Topical Structure Analysis of Academic Paragraphs in English and Spanish

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The present study examines 40 paragraphs selected from articles published in academic journals in English and Spanish from within the context of cultural differences in writing. Based on earlier findings by Lux and Grabe, Montaño-Harmon, Reid, and Reppen and Grabe, among others, that paragraphs composed in English and Spanish by children and adolescents are different, an analysis was conducted of 40 paragraphs written by adult academics and published in academic journals, focusing on the physical structure and the topical structure. The physical characteristics of the paragraphs included the number of words, sentences, and clauses. Results of this quantitative analysis reflect findings from earlier studies describing English–Spanish differences. The topical structure analysis (TSA), an analysis of coherence derived by examining the internal topical structure of each paragraph as reflected by the repetition of key words and phrases, provides insights into the organizational patterns favored by professional writers in these two languages. The results of the TSA show that English paragraphs tend to have a high use of internal coherence, while Spanish paragraphs do not generally tend to use immediate progression as a device for coherence.

INTRODUCTION

Over the past 30 years, linguistic research on writing, initiated by Kaplan's 1966 article about cultural thought patterns, has emphasized that culture influences writing. Kaplan's article opened the door to a type of study of written language that had not been seen before, and since its publication it has served as the starting point for many studies on culture and writing. Although he may have taken a culture-centric point of view in his descriptions of written patterns of languages, Kaplan did do one very important thing: He opened the field of study of contrastive rhetoric in such a way that today we know much more about how culture influences writing.

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The Whorfian hypothesis suggests that one's native language affects how that individual perceives the world. This perception, in turn, may influence how that individual will learn a second or foreign language. Hinkel (1994, p. 353) explains that "written texts represent a convergence of different stylistic, cultural, religious, ethical, and social notions, all of which comprise written discourse notions and frameworks." For example, in his original report, Kaplan (1966) described some essays written in English by speakers of other languages as indirect or as including many digressions, compared to the "ideal" model of English. He suggested that these differences were culturally induced. After receiving years of criticism, Kaplan (1987) suggested that we should not view writing styles of different languages as "indirect" or "interrupted" because this type of evaluation comes from a judgement based on our own cultural expectations of written texts, resulting in an unfair interpretation of the other language simply because it is different from our native language. Kaplan (p. 10) indicated that every individual considers written works in his or her own language to be "direct and uninterrupted in [their] flow of information." An example in Hinkel (1994) helps to illustrate. Hinkel (p. 354) reported that Chinese speakers reading English texts evaluated English discourse and argumentation as "'insufferably' redundant, cyclical, excessively detailed, forced, and unnecessary." These readers found the English texts to be substandard, based on their cultural expectations of written texts. Native English speakers would likely claim that those same texts were perfectly acceptable examples of English writing.

In order to discover more about differences of written texts from two languages, the present study is from within the field of contrastive text linguistics (as described by Connor, 1996) and is a comparative study of paragraphs written in Spanish and English. The genre of choice is academic writing, specifically articles published in academic journals in the humanities. The choice was made to study professional articles due to the fact that most of the research on Spanish (see below) has been conducted with high school or university students, or in other words, relatively inexperienced writers. The emphasis of this study has been to examine professional writing in its natural context. It is felt that the field of contrastive rhetoric can benefit from more studies of original productions in languages other than English, rather than texts generated in English by learners (also advocated by Péry-Woodley, 1990). Although using second language texts has been justified (Reppen & Grabe, 1993), it is obvious that a speaker of a different language producing texts in English will not use structures and rhetorical patterns that completely match his or her native language. Thus, it is advantageous to analyze native language productions.

This study is primarily about coherence, based on topical structure analysis (TSA) that looks for patterns in repeated key words and phrases (Lautamatti, 1987). Additionally, following models of earlier studies of Spanish–English contrastive rhetoric, there is an analysis of the physical characteristics of paragraphs.

