CONTRASTIVE RHETORIC AND ESP: METATEXT IN SPANISH-ENGLISH MEDICAL TEXTS

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In 1966, Kaplan's article "Cultural Thought Patterns in Intercultural Education" laid the groundwork for what has become known as Contrastive Rhetoric (CR), a branch of linguistic study that points out the nature of linguistic differences among cultures, using discourse structures as the basis for research. Since Kaplan's article, several studies have focused on the analysis of the rhetorical differences between texts produced by writers with different cultural backgrounds. The research presented in this paper tries to explore the cultural differences between texts written in English by Spanish-speaking academics (non-native speakers) and by Anglo-American academics (native-speakers) with respect to the concept of *metatext* in research articles taken from medical journals. Our study is based on some previously published articles which compared English with other languages (Clyne 1987; Mauranen 1993; Valero Garcés 1996). The findings suggest that Spanish academics use less *metatext* than English writers, showing a greater tendency to implicitness in their writing.

INTRODUCTION

Recent trends in the study of written texts reflect a growing interest in the analysis of the different rhetorical and organizational patterns of languages in order to facilitate not only Second Language Teaching and Learning but also translation processes. The term Contrastive Rhetoric (CR) was first introduced by Kaplan in his pioneering article "Cultural Thought Patterns in Intercultural Communication"; the CR hypothesis¹ is based on the fact that different cultures prefer different

¹ Contrastive Rhetoric hypothesis lies on the more general Sapir-Whorf hypothesis of linguistic relativism (Kaplan 1972:1, 6-7) and tries to show that there is no universal rhetoric. However, this idea

"thought patterns" and that these differences manifest themselves as variations in discourse structure. To describe the perceived variation, Kaplan represented graphically typical paragraph structures by speakers of several languages: extensive parallel constructions in the Semitic group, an "indirect" approach to the topic in the Oriental group, and frequent digressions in Romance and Slavic groups². This research has been considered as the first major study that attempted to analyze how L1 cultures influence L2 writing: it was argued that L2 students writings, especially their paragraph organization, exhibited the students' L1 cultural thought patterns (Allaei & Connor 1990:22). In other words, rhetoric and writing style preferences are culturally embedded. According to Mauranen (1993) culture is even present in scientific exposition, i.e. in those linguistic areas where a universal character is generally assumed. Thus, cultural variation has to be taken into account even in areas where mastery of discourse conventions plays the most important role. If we assume this influence, new concepts like genre need to be explained since "rhetorical variation is to be expected not only between national cultures but also between disciplinary cultures" (Mauranen 1993:5).

Swales (1990:58) defines genre as follows:

A genre comprises a class of communicative events, the members of which share some set of communicative purposes. These purposes are recognized by the expert members of the parent discourse community, and thereby constitute the rationale for the genre. This rationale shapes the schematic structure of the discourse and influences and constraints choice of content and style. Communicative purpose is both a privileged criterion and one that operates to keep the scope of a genre as here conceived narrowly focused on comparable rhetorical action. In addition to purpose, exemplars of a genre exhibit various patterns of similarity in terms of structure, style, content and intended audience.

Thus, it seems fair to accept that academic writing can be considered as a *genre* because it constitutes a meaningful whole addressed to a recognisable community. As a consequence, it can be suggested that some features of academic discourse depend on *genre* and others are culture-driven³.

has generated a great deal of controversy; for example, Ying (2000, 2001) proposes that there is no connection between CR premises and Sapir-Whorf theories.

² However, after over thirty years of studies carried out in this field, there have been considerable reactions as to the qualification of Kaplan's position in CR (Reppen & Grabe 1993; Leki 1991; Connor 1996; Taylor & Tingguang 1991; Enkvist 1995; Severino 1993). It has been argued that CR research examines the product only, detaching it from and ignoring both the contrastive rhetorical context from which the L2 writers emerge and the process these writers may have gone through to produce a text, that ethnocentrism in the case of English-speaking researchers was evident and that the focus on expositive texts was abusive.

³ The first features help us to distinguish a research article (RA) from a recipe and the second ones reflect some national tendencies, adding a kind of cultural peculiarities to the text.

Since Kaplan's article, several studies have tried to demonstrate that language influences and is influenced by its culture. These studies have largely focused on texts written in English but there is a lack of experimental work on texts produced by writers whose mother tongue is other than English, even though they can be considered as expert writers and use this language as a vehicle of expression. Because of this reason, we have decided to make a comparison between texts written in English by non-native speakers (Spanish writers) and those produced by native-English speakers, considering the dominant position of this language in scientific publishing.

