. Hasan 1985: *Language, Context and Text: Aspects of language in a social semiotic perspective*. Geelong, Victoria: Deakin University Press.
- Hymes, D. 1972: "On Communicative Competence". *Sociolinguistics*. Eds. J. Pride & J. Holmes. Harmondsworth: Penguin Books. 269-293.
- Johns, Anne M. 1997: *Text, Role and Context. Developing Academic Literacies*, New York: C.U.P.
- Johns, Ann M. (Ed.) 2002: *Genre in the Classroom*. New Jersey: Lawrence Earlbaum Associates.
- Lakoff. George 1987: *Women, Fire and Dangerous Things: What Categories Reveal about the Mind*. Chicago: University of Chicago Press.
- Nerlich, B. and D. Clarke 2002: "Contextual Competence: Its Growth, Use and Loss". *Studia Anglica Resoviensia: International English Studies Journal*. Ed. Grzegorz Kleparski. Rzeszów: Wydawnictwo Uniwersytetu Rzeszowskiego. No1/200: 269-293.
- Roldán Riejos, Ana 2004: "Strategic features of ESP from a socio-cognitive perspective" *Ibérica* 7: 33-51.
- Samraj, Betty 2002: "Texts and Contextual Layers: Academic Writing in Content Courses", Ed. Ann M. Johns *Genre in the Classroom. Multiple Perspectives*. London / New Jersey: Lawrence Erlbaum Associates, 163-178.
- Swales, John 1990: *Genre Analysis. English in Academic and Research Settings*. Cambridge: C.U.P.
- Swales, John 2004: *Research Genres: Explorations and Applications*. Cambridge: Cambridge University Press.
- Sweetser, Eve 1991: *From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure*. Cambridge: Cambridge University Press.
- Trimble, Louis 1985: *English for Science and Technology: A Discourse Approach*. Cambridge: Cambridge University Press.
- Úbeda, Paloma 2003: "Metaphor at Work: a Study of Metaphors Used by European Architects when Talking about their Projects", *IBÉRICA* 5: 35-48.
- Ungerer, F & H. Schmid 1996: *An Introduction to Cognitive Linguistics*. London: Longman.
- Van Dijk, Teun 2006: "Preliminary Draft of a Paper Published in "Discourse, Context and Cognition" *Discourse Studies*, 8 (1), 159-177.
- < <http://discourse-in-society.org/Discourse,%20context%20and%20cognition.htm> >
- Vass, Holly 2004: "Socio-cognitive Aspects of Hedging in two Legal Discourse Genres", *IBÉRICA* 7: 125-141.

White, Michael 2001: "Metaphor and Metonymy in Thought and Expression." *La investigación en lenguas aplicadas: enfoque multidisciplinar*. Eds. Guadalupe Aguado & Pilar Durán. Madrid: Fundación Gómez Pardo UPM, .47-64.

Widdowson, Henry G. 2004: *Text, Context, Pretext. Critical Issues in Discourse Analysis*, London: Blackwell.

Web References:

<<http://www.cs.bham.ac.uk/~jab/ATT-Meta/Databank/table.html>>

<<http://zakros.ucsd.edu/~trohrer/metaphor/metaphor.htm>>

<http://www.psyc.leeds.ac.uk/research/metaphor/info/index_b.htm>