Tracing convergence and divergence in pairs of Spanish and English research article abstracts: The case of *Ibérica*

Moisés Perales-Escudero and John M. Swales University of Michigan (USA) moisesd@umich.edu & imswales@umich.edu

Abstract

This paper investigates patterns of rhetorical convergence and divergence in pairs of RA abstracts (English-Spanish and Spanish-English) published in the journal *Ibérica*. To that end, a total of 84 pairs of author-translated RA abstracts were analyzed. Based on the results of a pilot study, the following rhetorical patterns were analyzed in the corpus: text-referring expressions, degree of epistemic commitment, amplified attitude, self-mention, and periphrastic (e.g. multi-word) expressions. In addition, selected authorial input was requested to seek further explanations about the variation across these two languages. For text-referring expressions, broad cross-linguistic convergence was found in the expressions used and the degree to which the text is given agency. By contrast, the abstracts in Spanish were found to include greater degree of epistemic commitment, more amplified expressions of attitude, more self-mention, particularly in the plural first person, and periphrastic equivalents. Authorial input indicated that some of these diverging patterns were due to collocational differences but they were also influenced by beliefs about what is more natural in Spanish. Our results suggest that there may be specific lexical bundles performing intensifying functions in Spanish that deserve further investigation. These findings may have implications for ESP pedagogy and translation studies.

Keywords: contrastive rhetoric, metadiscourse, abstracts, translation, academic discourse.

Resumen

Similitudes y diferencias en pares de resúmenes de investigación en español e inglés: el caso de Ibérica

Investigamos patrones de similitud y diferencia en pares de resúmenes de artículos de investigación con versiones en inglés y español publicados en *Ibérica*.

Para tal fin, analizamos 84 pares de resúmenes con ambas versiones escritas por los autores. A partir de un estudio exploratorio, analizamos los siguientes aspectos: expresiones que se refieren al texto, grado de compromiso epistémico, actitud, mención del autor, y expresiones perifrásticas. Solicitamos la colaboración de algunos autores para contar con explicaciones adicionales acerca de la variación entre estos idiomas. Encontramos similitudes en las expresiones que se refieren al texto en cuanto a las palabras usadas y el uso del texto como sujeto gramatical. Por otro lado, los resúmenes en español muestran un mayor grado de compromiso epistémico, expresiones de actitud más amplificadas, más mención del autor, y uso de perífrasis. Los autores indicaron que algunas de estas divergencias pueden deberse a diferencias entre las colocaciones que son típicas de estas lenguas, pero también a sus creencias respecto de lo que resulta más natural en español. Los resultados sugieren que existen en español ciertos "paquetes léxicos" con función intensificadora. Estos resultados pueden ser relevantes para la enseñanza del inglés con fines específicos y los estudios de traducción.

Palabras clave: retórica contrastiva, metadiscurso, resúmenes, traducción, discurso académico.

Introduction

In Genre Analysis, Swales (1990) concluded that abstracts were an underresearched genre from a discourse-analytic perspective. In these terms, he instanced only an unpublished study of 14 abstracts in neurology by Rounds (1982), and a 1985 chapter by Graetz, who, inter alia concluded that "The abstract is characterized by the use of the past tense, third person, passive, and the non-use of negatives" (Graetz, 1985: 125). Subsequent developments, both in the abstracts themselves (Hyland, 2000) and in analyses thereof, have led to considerable modification of the first three of Graetz's conclusions. As for the fourth conclusion, the virtual absence of negatives, we are not aware of any studies that have attempted to validate this very interesting finding.

Twenty years later, however, it is no longer possible to claim in general that the abstract remains "under-researched". In a fairly recent bibliographic overview entitled "Recent linguistic research into author abstracts: Its value for information science", Montesi and Urdiciain (2005) list 28 studies of research article abstracts since 1990, to which can be added a few additional pre-2005 studies and a fair number that have since appeared. The disciplinary fields from which the abstracts have been drawn are mostly language sciences, biology and medicine, although both Hyland (2000) and Stotesbury (2003) offer elaborate multi-disciplinary studies covering many fields. In addition, there has been comparative work between English and other languages: There are papers dealing with German (Busch-Lauer, 1995), Swedish (Melander, Swales & Fredrickson, 1997) Norwegian (Dahl, 2004 & 2009), Portuguese (Johns, 1992), French (Van Bonn & Swales, 2007) and Arabic (Al-Harbi & Swales, 2011). More pertinently to the topic of this paper, there have been at least eight investigations comparing Spanish and English abstracts, including Valero Garcés and Calle-Martínez (1997), Martín-Martín (2003), Lorés (2004), Lorés-Sanz (2009), and Burgess and Martín-Martín (2010).