This article focuses on some patterns of text-level rhetoric which can be observed in scientific texts written by academics coming from different cultural backgrounds in order to explore whether the writing conventions of English and Spanish researchers are governed by cultural peculiarities or whether the rhetorical preferences observed in the texts are imposed by the requirements of the genre, as Moreno (1997), Taylor & Tingguang (1991) and Grabe (1987) pinned down in their articles. The following section reviews briefly the studies more relevant to the present discussion.

REVIEW OF THE LITERATURE

CR theories have been received enthusiastically by many researchers and a number of studies on cultural differences involving different languages are available. These studies fall into three main strands of research: studies investigating academic discourse, studies investigating certain linguistic and discursive patterns and studies based on the connection between Translation Studies (TS) and CR. Taking into account the nature of the present paper and in order to pin down other studies that have- sometimes partially, sometimes completely- dealt with the same type of linguistic-textual patterns as us, we will only focus on the studies belonging to the second group, and specially on those comparative studies which analyse the metatextual material of texts⁴.

In general, it can be assumed that there is a lack of comparative work on the use of metatext at global levels of discourse; most relevant studies analyse English language in comparison with other languages. Mauranen (1993) describes a contrastive textlinguistic study of rhetorical differences between texts written in English by Anglo-American academics and by Finnish academics in order to reflect the intercultural variation in the rhetorical preferences of writers. According to the findings, this author assumes that despite a relative universality of academic papers

⁴ A comprehensive review of studies which investigate academic discourse and those which stress the connection between TS and CR is provided by Álvarez (2004a; 2004b).

imposed by genre, there is an important degree of intercultural variation in the rhetorical patterns used by writers; Anglo-American writers use more metatext since they are more concerned with guiding and orienting the reader through the text than Finns. However, Finnish writers show a more negative kind of politeness and a greater tendency towards implicitness in their writing (Mauranen 1993:3).

Valero-Garcés (1996) follows Mauranen's (1993) framework of research and conceptual apparatus and makes a comparison between texts written in English by economists of Hispanic origin with corresponding texts written by native-English writers with respect to metatextual material. The results, although based in a small sample, show that both cultural groups manifest different rhetorical preferences: the Spanish-speaking writers use relatively little metatext for explicitly orienting the reader, favouring a more impersonal style of writing as well as a greater tendency towards implicitness.

Moreno (1997) also focuses on a comparative work between Spanish and English with respect to a micro-level feature of text rhetoric: the use of causal metatext in leading readers in the interpretation of cause-effect intersectional relations (CEISRs). To do so, she carries out an empirical contrastive analysis of RAs written in English and in Spanish on business and economics. The main purpose of her work is to explore whether the use of cause-effect metatext is more subject to the restrictions imposed by the RA genre or to the rhetorical conventions of each writing culture. According to the findings and in contrast to Mauranen (1993), she concludes that it is the writing conventions imposed by genre and not the peculiarities of Spanish and English writing cultures, that govern the rhetorical strategies preferred by writers to make CEISR explicit (Moreno 1997:161).

Buckland (1998) concentrates on the differences between Swedish and English with respect to metatextual elements in academic texts. The results obtained from this study led this researcher to suggest that native speakers of English often use devices to condition the reader's interpretation and that reader address through the text is considerably more frequent in the English texts as compared to the Swedish texts. In conclusion, the role of the reader assigned by the writers in both cultural systems is different; in Swedish culture more freedom is given to the reader since part of the information is not explicit. In English rhetoric, however, the reader is offered explicit guidelines through the text.

Other contrastive studies on RAs have shown that the differences in the use of some metatextual elements can vary depending not only on languages involved but also on disciplines. For example Pisanski (2004) presents a contrastive analysis focusing on the differences in the use of *previews and reviews* in English and Slovene RAs on mathematics and archaeology. The quantitative results of the analysis which are further examined statistically suggest that the number of occurrences of the studied categories in the sample of English RAs is larger than in

the sample of Slovene articles, although the difference in the use of *previews and reviews* is smaller between the two languages than between the two thematic areas. As we can see, most of the studies show that metatext is often used more frequently and more systematically in English than in other languages.