CULTURAL INFLUENCES ON WRITING: STUDIES ABOUT SPANISH AND ENGLISH

Research in contrastive rhetoric in Spanish and English has resulted in a basic description of how these two languages are different. In English, for example, there is a long history of teaching people how to write, and that "direct" style has come to be associated with English-speaking cultures. English writers have been described as "much less interactional than those of other groups (Spanish)" (Lux & Grabe, 1991, p. 150), and they "appear to prefer a more reduced sentence style, as well as a more informationally oriented ... style" (p. 151). Montaño-Harmon (1991, p. 421) describes English writing as containing "logical relationships between one idea and the subsequent idea," frequently marked by the use of organizational words such as "first," "second," and "third."

Witte (1983), in describing compositions written in English by university students, explains that essays classified as "high-quality" were generally longer and were focused on fewer topics than the "low-quality" essays. By using a TSA, he found that the better essays had more topical cohesion in the form of repetition of topical subjects, while weaker essays did not include this type of topical repetition. This analysis of English texts illustrates what is considered to be "good" writing in English.

The early work on contrastive rhetoric of Spanish consisted of unpublished dissertations (Santiago, 1970, and Santana-Seda, 1970, cited by Connor, 1996). In the recent studies in Spanish–English contrastive rhetoric, the main focus has been on quantitative analyses of syntactic and lexical markers, with an eye towards enumerating physical differences. For example, Reid's dissertation (cited in Reid, 1990) looked at syntactic features of English, Arabic, Chinese, and Spanish university level students writing in English by studying essays from the Test of Written English from the TOEFL exam. Among other things, she found that writers of Spanish wrote significantly longer sentences, and she noted that the Spanish writers in her study used the same "elaborate style" that had been reported by the earlier unpublished dissertations. This "elaborate style" has been taken up by researchers who have followed Reid as one of the defining characteristics of Latin American Spanish (for example, Lux & Grabe, 1991; Montaño-Harmon, 1991; Reppen & Grabe, 1993). Elaborate style is usually defined in terms of the use of long sentences with many additive clauses as well as what Montaño-Harmon (1991, p. 423) refers to as "flowery, poetic language."

Montaño-Harmon (1991) reported on the writing of ninth graders in Mexico and the United States. The subjects from Mexico were native Spanish speakers who wrote in Spanish, while the subjects in the United States were from three groups, one group of Mexican ESL students, one group of Mexican American students, and one group of Anglo-American students, all of whom wrote in English. She found that in a quantitative analysis of syntactic characteristics of the essays, the Mexican students writing in Spanish wrote longer essays with

longer, but fewer, sentences. The Spanish writers also had more run-on sentences and fewer simple sentences than the Anglo students writing in English. In many instances of the Mexican students writing in Spanish, one paragraph consisted of only one sentence. She noted that the ESL students and Mexican American students reflected the Mexican Spanish writing styles more closely than the Anglo-American styles exhibited in her study.

Lux and Grabe (1991) reported on Spanish–English writing contrasts in the writing of university students (based on Lux's 1991 dissertation research). They studied Ecuadorian students writing in Spanish and English (EFL) as well as Anglo-Americans writing in English and Spanish (Spanish as a FL). They found that the Spanish texts had longer sentences, among other characteristics, and that Ecuadorian Spanish speakers used the same elaborate style described by earlier researchers. The multivariate analysis conducted by Lux and Grabe (p. 151) resulted in the following description: Ecuadorian Spanish writers prefer "an elaborated sentence style in their writing, and they appear to prefer a more abstract informational presentation."

Reppen and Grabe (1993, p. 117), in a comprehensive review of these earlier studies, note that Spanish writing has been described as being "more ornate and formal" than English. They were interested in children's writing in order to locate the source of the "elaborate style" of native Spanish-speaking adolescents and young adults tested in earlier studies. They found that the Spanish L1 children (writing in English) have characteristics similar to those of older subjects from the other studies. Reppen and Grabe (p. 125) comment that:

> One tempting explanation for the results of this study is to suggest that this elaborate style is simply a reflection of less developed writing; this assertion is commonly made for essays which make greater use of coordination. However, such an explanation does not account for the same patterns of results in the well-educated adolescent and university students reviewed in earlier studies.