One of the major themes and major findings in the previous literature as a whole is that RA abstracts exhibit quite wide disciplinary variation (Hyland, 2000; Stotesbury, 2003), and even this broad conclusion does not encompass the effects of those increasing number of journals that are adopting "structured" as opposed to continuous-text formats (Hartley, 2004). Since the focus of this paper is on the abstracts in *Ibérica* (the official journal of the European Association for Languages for Specific Purposes - ISSN 1139-7241), we will focus discussion of previous research to those studies that have examined what might be called "the language sciences". However, such a decision, while apparently neatly circumscribing on the surface, is in fact not without difficulties. As readers will recognize, the language sciences is a surprisingly "broad tent", even if probably not more so than other fields that straddle the traditional divisions between the humanities and the social sciences, such as anthropology. So, when it comes to making comparisons, this range should give us pause. For instance, Martín-Martín (2003) analyzed abstracts from experimental phonetics, a field closely allied with the hard sciences, while Dahl (2004) investigated the abstracts for the kind of "argumentative" papers found in formal and theoretical linguistics - papers that tend to rely on scholarly discussion of constructed language examples. Ceteris paribus, it is therefore reasonable to expect powerful sub-disciplinary differences and particularities. Even when we further focus on applied linguistics per se, divergences are not hard to detect as the different subfields are prone to giving more or less attention to such issues as statistical validation, experimental design and pedagogical applications.

Even if sub-disciplinary differences (Samraj, 2002) can be controlled when comparing two (or more) corpora of abstracts, there remains the issue of the comparability of the "sources" of those two corpora, especially when we

take into account the arguments put forward by Connor and Moreno (2005) for "maximum similarity" between two corpora. Essentially, there must remain doubts about whether - or to what extent - it is possible to make useful comparisons between "big" international English-language journals and "small" national or regional ones publishing in other languages, largely because of the confounding variables that intervene (Swales, 2004). These would include differences in author and reader expectations, differences in acceptance rates and editorial processes, differences in the size and interconnectedness of the parent discourse communities (Burgess, 2002), and likely differences in the reception histories of the accepted articles. For example, Van Bonn and Swales (2007) eventually concluded that their comparison of abstracts between the Journal of Linguistics in Britain and the Bulletin de la Société de linguistique de Paris was largely vitiated by differences in status, even though each was the leading journal in the field in its respective country. As they note:

The "Journal of Linguistics" is the official organ of the Linguistics Association of Great Britain, whose members receive copies at a greatly reduced rate. The journal is found in libraries worldwide, and it can be expected that competition for space is high, the review and editing processes arduous, and the kudos for publishing therein considerable. None of these factors would seem to apply to a similar extent to the Bulletin. (Van Bonn & Swales, 2007: 105)

Although some of these differences may be being reduced by the trend toward electronic publishing on the Web, they still suggest that contrastive rhetoric researchers would do better to choose "small" regional Englishlanguage journals as one pivot of a cross-linguistic comparison rather than the current prevailing practice of opting for high-impact ISI journals.¹

Following the example of Swales and Van Bonn (2007), we have attempted to resolve the comparability problem by examining the paired Spanish and English abstracts from a single journal - Ibérica, the official organ of the European Association for Languages for Specific Purposes. As readers may anticipate, this attempted resolution retains some minor attendant problems. For one thing, the readership of the two languages is still likely to be somewhat divergent; those reading the English abstracts and the English articles are likely to be more geographically diverse than those reading the Spanish-language texts. For another, it is clear that in the case of any particular article, one of the two required abstracts will be written before the

other. In effect, we have a "parent" abstract and a "sibling" one, the latter being some version/translation of the former. In such a context, we may no longer expect to find much difference in the rhetorical shape or "move structure" of the two paired abstracts, and, as a result, our findings provide a different perspective than those studies that have focused on the move structure of this part-genre, such as Bittencourt dos Santos (1996), Hyland (2000), Lorés (2004), Pho (2008) and Lorés-Sanz (2009). On balance, though, we believe that, in the procedures we have adopted, the advantages considerably outweigh the disadvantages. For example, these procedures allow us to research authors' perceptions on the rhetorical and/or stylistic variations in the languages they use and also to uncover patterns of divergence in micro-level discoursal features that can be of interest to ESP instructors and translators.