Next, we shall consider the development of a model of metatext which accounts for various levels of operation and then the data analysed in the present study.

DEFINING METATEXT

It is generally agreed that the concept of metatext⁵ involves several confusing elements and it is therefore difficult to define it in a precise and explicit fashion. However, most of the theories suggest that metatext comprises those elements in text which go beyond the propositional content.

Lautamatti (1978) defines this concept referring to it as one aspect of non-topical linguistic material. She explains that written discourse has mainly two levels of discourse: firstly, the topic material (basic material) which is the material related to the discourse topic, and secondly the non-topical material (secondary or metatextual material) which is separate and composed of different types. The main objective of non-topical metatextual material, according to Lautamatti, is "helping readers relate the content matter of the discourse to a larger framework of knowledge and help them understand the internal organization of the discourse" (Crismore 1989:67-68). In other words, metatextual elements can be explained as the linguistic material of text that does not add propositional content, but rather signals the presence of the author through the text.

Lautamatti's approach distinguishes five different types of non-topical material: *metatextual markers* (material used to comment on the discourse itself), *illocutionary markers* (material used to comment on and make explicit the illocutionary force of the statements concerned), *commentary markers* (material used to comment directly to readers), *modality markers* (material used to suggest or evaluate the value of the ideas explained) and *attitude markers* (material used to make explicit the author's own attitude toward the content of the text). This approach was taken as a starting point for other comprehensive models of metatext,

⁵ Some studies have used different terms to deal with this concept. Terms as metadiscourse, metatalk, gambits, signalling and non-topical material are frequently used. See Moreno (1999:163) and Crismore (1989:49-70) for a discussion. However, some researchers as Bunton (1999) point out that metatext is not equivalent to metadiscourse, since metadiscourse refers to a broader concept including interpersonal and textual elements, and metatext is a narrower term which only deals with textual elements (1999:44).

e.g. Williams (1981) and Vande Kopple (1985). The former explains metatext from a stylistic point of view:

Writing about writing whatever does not refer to the subject matter being addressed. This includes (a) all connecting devices (therefore, however, for example, in the first place); (b) all comments about the author's attitude (I believe, in my opinion, let me also point out); (c) all comments about the writer's confidence in his following assertion; (d) references to the audience (as you can see, you will find that, consider now the problem of...) (Williams 1981:212).

This researcher identified three broad categories of metatext, each of which is composed of two different elements: *hedges and emphatics*, which express the certainty with which an author presents information; *sequencers and topicalizers*, which guide a reader through a text and *attributors and narrators*, whose function is telling the reader where facts and opinions come from.

Vande Kopple (1985) presents a comprehensive approach to the concept of metatext, mainly based on functional criteria⁶. He states:

On one level we supply information about the subject of our text. On this level we expand propositional content. On the other level, the level of metadiscourse, we do not add propositional material but help our reader organize, classify, interpret, evaluate, and react to such material. Metadiscourse, therefore, is discourse about discourse or communication about communication. (1985:83).

This model is based on seven different categories of metatext which are summarized in Table 1.

⁶ The present study is based on Vande Kopple's model since it provides a comprehensive framework for the analysis of the texts in the corpus.

Categories of Metatext

- TEXT CONNECTIVES: help readers to recognize how texts are organized and guide them smoothly through the text.
 - Sequencers.
 - Logical and temporal connectives
 - Reminders of the material.
 - Announcements of the material
 - Topicalizers.
- CODE GLOSSES: help readers grasp and interpret the meaning of words, phrases and idioms or the particular senses of units.
- ILLOCUTION MARKERS: make explicit for readers what speech or discourse act is being performed at certain points in the text.
- VALIDITY MARKERS: assess the probability or truth of the propositional content and show the author's degree of commitment to that assessment.
- NARRATORS: let readers know who said or write something.
- ATTITUDE MARKERS: allow authors to reveal their attitude toward the propositional content.
- COMMENTARY: addresses readers directly, frequently in order to draw them into an implicit dialogue with the author.

Table 1. Categories of metatext defined by Vande Kopple (1985) and used in our study.

DEFINITION OF THE CORPUS

The corpus used in the present small-scale study is composed of three pairs of texts⁷. Each pair consists of a research article written in English by a native-English speaker and another one by a Spanish speaker. The criteria for selecting the articles are as follows:

Discipline: the field of virology was chosen.