However, returning to Montaño-Harmon (1991), we can suggest the possibility that the Spanish-speaking adolescents and university students are not very well educated in composition skills. Montaño-Harmon studied 25 textbooks for the teaching of "redacción" (roughly translated as "composition," but mainly used in terms of prescriptively correct use of verb forms, spelling, and accentuation) in use in Mexico at the time of her research. Montaño-Harmon (p. 418) discovered that only two of those texts presented "any type of pattern for paragraph organization." What these 25 texts did emphasize to achieve effective communication in writing was the following: vocabulary building, writing practice based on literary models, rewriting an idea in various ways, and practice in grammar and mechanics. For example, Cassany (1991) notes that Spanish writing can only be learned and improved by examining texts that have already been written.

The earlier studies reported here contained analyses of writing samples produced by young, non-professional writers (grade school, high school, and university). However, despite the differences in age and education, similar patterns were found in terms of cultural styles. In an attempt to understand if the previously recorded differences are truly a matter of culturally determined patterns or if they are a result of immature writers as subjects, the current study has as its object of study paragraphs written by highly educated professional academics.

Following the previous models, the first part of the analysis in the current study is a quantitative description of the 40 paragraphs. But in an attempt to understand the cultural thematic patterning better, the second analysis focuses on the internal coherence of the paragraphs as reflected in their thematic progression of key words and phrases. To do this, Lautamatti's (1987) TSA was used. If we remember Kaplan's original (1966) evaluation, he was describing essays in terms of their topical development. The TSA methodology helps to objectively define and plot thematic progression in order to make a comparison of progression in the two languages in question.

THE STUDY

Twenty paragraphs in English and twenty paragraphs in Spanish were chosen for the analysis. A paragraph is defined as a "group of sentences forming a complete unit of thought and marked on a page of text by spacing or indentation" (Lackstrom, Selinker, & Trimble, 1973, p. 130). Although these authors argue for the possibility of the "conceptual paragraph," which may include more than just the "physical paragraph," for the purposes of the current research, the physical paragraph represents an easily identifiable and adequate unit for analysis. When an author divides physical paragraphs, he or she has intentions regarding the organization of the text. Comes (1974) provides a similar definition for Spanish paragraphs, suggesting that a paragraph contains a complete idea that is physically marked as a separate section of text and is set off by an indentation. Because of the similarities in the definitions of paragraphs in English and Spanish, it is valid to study the internal structure and organization of physical paragraphs and to compare them.

Selection of Corpus

Staying within the area of humanities in order to select paragraphs in related subject areas, journals on philosophy, education, linguistics, psychology, and Spanish literature were selected. These are areas that have well respected journals published in both English and Spanish that are readily available. In addition, the

TABLE 1
Journal Titles Selected for Research

English	Spanish
The Journal of Philosophy	Revista Latinoamericana de Filosofía
Educational Action Research	Educación Hoy
Language	Revista Lenguaje
American Journal of Psychology	Revista de Psicología Social
Hispanic Review	Revista de Critica Literaria Latinoamericana

topic areas are related, suggesting the possibility for similarities in paragraph structure across the disciplines.

Ten specific journals (five in English and five in Spanish) were selected, matching subject areas (for example, there are two journals in education, one in Spanish and one in English, two in psychology, philosophy, literature, and linguistics). All of the selected journals were published in the second semester of 1995 (see Table 1).

From each selected journal, two articles were chosen at random, and two paragraphs were chosen from each article (see Appendix A for a list of the journal articles). The first paragraph chosen was the first full paragraph on the third page of the article, and the second paragraph was the first full paragraph on the seventh page of the article. The paragraphs were generally located in the literature review and in the Results and Discussion sections. Forty paragraphs were selected to be analyzed. The paragraphs were analyzed in terms of their physical structure and their topical structure.

Methods for Physical Analysis

The physical analysis consisted of simple counts of the number of words, number of sentences, number of words per sentence, number of clauses, and number of clauses per sentence. In order to avoid potential differences due to diachronic language changes, all paragraphs that were chosen were published in the second half of 1995. The genre was also controlled (all paragraphs were published in academic journals), as was the general thematic content (all paragraphs were written by experts in their fields).