Corpus and methodology

The corpus for our study consisted of 84 author-written² pairs of abstracts of research articles published in the *Ibérica* journal between the years of 2001 (issue 3) and 2009 (issue 18); the requirement that all articles be accompanied by bilingual abstracts was not introduced until Issue 3. We had excluded from the corpus a couple of articles with a French abstract and a number of invited lead articles (19 in all) written by ESP experts working outside Spain. Our initial assumption was that the journal editors had produced the Spanish translations of these abstracts written by these academics working in non-Spanish-speaking countries, and this was confirmed by the current editor. We excluded these to avoid the findings being affected by the idiolectal stylistic preferences of long-running editors.

The source language for these abstracts was determined by looking at the language the paper was written in, and for this it was presumed that the language a paper was written in was the source language for the abstract (a fact later confirmed, see below). As a result, English turns out to be the source language of 57 of these abstracts, while Spanish is the source language of the remaining 27. The 84 articles and pairs of abstracts were written by academics working at Spanish universities, largely specializing in applied discourse analysis and LSP/ESP. High proficiency levels in the two languages as well as astute insights into the behaviors of academic registers in those languages can therefore be presumed – as indeed was confirmed by the email responses to be discussed below.

The articles were then examined paying attention to the following discoursal aspects: text-referring expressions, degree of epistemic commitment, amplified attitude, self-mention, and periphrastic equivalents. An additional stylistic category that turned out to be germane was the use of periphrastic (multi-word) equivalents in Spanish to shorter stretches of text in English. These four features had been previously explored as being of interest in a pilot study (Swales & Perales-Escudero, 2009) based on a subsection of the previous corpus. We contacted by mail the authors of those abstracts showing variation in one or more of these categories (except text-referring expressions) to solicit any insights that they may have with regard to these cross-linguistic divergences and to their translation processes. Although textbased interviews about an author's own work have become fairly common in this field (Hyland, 2000), it is much rarer for investigators to ask authors to respond to their bilingual texts, particularly when, as in our case, the interviewees have very considerable metalinguistic awareness.

Below are the questions that were asked in the letters:

- We presume that you wrote the abstract first in the same L1 as the rest of the paper, and then wrote the "other language" abstract. Can you confirm this?
- Did you write the version in the other language yourself? Did the journal editor write it or edit it? Did anybody else play a hand in it?

The particular pairs of linguistic expressions we were interested in were listed in the letter, and were followed by a request to share any insights about them, as in the example below.

In the second sentence we see an interesting difference between the Spanish version and the English version. The Spanish version reads "Identificamos el marco predominante..." whereas the English version reads "We also try to define the current prevailing set..."

We are wondering if you would be so kind to look at those and share with us any particular insights about your processes of composition and/or what these differences may reveal regarding stylistic or rhetorical preferences when writing abstracts in Spanish versus writing abstracts in English.

The responses to these queries were collected and analyzed using open coding.

Results

Authorial input

Fifteen out of the 35 contacted authors responded to our requests for input, a very reasonable response rate given the often-large time lag between the composition of the paper and our email message. All confirmed our guess that the abstract was first written in the same L1 as the rest of the paper. Also all 15 of them wrote the English versions, but at least one had it revised by a native speaker of English. The same author used the help of what she calls "a Spanish expert" to revise the Spanish version.

In response to our item-specific questions, all of the authors indicated that they had followed in introducing divergences between the texts what seemed to them to be language that was "more natural", "more fitting", or "sounded better". Five of them indicated explicitly that they believe that there are differences in the degree of periphrasis that is acceptable in English versus Spanish academic prose; as one of them puts it "Spanish is more periphrastic than English", or as another said "we prefer to write shorter sentences in English". Three authors also mentioned that they explicitly avoid literal translations. Another three authors mentioned collocational differences and/or differences in "lexical chunks" as reasons for diverging choices. More specific metalinguistic comments are discussed along with the relevant examples in the section below.