Journal: all the articles were taken from the same magazine (*Journal of Medical Virology*); this is a specialized medical magazine addressed to experts.

Year of publication: all the papers were published in 2000.

⁷ The six RAs which form our corpus are listed in the Appendix A.

Length of article: the papers which form the sample vary in length ranging from 2400 to 3700 words.

The main characteristics of the texts (number of pages, number of paragraphs and number of sentences and words) are given in Table 2^8 .

	E1	S!
Number of pages	6	5
Number of paragraphs	27	17
Number of sentences	97	79
Number of words	2677	2424
	E2	S2
Number of pages	6	4
Number of paragraphs	24	14
Number of sentences	103	89
Number of words	2907	2547
	E3	S3
Number of pages	8	6
Number of paragraphs	36	34
Number of sentences	148	107
Number of words	3610	3135

Table 2. Main characteristics of the texts which form our corpus.

 $^{^{8}}$ Texts named "E" correspond to those produced by native English speakers and those named "S" to the texts written by Spanish academics.

COMPARATIVE ANALYSIS: METATEXTUAL MATERIAL IN TEXTS

Vande Kopple's (1985) categories of metatext were taken as a starting point for the analysis of the texts. In terms of analyzing how the writer guides the reader through the text his category of *text connectives* was found to be particularly useful.

All occurrences of metatext were counted and analysed in the three pairs of texts in order to confirm or refute the findings obtained in previous studies (Mauranen 1993; Valero-Garcés 1996), i.e. the metatextual differences between texts written by academics with different cultural backgrounds. The number of sentences that contained metatextual material was also compared to the number of sentences in the text in order to have a general idea about the metatext/text ratio.

RESULTS

TEXT CONNECTIVES

When considering this category of metatext, we can see from the selected data that in most cases the native-English writers use a slightly higher percentage of *connectives*. As may be seen in Table 3, a considerable number of occurrences of *logical* and *temporal connectives* can be found in both kinds of texts. The analysis of the data also reveals that the frequency of appearance of *reminders* and *announcements of the material* is higher in the texts written by native-English speakers than in those produced by Spanish writers. As far as *topicalizers* are concerned, the study suggests that this subtype of metatext is not frequently used in texts, i.e. writers of academic papers prefer other devices to connect the information through the text. Table 3 illustrates the metatextual differences between the three pairs of texts with respect to *text connectives*.

CODE GLOSSES

The two subcorpora show the same tendencies with respect to this metatextual element (no occurrences have been found). In other words, the present comparison has not managed to demonstrate that the writing culture is responsible for differences in this parameter. These results tend to suggest that at least in this metatextual element, it is the writing conventions of the RA genre that govern the writing process⁹.

⁹ RAs are addressed to experts so explanations and definitions of terms or phrases are not necessary.

E1			S1	
Text Connectives	N	%	N	%
Sequencers				
Logical and	2	2.06	9	11.3
temporal connectives	20	20.6	8	10.12
Reminders of the				
material	15	15.46	7	8.86
Announcements of	1	1.03	0	0
the material	1	1.03	1	1.26
Topicalizers	_	-1.02	-	-1
Total	39	40.20	25	31.64
E2			S2	
Text	N	%	N	%
Connectives	- 1	, •		, •
Sequencers	3	2.91	3	1.12
Logical and	9	8.73	9	10.11
temporal connectives	,	6.73	,	10.11
Reminders of the	16	15.53	7	7.86
material	10	9.7	3	3.37
Announcements of the material	2	1.94	2	2.24
Topicalizers				
Total	40	38.83	22	24.71
E3			S3	
Text Connectives	N	%	N	%
Sequencers	_	4.50	4.0	221
Logical and	7	4.72	10	9.34
temporal connectives	11	7.43	7	21.49
Reminders of	17	11.48	7	6.54
the material	11	7.43	0	0
Announcements of the material	1	0.67	3	2.8
Topicalizers				
Total	47	31.75	43	40.18

Table 3. Metatextual differences between the three pairs of texts with respect to *text connectives*. "N" represents the number of occurrences of the different metatextual categories and "%" the percentage per sentence.

ILLOCUTION MARKERS

The collected sample shows that the native-English texts use a higher percentage of *illocution markers* than Spanish writers. Detailed information is provided in Table 4.