Results and Discussion of Physical Analysis

The physical analysis of the paragraphs shows some predictable differences between the two languages (based on results of previous studies), particularly in the total number of words and number of words per sentence. As can be seen in Table 2, the total number of words in English is much greater than in Spanish (3,240 vs. 2,491). We can see that, as a result, the average number of words per

TABLE 2
General Data

	English	Spanish
Total number of words	3,240	2,491
Average words per paragraph	162	124.5
Total number of sentences	135	76
Average sentences per paragraph	6.75	3.8
Average words per sentence	24	32.8

TABLE 3
Clause Data

	English	Spanish
Total number of clauses	275	196
Average clauses per paragraph	13.75	9.8
Average clauses per sentence	2.04	2.58
Average words per clause	11.7	12.7

paragraph is quite different as well: The English paragraphs average 162 words, while the Spanish paragraphs average 124.5 words. Similarly, the number of sentences in English is much greater than in Spanish, but because of the difference in the number of words, a simple *t*-test shows that this is not statistically significant. This also holds for the average number of sentences per paragraph.

While the English paragraphs tend to be longer with more sentences than the Spanish paragraphs in the data, at the sentence level there is the opposite tendency. In the English data, the average number of words per sentence is 24, while the Spanish sentences have an average of 32.8. It would be expected that the Spanish sentences would be shorter than the English sentences based on the patterns of paragraph length and number of sentences. The fact that this is not true is statistically significant. A *t*-test reveals that this opposite tendency is significant at the .01 level. In summary, the English paragraphs in this study are longer (more words) with more sentences, but the sentences are shorter than in the Spanish data (which show shorter paragraphs with fewer sentences). This reflects the findings of earlier studies in Spanish.

Table 3 shows the totals for the number of clauses. For the purposes of this part of the analysis, clauses are considered to be groups of words that include both a subject and a verb, including dependent and independent clauses. By looking at the average number of clauses per paragraph, it can be seen that this data parallels the data for sentences. In English, there are more clauses per paragraph, reflecting the longer paragraphs in English. There is a minor difference in the number of clauses per sentence, with English having fewer,

but again, the English sentences have fewer words, so this fact is completely predictable based on the data presented above.

In summary, based on this sample, it appears that there are two tendencies for these paragraphs. First, the English paragraphs tend to be longer and have more sentences than the Spanish paragraphs. And second, the sentences in Spanish are longer than the English sentences. This very closely matches findings from earlier studies. It is important to note that the paragraphs analyzed here were written by adults, professionals in their fields of study, publishing articles in refereed journals. The data from this analysis show that Spanish-speaking professional writers have a similar preference for the "elaborate style."

Methods for Topical Structure Analysis

As Kaplan described in 1966, the internal structure of a paragraph is what has been used to define it as having culturally distinct characteristics, and Lautamatti's (1987) TSA was designed to identify the internal structure of paragraphs by plotting the repetition of key words and phrases. Schneider and Connor (1990, p. 423) consider the applicability of TSA in text analysis of coherence, and after a rigorous statistical analysis, they conclude that "TSA offers a productive approach to text analysis in composition research."

Considering this, the second analysis of the paragraph data in this study was a TSA. According to Connor and Farmer (1990, pp. 127–128), TSA "considers both global and local coherence of texts" and is "concerned with the semantic meanings of sentences and their sequencing to develop the overall discourse topic." TSA is conducted by identifying sentence elements and plotting topical subjects onto a table to see relationships in the development of the thematic structure of the paragraph.

Lautamatti (1987) describes three basic sentence elements that play a role in TSA. She identifies the initial sentence element (ISE), which is what comes first in the sentence. This may be the subject of the sentence, an introductory phrase or clause, etc. The second element is the mood subject, or the grammatical subject of the sentence. And the final element is the topical subject, which may or may not be the mood subject. After the three elements are identified in each sentence, the topical subject is plotted onto a graph, and a physical representation of the thematic development can be visualized (see example below).

Lautamatti (1987) suggests three types of thematic progression in her presentation of TSA: parallel progression (two consecutive clauses with the same topical subject); extended parallel progression (a topical subject that occurs in two clauses that are not consecutive); and sequential progression (the rheme element of a clause becoming the theme element of the consecutive clause). One clarification was made in the selection of clauses that were subjected to this analysis: For the purposes of this study, only the topical subjects of independent clauses were identified.

The following example is provided to help understand these three types of thematic progression. *Italics* are used for ISE, underlining is used to signal mood subject (grammatical subject of the verb), and **bold face** is for the topical subject.