Text-referring expressions

Most of the 84 paired bilingual abstracts (57 for English-language articles and 27 for those written in Spanish) contain one or more text-referring expressions, such as "this paper examines ...". By text-referring expressions (TREs) we mean those lexical items that make reference to the whole of the accompanying article, rather than to some part of it, as in "These results suggest ...". We start by looking first at the nouns used to make a self-referring textual reference. The numbers of occurrences are shown in Table 1.

English TRE nouns		Spanish TRE n	ouns	
paper	59	artículo		46
study	19	estudio		20
article	15	trabajo		21
analysis	2	análisis		1
research	2	investigación		2
survey	1			
work	1			
TOTAL	99		TOTAL	90

Table 1. Text-referring nouns in English and Spanish abstracts.

The relatively small difference in the totals seems to be due to a certain Spanish preference for using personal pronouns, as in the pair below. In this and all other relevant examples we provide a literal translation to English of the Spanish text in square parentheses in cases where the author's own English version is different enough from the Spanish version to warrant this literal translation.3 The number in parenthesis at the end of each entry represents the code we assigned to the paper; the first letter in that code indicates the papers' source language (S=Spanish, E=English); italics have been added as appropriate.

Example 1:

Describimos el uso de estrategias de atenuación en 40 artículos de revisión ... This paper describes the use of hedges in 40 review articles ...

[We describe the use of hedging strategies in 40 review articles ...] (S20)

In general, it would seem that "study" and estudio are regular translationequivalents (Catford, 1965), and that "paper" becomes translated by articulo or trabajo, and that artículo often becomes "paper" in the English versions. A further sign of the sophisticated understanding of the connotations of English by the abstract writers is shown by the treatment of the Spanish text-referring term, trabajo ("work"). In fact, the one occurrence of "work" in the English sub-corpus is not in fact a direct translation of trabajo:

Example 2:

Este artículo de carácter interdisciplinar establece una correlación entre los modos cognitivos...

This article of interdisciplinary character establishes a correlation between the cognitive modes...]

The purpose of this interdisciplinary work is to establish a correlation between culture ... (S16)

As the *Ibérica* authors clearly recognize, "work", which can occur in English as text-referring lexical item, is primarily associated with longer and highly significant written products, such as "The Collected Works of Charles Darwin", and thus should be avoided for a standard research article. 4 This insight, however, is not always shared by graduate students with a Portuguese or Spanish mother tongue. For instance, Dayrell and Aluísio (2008) found that in 84 draft English abstracts written by Brazilian graduate students in the sciences (broadly defined), text-referring "work" was used 32 times, in contrast to only five uses in a comparable corpus of 84 published abstracts in the same fields. In discussion with English language staff at Madrid Polytechnic in 2007, the second author was told of the problematic use of "work" in the English-language abstracts accompanying engineering undergraduate final research projects.

A more striking divergence between the two sub-corpora concerns the use of prepositional phrases with TREs, as in the following:

Example 3:

In this paper, I propose a translation approach to metaphor teaching in the classroom ...

En este artículo, proponemos un enfoque translativo de enseñanza de metáforas...

[In this article, we propose ...] (E42)

These formulaic openings are twice as common in the Spanish texts, there being 25 instances in contrast to only 12 in English. The reason for this difference does not lie – as it does for some languages – in any reluctance on the part of Spanish to follow an inanimate subject with an animate "volitional" verb because it is easy to attest sentence openings such as the following:

Example 4:

Este estudio intenta demostrar la pujanza de las metáforas en el vocabulario

This study attempts to show the power of metaphors in Spanish and English ... [This study attempts to demonstrate the power of metaphors in technical vocabulary ...] (S26)

Example 5:

This article explores an aspect of the processing perspective in L2 learning ... Este artículo pretende reflexionar sobre un aspecto de la perspectiva del procesamiento de segundas lenguas...

This article intends to reflect on an aspect of the language processing perspective...] (E40)

One further sign of the English skills of these abstract authors is that there are no instances of anybody attempting a literal translation of the reflexive passive, as in *"In this work are studied the differences ...".

However, Burgess and Martín-Martín (2010) found a couple of examples in their Psychology abstracts and this structure is not unknown in the academic English written by Brazilians (Johns, 1992).