E1			S1	
	N	%	N	%
Illocution markers	8	8.24	6	7.59
E2			S2	
	N	%	N	%
Illocution markers	13	12.62	9	10.11
E3			S3	
	N	%	N	%
Illocution markers	25	16.89	13	12.14

Table 4. Metatextual differences with respect to *Illocution markers*.

VALIDITY MARKERS

As may be inferred, the frequency of appearance of *validity markers* in our corpus, i.e. those devices used to assess the truth of the propositional content, is higher in the texts written by native-English speakers. The results of the analysis are shown in Table 5.

E1			S1	
	N	º/o	N	%
Validity markers	16	16.49	6	7.59
E2			S2	
	N	%	N	%
Validity markers	18	17.47	3	3.37
E3			S3	
	\mathbf{N}	%	N	%
Validity markers	17	11.48	10	9.34

Table 5. Metatextual differences with respect to Validity markers.

NARRATORS

It seems that in the Spanish-English texts, *narrators* occur far more frequently than other metatextual catagories (Table 6). They let readers know who said or wrote something, very important information in RAs.

E1			S1	
	N	%	N	%
Narrators				
	32	32.98	13	16.45
E2			S3	
	N	%	N	%
Narrators				
	30	29.12	20	22.4
E3			S3	
	\mathbf{N}	%	N	%
Narrators				
	30	20.27	16	14.95

Table 6. Metatextual differences with respect to *Narrators*.

ATTITUDE MARKERS AND COMMENTARIES

The differences obtained in the comparison of these categories are not significant, indicating that there is some homogeneity in the unfrequency of appearance of *attitude markers* and *commentaries* in our corpus. These findings, however, were predictable since these metatextual categories are more frequently found in other text types.

The results of the analysis confirm that most of the selected metatextual elements occur far more frequently in the articles written by native-English speakers than in those written by Spanish academics, confirming previous studies like Mauranen's (1993) and Valero-Garcés (1996). Nevertheless, there were no significant results relating to *code glosses, attitude markers* and *commentaries* because of the requirements of the genre.

CONCLUDING REMARKS

On a general level, the results of this study lend further support the idea that native-English texts use more metatext than Spanish writers; in other words, both cultural groups manifest their presence in different ways through certain rhetorical preferences; native speakers of English use more often metatext in order to anticipate both information which is to follow and how text segments relate to each other. Guidance in reasoning is indicated, conditioning in some cases, the reader's interpretation.

However, it must be emphasised that our results may not be representative of English or Spanish academic writing in general, since a very limited sample of text was analysed. Nevertheless, they can serve as a starting point for further contrastive analysis of the uses of metatext.

The study also suggests that the genre peculiarities impose a relative uniformity in academic papers, although there is intercultural variation in the rhetorical preferences of writers.

From all the foregoing, it may be concluded that both cultures assign different roles to writer and reader in the communicative process, confirming previous studies as Hinds' (1987); in Spanish-speaking cultures the reader is not supposed to be guided through the text (reader responsible language); on the contrary, in English compositions the reader is offered explicit guidelines that makes the product easier to understand (writer responsible language).

These conclusions can be useful from a practical point of view as well, especially in *English for Academic Purposes* teaching for Spanish students, in academic writing itself and in translation processes.

REFERENCES

- Allaei, Sarah and Connor, Ulla. "Exploring the Dynamics of Cross-cultural Collaboration in Writing Classrooms." *The Writing Instructor* 10 (1) (1990): 19-28.
- Álvarez, Susana. "Retórica Contrastiva y Calidad de la Traducción: Los patrones organizativos de las Lenguas como Motor Principal del Proceso Traductor." *Actas de las IV Jornadas sobre la Formación y Profesión del Traductor e Intérprete*, 2004a (in press).
- Álvarez, Susana. "Retórica Contrastiva. El Concepto de Metatexto en los Artículos de Investigación en el Campo de la Medicina." *Actas del III Congreso Internacional de Traducción*, 2004b (in press).
- Bäcklund, Ingegerd. "Metatext in Professional Writing. A Contrastive Study of English, German and Swedish." *TEFA* 25 (1998): 1-42.