> (1) *For example*, **one project** <u>I</u> set involved the class devising a board game based on a nursery rhyme or folk tale for younger children. (2) ***<u>The class</u>*** were reasonably enthusiastic about this until they realised that they younger children were fictional; (3) i.e., ***<u>they</u>*** would not be playing these games with real children apart from each other. (4) <u>*I*</u> felt a certain amount of shame here, for I realised that the reason there would be no audience was because I had already decided that **those games** would not be 'good enough' for public consumption. (5) <u>*I*</u> have frequently arranged **real audiences** for other classes, but only when I have been confident that the finished product would show the class, the school, and, most shamefully of all, myself, in a good light. (6) ***<u>My other error</u>*** was not to impose a structure to the work or a deadline by which to finish. (7) *Because these were **low-ability students***, my reasoning ran, <u>they</u> would need more time to complete the activity, (8) *and in the way of these things*, **<u>the children</u>** simply filled the available time with low-level busy work—colouring in the board, and making the dice and counters, rather than the more challenging activities such as negotiating group responsibilities, discussing the game or devising the rules. (Holden, 1995)

Parallel progression: In the clause number (2), the noun phrase ''the class'' functions as the ISE, the mood subject, and the topical subject. In the next independent clause (after the semi-colon), the three sentence elements coincide in the word ''they.'' In this example, ''they'' from the third clause refers to the same topic as ''the class'' from the second; thus it is an example of parallel progression.

Extended parallel progression: In clauses (7) and (8), the topical subjects ''low ability students'' and ''the children'' refer back to the topical subject in the second clause, ''the class.'' The first is an example of extended parallel progression because there are a number of clauses with different topical subjects between the first mention of this topic and its appearance in clause (7). And, in clause (8), the relationship is parallel progression because the same topical subject is used in the consecutive clauses (7) and (8).

Sequential progression: In this same excerpt we can see an example of sequential progression from the clause (3) to clause (4) and from clause (4) to clause (5). In clause (3), the author mentions the use of ''games'' in the sentence, but it is not the topical subject. Then, the author retakes that rheme element of clause (3) as the theme, or topical subject, of clause (4), ''those games.'' And in that same clause, the author mentions ''audience,'' which he then elaborates on in clause (5), using ''real audiences'' as the topical subject.

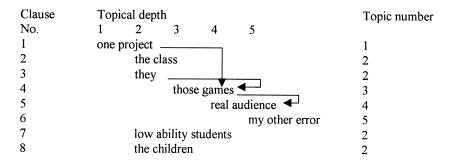In the course of the analysis of the paragraphs in this study, the necessity of an additional category became apparent: extended sequential progression. This can be defined as the rheme element of a clause being taken up as the theme of a non-consecutive clause. In the previous example, the topic of the ''game'' is brought up for the first time in the first clause, but not as the topical subject. This

TABLE 4
Co-Occurrence of Sentence Elements

	English		Spanish	
	Number	**Percent**	**Number**	**Percent**
Type 1	62	40	31	34
Type 2	42	27	25	27
Type 3	25	16	12	13
Type 4	0	0	0	0
Type 5	25	16	13	14

is then repeated as the topical subject of clause (4), and a number of clauses intervene between the first mention of the game and the second use as a topical subject, making this an extended sequential progression.

After finding the topical subject of each independent clause, this information is plotted into a table that gives the visual representation of the topical progression of the paragraph. The following graph is an illustration of the previous example where the arrows indicate sequential and extended sequential progression. The clause number is to the left, and the topic number appears to the right.

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Clause      Topical depth                          Topic number
No.           1    2    3    4    5
1           one project ————————┐                      1
2                 the class     │                       2
3                 they ————————┐│                       2
4                       those games ◄——┐                3
5                            real audience ◄——┐         4
6                                    my other error     5
7                 low ability students                  2
8                 the children                          2
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It may be asked whether this TSA, designed for texts written in English, can be applied to Spanish, due to basic differences in English and Spanish syntax. For that reason, an initial comparison of the occurrence of sentence elements in the corpus of paragraphs from both languages was conducted.