A final observation to be made in this sub-section concerns the use of premodifiers with the TRE nouns. As expected, in both sub-corpora the demonstratives "this" and este are most often chosen; beyond that, there is a

greater preference in the Spanish texts for presente, with 22 instances, as opposed to just eleven uses of "present" in English. However, there are a number of cases where the Spanish member of the pair has este while the English one has "present", suggesting something of a free stylistic choice in this regard.

Variation in rhetorical elements and periphrasis

Three rhetorical dimensions were found to display patterns of variation in the Spanish abstracts with regard to their English equivalents: stronger epistemic commitment realized by either less hedged or more boosted statements; more amplified attitude; and greater authorial presence. In addition, periphrastic equivalents in Spanish to more succinct stretches of text in English provided another relevant stylistic category. These divergences were found to be present in 38 of the 84 pairs of abstracts in the sample, that is, in 45% of the total. Sometimes these patterns conflated in the same phrase or clause, as in example 6 below:

Example 6:

There was a statistically significant difference in ...

Uno de los resultados más destacados fue que existe una relación estadísticamente significativa ...

One of the most significant results was that there is a statistically significant difference ...] (E9)

Here the statement of results in the Spanish version is preceded by a multiword booster that is absent in the English version. This instance was thus double-coded as stronger epistemic commitment and a periphrastic equivalent. Table 2 below shows the number of Spanish abstracts with occurrences of each pattern of variation as well as the total number of occurrences.

Pattern	No. of abstracts	No. of occurrences
Stronger epistemic commitment	11	11
Amplified attitude	7	7
More self-mention	11	14
Periphrastic equivalents	30	39

Table 2. Occurrences of diverging rhetorical patterns in the sample.

It is worth noting that papers showing these features can be found in all the issues of Ibérica that were analyzed but two, suggesting a somewhat uniform distribution of these patterns across time. Each specific pattern is discussed in its own sub-section below.

Stronger epistemic commitment

Eleven of the Spanish abstracts use verbs and qualifiers that show a greater degree of epistemic commitment to propositions than do their English equivalents. In most cases, the commitment is to the results of the research being reported, but in at least one case the commitment signals what is to be taken as common, accepted knowledge:

Example 7:

One of the means for the spreading of those new developments ...

Es bien sabido que uno de los mecanismos esenciales para la difusión de los nuevos avances ...

It is well known that one of the essential mechanisms for the diffusion of new advances ...] (E28)

There are two ways that stronger epistemic commitment is signaled. More frequently, the stronger commitment is realized either by amplified boosting in the Spanish versions, i.e. a booster present in the English version is also present in the Spanish version in amplified form. For example:

Example 8:

Learners' performance *denoted* the positive effects of explicit instruction ... El análisis de los datos obtenidos reveló los efectos positivos de la instrucción

The analysis of the data revealed the positive effects of ...] (E21)

Alternatively, some Spanish versions seem more committed to the truthfulness of propositions because they include bare assertions where the English versions have a hedged statement.

Example 9:

To our knowledge, little research has been carried out on RPA writing ... Hay aún escasas publicaciones sobre cómo los científicos españoles ... [There are few publications on how Spanish scientists ...] (E24)

Or, the Spanish version includes a booster where the English version does not, as in the example below.

Example 10:

This is to be a functional, stylistic linguistics ...

Esta nueva área representa un enfoque funcional ...

[This new area constitutes a functional approach ...] (E2)

However, there are cases, based on observations from the authors we contacted, that indicate that the stronger epistemic commitment in Spanish can stem from a perceived collocational pattern in this language that diverges from the English equivalent. Consider example 11:

Example 11:

... which *supports* the idea that the model presented can be easily extended... ... lo cual confirma la idea de que el modelo presentado se puede extender ... [... which confirms the idea that the model presented can be extended...] (E29)

The authors of the abstract from which the above fragments have been drawn explained that using the expression lo cual apoya/sostiene la idea did not sound natural to them, and that they also thought confirma la idea to be a common collocation in Spanish.

Example 12:

It has been observed that the analysis of elements traditionally associated...

Es un hecho observable que los estudios que han abordado el área...

[It is an observable fact that studies that have approached the area...] (E38)

In example 12 our respondent noted, "English is more subtle. You need more hedging for instance. Spanish is more 'straightforward', so to speak".