- Bunton, David. "The Use of Higher Level Metatext in PhD Theses." English for Specific Purposes 18 (1999): 41-56.
- Clyne, Michael. "Culture and Discourse Structure." Journal of Pragmatics 5 (1981): 61-66.
- Clyne, Michael. "Cultural Differences in the Organization of Academic Texts." *Journal of Pragmatics* 11 (1987): 211-247.
- Colina, Sonia. "Contrastive Rhetoric and Text-Typological Conventions in Translation Teaching." *Target* 9(2) (1997):335-353.
- Connor, Ulla and Kaplan, Robert, eds. Writing Across Languages: Analysis of L2 Text. Reading (Massachusetts): Addison Wesley Publishing Company, 1987.
- Connor, Ulla and Lauer, Janice. "Cross-Cultural Variation in Persuasive Student Writing." Writing across Languages and Cultures: Issues on Contrastive Rhetorics, Ed. Alan Purves. Newbury Park (California): Sage Publications, 1988.138-160.
- Connor, Ulla and McCagg, Peter. "A Contrastive Study of English Expository Prose Paraphrases". *Writing Across Languages: Analysis of L2 Text*. Eds. Ulla Connor and Robert Kaplan. Reading (Massachusetts): Addison Wesley Publishing Company, 1987. 73-87.
- Connor, Ulla. "Argumentative Patterns in Student Essays: Cross-Cultural Differences". *Writing Across Languages: Analysis of L2 Text*. Eds. Ulla Connor and Robert Kaplan. Reading (Massachusetts): Addison Wesley Publishing Company, 1987. 57-73.
- Connor, Ulla. "Methods of Research in Contrastive Rhetoric: Some Issues". *Organization in Discourse. Proceedings from the Turku Conference*. Eds. Brita Wårvik, Sanna-Kaisa Tanskanen et al. Turku (Finland): Anglicana Turkuensia, University of Turku, 1995. 15-29.
- Connor, Ulla. Contrastive Rhetoric: Cross-Cultural Aspects of Second-Language Writing. New York: Cambridge University Press, 1996.
- Connor, Ulla. "Variation in Rhetorical Moves in Grant Proposals of US Humanists and Scientists." Text 20(1) (2000): 1-28.
- Crismore, Avon. Talking with Readers: Metadiscourse as Rhetorical Act. Frankfurt: Peter Lang, 1989.
- Eggington, William. "Written Academic Discourse in Korean: Implications for Effective Communication". *Writing Across Languages: Analysis of L2 Text*. Eds. Ulla Connor and Robert Kaplan. Reading (Massachusetts): Addison Wesley Publishing Company, 1987. 153-169.
- Enkvist, Nils. "Discourse Organization, Crosscultural Rhetoric, and Translation". Organization in Discourse. Proceedings from the Turku Conference. Eds. Brita Wårvik, Sanna-Kaisa Tanskanen et al. Turku (Finland): Anglicana Turkuensia, University of Turku, 1995.41-59.
- Fernández, Francisco. *Traducción y Retórica Contrastiva: A Propósito de la Traducción de Textos de Divulgación Científica del Inglés al Español*. Santiago de Compostela: Servicio de Publicaciones de la Universidad de Santiago de Compostela, 1999.
- Grabe, William. "Contrastive Rhetoric and Text-Type Research." Writing Across Languages: Analysis of L2 Text .Eds. Ulla Connor and Robert Kaplan. Reading (Massachusetts): Addison Wesley Publishing Company, 1987. 115-139.
- Hinds, John. "Reader Versus Writer Responsability: a New Typology". Writing Across Languages: Analysis of L2 Text .Eds. Ulla Connor and Robert Kaplan. Reading (Massachusetts): Addison Wesley Publishing Company, 1987. 141-153.
- Kaplan, Robert. "Cultural Thought Patterns in Intercultural Education." Language Learning 16 (1966):1-20.
- Kaplan, Robert. *The anatomy of rhetoric: Prolegomena to a Functional Theory of Rhetoric.* Philadelphia: Center for Curriculum Development, 1972.