Lautamatti (1987) proposed five potential types of combination of these elements: Type 1, when all three elements coincide; Type 2, when the ISE is separate from the mood subject and the topical subject, which coincide; Type 3, when the ISE and the mood subject coincide and the topical subject is apart; Type 4, when the ISE and topical subject coincide and the mood subject is separate; and Type 5, when all three elements are separate.

In the paragraph data from this study, a comparison was made between the two languages in terms of which types of co-occurrence were most common in order

TABLE 5
Summary of Topical Development in English

ID number	Independent clauses	New topics	PP	EPP	SP	ESP
B1a	10	7	0	3	0	1
B1b	6	4	1	1	2	0
B3a	10	7	3	0	2	0
B3b	5	5	0	0	1	0
C1a	12	9	2	1	2	1
C1b	6	4	2	0	1	0
C3a	5	5	0	0	2	0
C3b	4	3	1	0	2	0
E1a	5	5	0	0	2	0
E1b	7	5	1	1	1	0
E2a	5	4	1	0	0	0
E2b	16	12	2	2	4	1
F1a	6	6	0	0	2	0
F1b	10	7	3	0	1	0
F2a	6	4	2	0	1	0
F2b	7	7	0	0	1	1
I1a	4	2	2	0	1	0
I1b	11	6	4	1	1	0
I2a	12	5	4	3	0	0
I2b	7	6	0	1	0	0
Total	154	113	28	13	26	4

Notes:

PP = parallel progression, EPP = extended parallel progression, SP = sequential progression, and ESP = extended sequential progression.

to verify the applicability of Lautamatti's (1987) model to Spanish texts. Table 4 presents that data, and although the raw numbers look quite different, there really is no meaningful difference in the percentages. Starting with Type 1, English uses this type 40 percent of the time, and Spanish uses it in 34 percent of the independent clauses. Type 2 appears in both English and Spanish in 27 percent of the independent clauses. English uses Type 3 in 16 percent of the cases, while in Spanish it occurs in 13 percent. Type 4 is equally absent in both languages. And finally, Type 5 appears in English 16 percent of the time, and in Spanish it appears in 14 percent of the cases.

This correlation in sentence structure as revealed in this analysis of sentence elements suggests that Spanish is sufficiently similar to English in terms of possibilities of distribution to justify the use of Lautamatti's (1987) TSA for the purposes of comparing thematic development in the two languages.

Results and Discussion of Topical Structure Analysis

Table 5 summarizes the topical development in the 20 English paragraphs. As can be seen, all of the paragraphs have some kind of topical reoccurrence.

TABLE 6
Summary of Topical Development in Spanish

ID number	Clauses	New topics	PP	EPP	SP	ESP
A1a	4	4	0	0	0	0
A1b	7	7	0	0	0	1
A4a	6	4	2	0	0	0
A4b	3	2	0	0	2	0
D2a	6	6	0	0	0	0
D2b	2	2	0	0	0	0
D3a	4	2	1	1	1	0
D3b	7	4	1	2	0	1
G1a	3	3	0	0	1	0
G1b	4	3	0	1	0	0
G2a	5	4	1	0	0	0
G2b	4	3	1	0	0	0
H1a	4	4	0	0	0	1
H1b	6	6	0	0	1	0
H2a	3	2	1	0	1	0
H2b	8	6	0	2	0	1
J1a	2	1	1	0	0	0
J1b	7	3	2	2	0	0
J2a	1	1	0	0	0	0
J2b	4	3	1	0	0	0
Total	90	71	11	8	6	4

Notes:

PP = parallel progression, EPP = extended parallel progression, SP = sequential progression, and ESP = extended sequential progression.

In analyzing the 20 Spanish paragraphs (Table 6), we can see that, in opposition to the English data, several of the paragraphs have no progressive topical development at all (four paragraphs). This may suggest that in Spanish, the demand for coherence by repetition of topics is not as strong as it is in English. This may also be interpreted by native English speakers as writing that has digressions, as Kaplan (1966) described the English compositions of native Spanish writers.