Amplified attitude

Following Hyland (2005), attitude markers do not qualify the truth value of propositions but rather construct writers' affective stance(s) towards propositions, as in expressions of surprise or importance. In this sense, seven articles showed instances of more amplified attitude in their Spanishversion abstracts. In most instances, the amplified attitude was found in statements evaluating previous research or relevant constructs. In the two examples below, the Spanish qualifier fundamental replaces either a hedge (example 13) or a less strong attitude marker (example 14) in the English versions.

Example 13:

- ... the role that the Internet may play in helping us attain this objective ...
- ... en un proceso en el que el Internet juega un papel fundamental ...
- [... in a process in which the Internet plays a fundamental role...] (E20)

Example 14:

El concepto de género tiene un papel fundamental en la enseñanza y aprendizaje...

The concept of genre has an important role in the teaching and learning... [The concept of genre has a fundamental role in the teaching and learning...] (S7)

The author of example 14 mentioned that she chose fundamental because "it is stronger and there is something strange in 'tiene un papel importante,", thus suggesting both a perception of a cultural difference and a collocational divergence as reasons behind her choice. The perception of a cultural difference was echoed by the author of example 15 below, who suggested that "maybe in Spanish we are allowed to exaggerate a little".

Example 15:

- ...the term 'engineering' is rarely used.
- ... parece sorprendente la ausencia del término 'ingeniería'.
- [... the absence of the term 'engineering' seems surprising] (E34)

In other instances, attitude markers are attached to statements of results in Spanish where they are absent in English, as in example 16:

Example 16:

We argue that one of the main strategies used to attract the readers' attention

Nuestro argumento principal es que una de las estrategias principales que se

[Our principal argument is that one of the main strategies that are used...] (E38)

Self-mention

The last of the discoursal features we discuss is pronominal self-mention in our paired abstracts. In fact, eleven of the abstracts in the corpus use selfmention in the Spanish version where the English version does not. In four of these, and in six instances, this self-mention occurs in statements summarizing the topic of the article, as in:

Example 17:

Describimos el uso de estrategias de atenuación en 40 artículos de revisión...

This paper describes the use of hedges in 40 review articles...

[We describe the use of hedging strategies in 40 review articles...] (S20)

In five other papers and instances, the self-mention was connected to statements of results, as in example 28. The two remaining papers used selfmention when discussing previous research.

Example 18:

Descubrimos que los estudiantes emplean una cierta variedad de marcadores

discursivos...

The main findings were that students employed a variety of discourse

[We found that the student employ a certain variety of markers ...] (S3)

However, there are some instances of the converse tendency whereby the English abstract contains first person pronouns and the Spanish member of the pair does not. In the single-authored papers, there were five instances of this trend; in most cases, the Spanish authors had instead opted to use an impersonal reflexive verb.

More generally, 40% of the Spanish abstracts for the single-authored articles contain first person pronouns/verb morphology, thus suggesting, as might be expected, that these forms of self-mention (up to a maximum of four) are a fairly common but by no means an expected - or indeed required rhetorical choice. However, only four of the single-authored papers chose to employ the singular variant, two with a Spanish source language and two with an article written in English. In one case, we can see an interesting stylistic/rhetorical choice:

Example 19:

In this paper, *I propose* a translation approach...

En este artículo proponemos un enfoque traslativo...

[In this article we propose a translational approach...] (E21)

By far the most frequent choice for *Ibérica* authors when writing on their own is to use the plural option, "we" or -mos. We know there has been much attention to this feature in recent Spanish-English contrastive studies (Mur-Dueñas, 2008; Burgess & Martín, 2010), but our discussion here will be necessarily limited because of space considerations. Although Burgess and Martín-Martín (2010) argue that the choice of "we" for single-authored papers is less author-intrusive and egocentric than the singular alternative, in our view this position represents a continental European perspective indeed, a very similar phenomenon was noted by Van Bonn and Swales (2007) in the English abstracts of papers by LSP scholars working in France. However, to us, from a North American perspective, this use of "we" by a single author strikes us, in today's globalizing climate, as somewhat hortatory and overbearing. In effect, "I" is just me, but if "we" is being used to represent nothing but my own work or my own thoughts then that suggests, at least to us and to Hyland (2001), a taking on of some wider representative role and authority. We do not mean this as a criticism of the Continental usage, but we wish to note that, when used in English, "we" for singleauthored papers might give a slightly different impression than the author might have intended. This is then as an example of a cross-cultural divergence in the stylistic interpretation of a specific rhetorical feature. At the end of this story, therefore, we see a small sign that one feature of Spanish academic writing (the preference for pluralizing single-author first person statements) has, as it were, leaked over to their English-language abstract texts.