- Kaplan, Robert. "Cultural Thought patterns Revisited." Writing Across Languages: Analysis of L2 Text. Eds. Ulla Connor and Robert Kaplan. Reading (Massachusetts): Addison Wesley Publishing Company, 1987. 9-23.
- Kaplan, Robert. "Contrastive Rhetoric and Second Language Learning: Notes Toward a Theory of Contrastive Rhetoric". Writing across Languages and Cultures: Issues on Contrastive Rhetorics. Ed. Alan Purves. Newbury Park (California): Sage Publications, 1988. 275-305.
- Lautamatti, Liisa. "Observations on the Development of the Topic of Simplified Discourse." *Writing Across Languages: Analysis of L2 Text*. Eds. Ulla Connor and Robert Kaplan. Reading (Massachusetts): Addison Wesley Publishing Company, 1987. 87-115.
- Leki, Ilona. "Twenty-Five Years of Contrastive Rhetoric: Text Analysis and Writing Pedagogies." Tesol Quarterly 25(1) (1991):123-143.
- Lux, Paul and William Grabe. "Multivariate Approaches to Contrastive Rhetoric." *Lenguas Modernas* 18 (1991):133-160.
- Matsuda, Paul. "On the origin of Contrastive Rhetoric: a response to H.J. Ying." *International Journal of Applied Linguistics* 11(2) (2001): 257-60.
- Mauranen, Anna. "Contrastive ESP Rhetoric: Metatext in Finnish-English Economics Texts." English for Specific Purposes 12(1) (1993a): 3-22.
- Mauranen, Anna. Cultural Differences in Academic Rhetoric: A Textlinguistic Study. Frankfurt am Main: Peter Lang, 1993b.
- Montaño-Harmón, Rosario. "Discourse Features of Written Mexican Spanish: Current Research in Contrastive Rhetoric and its Implications." *Hispania*, 74 (1991): 417-425.
- Moreno, Ana Isabel. "Genre Constraints Across Languages: Causal Metatext in Spanish and English RAs." *English for Specific Purposes*, 16(3) (1997):161-179.
- Ostler, Shirley. "English in Parallels: A Comparison of English and Arabic Prose." *Writing Across Languages: Analysis of L2 Text*. Eds. Ulla Connor and Robert Kaplan. Reading (Massachusetts): Addison Wesley Publishing Company, 1987.169-186.
- Pisanski, Agnes. "Text-organizing Metatext in Research Articles: an English-Slovene Contrastive Analysis" *English for Specific Purposes*, 2004 (in press).
- Purves, Alan, ed. Writing across Languages and Cultures: Issues on Contrastive Rhetorics. Newbury Park (California): Sage Publications, 1988.
- Reppen, Randi and Grabe, William. "Spanish Transfer Effects in the English Writing of Elementary School Students." *Lenguas Modernas* 20 (1993):113-128.
- Swales, John. Genre Analysis: English in Academic and Research Settings. Cambridge University Press, 1990.
- Taylor, Gordon and Tingguang, Chin. "Linguistic, cultural and subcultural issues in Contrastive Discourse Analysis: Anglo-American and Chinese scientific texts." *Applied Linguistics* 12(3) (1991): 319-336.
- Valero-Garcés, Carmen. "Contrastive ESP Rhetoric: Metatext in Spanish-English Economics Texts." English for Specific Purposes 15(4) (1996): 279-294.
- Vande Kopple, William. "Some Exploratory Discourse on Metadiscourse." *College Composition and Communication* 36 (1985): 82-93.
- Williams, Joseph. "Literary Style: The Personal Voice." *Style and Variables in English.* Ed. Timothy Shopen, and Joseph Williams. Cambridge: Winthrop, 1981.116-216.

- Severino, Carol. "The "doodles" in context: Qualifying claims about contrastive rhetoric." *The Writing Center Journal* 14(1) (1993): 44-62.
- Ying, Huang. "The origin of Contrastive Rhetoric." International Journal of Applied Linguistics 10(2) (2000): 259-68.
- Ying, Huang. "On the origins of Contrastive Rhetoric: a reply to Matsuda." *International Journal of Applied Linguistics* 11(2) (2001): 261-66.

APPENDIX A. CORPUS

- A.1. RAs written by native-English Speakers.
- E1: End-Stage Liver Disease and Liver Transplantation: Role of Lamivudine Theraphy in Patients with Chronic Hepatitis B.
- E2: Further Evidence of the Absence of Measles Virus Genome Sequence in Full Thickness Intestinal Specimens from Patients with Crohn's Disease.
- E3: Epidemiology of Precore Mutants of Hepatitis B in the United Kingdom.
- A.2. RAs written by non-native-English Speakers.
- S1: Autoclaving Eliminates Hepatitis C Virus from a Hemodialysis Monitor Contaminated Artificially.
- S2: A Large Percentage of the Spanish Population under 30 Years of Age is not Protected against Hepatitis A.
- S3: Fluorescent "in situ" Hybridization of Hepatitis C Virus RNA in Peripheral Blood Mononuclear Cells from Patients with Chronic Hepatitis C.