Table 7 presents the comparative totals of the thematic progression in all of the paragraphs. Because of the different lengths of the paragraphs, an analysis of percentages helps to visualize similarities and differences. In English, 72.7 percent of all independent clauses introduce new topics, while 78.8 percent in Spanish have new topics, which is not a significant difference. There is a difference in the occurrence of parallel progression and sequential progression, but not for the extended progressions. In English, parallel progressions make up 17.7 percent of the clauses, while in Spanish they are only 12.2 percent of the total clauses. Similarly, in English, 16.8 percent of the clauses contain topical development in the form of sequential progressions, while Spanish only has 6.6 percent. This reflects a valued characteristic of composition in English, to develop ideas by introducing them as the rheme of a sentence and later taking

TABLE 7
Comparative Summary of Totals for TSA

	English		Spanish	
	Number	Percent	Number	Percent
Clauses	154		90	
Topics	113	72.7	71	78.8
PP	28	17.7	11	12.2
EPP	13	8.4	8	8.8
SP	26	16.8	6	6.6
ESP	4	2.5	4	4.4
Total progression	71	46	29	32

them up as the theme. This aspect is considered to lend coherence (and even sophistication) to a paragraph.

There is an opposite trend between the two languages in terms of the extended progressions. In English, extended parallel progression occurs in 8.4 percent of the clauses, and in Spanish, it occurs in 8.8 percent of the clauses, which though minor, shows greater use of extended parallel progressions in Spanish than in English. Similarly, in Spanish, we see that 4.4 percent of the clauses have extended sequential progression, and in English there is only 2.5 percent.

In the paragraphs analyzed for this study, the English authors tend to have more repetition of key words and phrases in what a native reader may interpret as a "direct" line. The Spanish texts, on the other hand, seem to have a number of different topical subjects within one paragraph, without much repetition of key words. Montaño-Harmon (1991, p. 421) explains that in Mexican Spanish these "complete breaks in the connection between one idea and the next" are common; however, in English this same type of deviation is used to classify a text as "low quality" (Witte, 1983). In other words, in the English texts, relationships between ideas are made explicit by repetition. In the Spanish texts, relationships are not represented by repetition of key words.

In global terms, 71 of the 154 independent clauses in English (46%) have some kind of repeated topic. On the other hand, 29 of the 90 clauses of Spanish (32%) include a progressive topic. This suggests a very important difference in the internal topical structure of paragraphs in these two languages.

CONCLUSIONS

It is important to point out that that the results of the physical analysis of this group of paragraphs reflect findings from earlier studies. While previous studies looked at the productions of relatively immature writers (children, adolescents, young adults), the current study had a focus on written productions of adult scholars; these paragraphs were found in academic journals, which have

notoriously high standards for acceptance of articles. The same elaborate style in Spanish that was seen in the earlier studies was found in the data for this study, seen here as long sentences with many clauses. It appears then that Spanish rhetoric includes a preference for elaborate style in written composition.

Although the TSA was developed for use with English texts, it has been shown to be applicable to Spanish texts, as described above. Spanish is largely a subject–verb–object language, but it has incredible flexibility in terms of word order, helped by the verbal inflections that indicate person and tense. However, this structural difference between Spanish and English and the fact that Spanish is a pro-drop language did not influence the applicability of the TSA. As was shown in Table 4, the correlation of sentence types between the two languages suggests that this analytical model can be used satisfactorily to compare the two languages.

Regarding Lautamatti's (1987) proposal of TSA, with three types of progression (parallel, sequential, extended parallel), the data in the present study suggest the need for the addition of the fourth category used here: extended sequential progression. This category appeared in data from both languages and appears to be used as a strategy in Spanish to link ideas together across the distance of a paragraph. In the data from this study, the strategy of the writers in Spanish seems to be to present descriptions and examples of the topic, without the necessity of repeating the topic immediately.

Due to the fact that only 40 paragraphs limited to the area of humanities were analyzed, it is not possible to conclude that all academic paragraphs in English and Spanish follow this same model. But these tentative conclusions can be made about possible tendencies for paragraphs in the two languages. It is important to point out that more extensive work is needed to verify these findings in other academic fields and other types of writing.