Periphrastic equivalents

This is a fuzzy, stylistic rather than discoursal, category that we applied to all cases where the Spanish versions showed more linguistic elaboration than their English equivalents. It is worth noting that in some cases this category overlaps with the previous ones, as illustrated by example 7 above which we reproduce again below:

Example 7:

One of the means for the spreading of those new developments in the different technologies is ...

Es bien sabido que uno de los mecanismos esenciales para la difusión de los nuevos avances ...

It is well known that one of the essential mechanisms for the diffusion of new advances ...] (E28)

Cases like this example were double-coded and counted accordingly. There were 12 instances of such double-coding out of the total 39 occurrences of periphrastic equivalents.

In three instances, the periphrasis was due to the inclusion in Spanish of additional information that was absent in English. Presumably these extra elements of content were incorporated in order to provide some further orientation for Spanish readers, as was indeed mentioned by the author of example 20), or, as the authors of example 21) pointed out, this may be reflective of a perception that it is natural for Spanish to be more periphrastic than English.

Example 20:

This trend of research adopts the cognitive/experientialists approach proposed in Lakoff (1987), Sweetser (1990), or Fauconnier (1997), among others.

Estos estudios siguen una tendencia cognitiva, según proponen Lakoff (1987), Sweetser (1990) o Fauconnier (1997) entre otros y que, asimismo, se ha elegido en este estudio.

These studies follow a cognitive trend, as proposed by Lakoff (1987), Sweetser (1990) or Fauconnier (1997) among others, and which has also been chosen in this study] (E38)

Example 21:

- ... se han seleccionado un grupo de expresiones verbales que, por su relevancia en dicho proceso, pueden considerarse representativas del mismo.
- ... I have selected a group of significant phrases which refer to the most representative events of the above-mentioned process.
- [... a group of verbal expressions have been selected which, because of their relevance to said process, can be considered representative of the same process] (S2)

Example 22:

Much literature has been written...

A este respecto, disponemos de numerosos artículos...

[In this regard, we have available to us numerous articles...] (E28)

While it is beyond the scope of this study to characterize the functional and structural nature of these instances of additional information, we note that in some cases it seems relatable to textual (a este respecto) or interpersonal (disponemos) themes as in example 22.

As illustrated by examples 23 and 24 below, in some cases there exist in Spanish what appear to be lexical bundles (or n-grams) that authors opted to employ instead of one-word translation-equivalents because, as three authorrespondents pointed out, they seemed "more natural" or "sound better" in Spanish. These periphrastic alternatives included poner de manifiesto, poner de relieve, and ser testigos de. All of these are used when stating or commenting on results. In all these examples, it would have been possible for the authors to use a one-word lexical item in Spanish; it can therefore be hypothesized that academic and scholarly Spanish continues to have some predilection for multi-word expressions:

Example 23:

Este análisis contrastivo también pone de manifiesto que ...

The contrastive analysis, furthermore, demonstrates that...

[It has been put into manifestation that...] (E12)

Example 24:

Los resultados ... son testigos de la función de lingua franca asumida por el inglés ...

These results ... stress the function of English as a lingua franca...

These results are witnesses to the function of lingua franca assumed by English] (S5)

In functional terms, these periphrastic equivalents are used seven times in expressions of epistemic commitment, four times in expressions of attitude, and, interestingly, 19 times in purposive statements, as the following illustrations attest:

Example 25:

The aim of this paper is to analyze some of the linguistic means ...

El objetivo primordial de este artículo es analizar algunos de los medios lingüísticos ... [The primordial objective of this article ...] (E13)

Example 26:

... and to show how the concept of genre colony can be used to organize the syllabus of an English for Engineering Course ...

... y hacer una propuesta de cómo se puede organizar un syllabus de Inglés para Ingeniería ...

[... and to make a proposal of how an English for Engineering syllabus can be organized ...] (S7)

Example 27:

Con el fin de llamar la atención sobre este territorio virgen, presentamos en este trabajo ...

To fill this gap, this paper proposes an attempt to classify these units.

With the goal of calling attention on this virgin territory, we present in this paper ...] (S6)

Example 28:

We focus on the distinction between cultural metaphors and culturally-adapted new metaphors ...