Implications

The most important implication of this analysis is the understanding of how paragraphs in English and Spanish are similar and different so that language teachers can help students learn to write. First of all, understanding the simple physical differences between the two languages, in terms of words per sentence and sentences per paragraph, can help an instructor guide his or her students in composition classes. Also, by knowing that English demands more internal coherence in the form of parallel and sequential progression, the teacher of English to Spanish speakers can focus on this difference between the two languages.

For the teacher of Spanish to native speakers of English, the knowledge of the freedom of Spanish with regards to topical structure can be used to help students understand the flexibility and creativity of Spanish. Montaño-Harmon (1991) reports that for many years, Spanish composition taught at the university level in the United States has been evaluated from the English point of view, rather than

from the Spanish point of view. This can result in non-native Spanish writers who "will sound simplistic and juvenile, or boring and dry … (or) will project a hidden message of abruptness, even rudeness, insulting (their) Spanish-speaking reader(s)" because of their "linear, deductive, enumerative composition" (p. 424), which while appropriate in English, is not appropriate in Spanish.

Because of this problem, didactic materials should be designed that emphasize the similarities (helping students positively transfer their previous knowledge into the second or foreign language) and that explain differences and help students avoid them when writing in the non-native language.

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APPENDIX A.

List of Articles

A1: Rodríguez, V. (1995). Comentarios sobre la teoría de las cantidades conservadas. *Revista Latinoamericana de Filosofía 21*(1), 23–36.

A4: Pérez, D. I. (1995). Leyes causales intencionales? Sobre los argumentos de Fodor en favor de las leyes intencionales. *Revista Latinoamericana de Filosofía 21*(1), 67–82.

B1: Foss, J. E. (1995). Materialism, reduction, replacement, and the place of consciousness in science. *The Journal of Philosophy 92*(8), 401–429.

B3: van Gelder, T. (1995). What might cognition be, if not computation? *The Journal of Philosophy 92*(8), 345–381.

C1: Holden, G. (1995). Doing a jigsaw without the picture. *Educational Action Research 3*(2), 139–152.

C3: Haggarty, L., & Postlethwaite, K. (1995). Working as consultants on school-based, teacher-identified problems. *Educational Action Research 3*(2), 169–182.

D2: Tedesco, J. C. (1995). Tendencias actuales de las reformas educativas. *Educación Hoy 24*(123), 27–38.

D3: Bethencourt, M. (1995). Educación para la paz desde la escuela. *Educación Hoy 24*(123), 75–92.

E1: Spencer, A. (1995). Incorporation in Chukchi. *Language 71*(3), 439–489.

E2: Croft, W. (1995). Autonomy and functionalist linguistics. *Language 71*(3), 490–532.

F1: Rossano, M. J., Warren, D. H., & Kenan, A. (1995). Orientation specificity: How general is it? *American Journal of Psychology 108*(3), 359–380.

F2: Kemp, S., & Strongman, K. T. (1995). Anger theory and management: A historical analysis. *American Journal of Psychology 108*(3), 397–418.

G1: Pacheco, C. (1995). Sobre la construcción de lo rural y lo oral en la literatura hispanoamericana. *Revista de Critica Literaria Latinoamericana 42*, 57–72.

G2: García Canclini, N. (1995). Narrar la multiculturalidad. *Revista de Critica Literaria Latinoamericana 42*, 9–20.

H1: Carreño, M., & Serrano, G. (1995). Análisis de instrumentos para la medida del amor. *Revista de Psicología Social 10*(2), 131–148.

H2: Romero, E., Luengo, M. A., & Otero-López, J. M. (1995). La relación entre autoestima y consumo de drogas en los adolescentes: Un análisis longitudinal. *Revista de Psicología Social 10*(2), 149–160.

I1: Cheadle, N. (1995). "Mise en Abyme" and the Abyss: Two paintings in Ernesto Sábato's trilogy of novels. *Hispanic Review 63*(4), 543–553.

I2: Dworkin, S. N. (1995). Two studies in Old Spanish homonymics. *Hispanic Review 63*(4), 527–542.

J1: Martínez, M. C. (1995). El discurso escrito base fundamental de la educación y la polifonía del discurso pedagógico. *Revista Lenguaje 22*, 50–67.

J2: Pardo Abril, N. (1995). Procesos textuales: En busca de calidad en la enseñanza del español. *Revista Lenguaje 22*, 68–79.