Nos proponemos estudiar la diferencia entre metáforas convencionales ...

[We intend to study the differences between conventional metaphors ...] (E43)

The author of example 25 explicitly mentioned that he believes "objetivo primordial" to be, in his own words, "a chunk" in Spanish. The authors of the other examples again mentioned that Spanish is more periphrastic and that straight literal translations "wouldn't be natural". The latter assertion suggests that collocational and "chunking" divergences may operate for this particular area of purposive phraseology.

Final considerations

This study makes, we believe, a small contribution to the growing literature aimed at comparing contemporary English and Spanish academic prose,

indeed a literature well represented in the pages of Ibérica. By choosing a corpus of paired texts from the same journal, many of the difficulties associated with comparing international and national publications have been avoided. By choosing a corpus of texts written by language specialists, many of whom with a superb command of written English, the study is not sidetracked by errors or infelicities in either sub-corpora, or indeed by the products of commercial translators. Further, the email responses from a selection of the authors represented in the corpus reveal very considerable insight into the stylistic and collocational patterning of the two languages in the areas of those authors' professional expertise.

The very nature of this study, its data and its attendant investigative procedures, move the focus away from the move structure or rhetorical shape of abstracts that has become such a feature of recent discourseanalytic research into this part-genre, as perhaps singly and most recently best represented by Lorés-Sanz (2009), who examined abstracts in terms of whether they adopted an IMRD or CARS model. Instead, our approach does not center on what is being communicated in an abstract (e.g. "indicative" v. "informative"), but on how it is being communicated. As might be expected, the divergences between the Spanish texts and the English ones are relatively small; indeed, they are nothing like those uncovered for (peninsular) Portuguese by Karen Bennett (2007 & 2009). Even so, the differences, while often small and subtle, remain significant both intrinsically (as a reflection of linguistic-cultural propensities), but also practically as they are relevant to advanced learners of either language and to professional translators.

One of the differences we have found is the presence of stronger epistemic commitment in the Spanish abstracts, which seems to align with the conclusions of Divasson Cilveti and León Pérez (2006), who found that abstracts written in English by Spanish doctors made little use of hedging. This would suggest that Spanish-speaking writers of academic abstracts are more comfortable with higher degrees of epistemic commitment. As one of respondents commented "English is more subtle. You need more hedging. Spanish is more straightforward".

Our study also suggests that there are multi-word expressions of epistemic modality in Spanish that may be more frequent in certain genres or registers than their one-word equivalents, such as poner de manifiesto, poner de relieve, and ser testigos de. It is also possible that these express slightly different degrees of epistemic commitment, but that is not clear from our limited data. And, while it seems clear that these expressions may fall under the general category of intensifiers or boosters, it is not clear how they would be classified under existing taxonomies of Spanish intensifiers, such as that by Mendiluce Cabrera and Hernández Bartolomé (2005). We think that, under that taxonomy, the category of empirical expressions, or expressiones de empirismo might be the most appropriate one, since these multi-word expressions are associated with expressions of results and seem to indicate "objetividad científica y, en consecuencia, un matiz de convencimiento" (Mendiluce Cabrera & Hernández Bartolomé, 2005: 79), that is scientific objectivity and, consequently, a degree of commitment, presumably to the results, which are the defining criteria for this category according to these authors. However, more occurrences in more contexts would need to be analyzed in order to affirm this with any certainty.

Finally, the results also have implications for translation training. For example, if indeed these lexical bundles and other periphrastic forms of expression proved to be rhetorically salient and/or more frequent than their single-word equivalents in Spanish prose, it may be important to make students of translation aware of this divergence. In a world where English continues to be the preferred language of academic publications and seems to be encroaching in academic registers of other languages (Bennett, 2007 & 2009; Burgess & Martín-Martín, 2010), it can be argued that one important role of translators is to preserve whatever uniqueness there is to the rhetorical patterns of other languages by using those that are most distinct from English whenever appropriate. It follows that translator trainees and other language professionals may need to be made aware of the existence of such distinct patterns in a more systematic fashion. We hope our study is also a modest contribution in that direction.

Acknowledgements

We would like to thank the two anonymous reviewers for their valuable comments and insights that have, we hope, led us to produce an improved version of our paper.

> [Paper received May 2010] [Revised paper accepted September 2010]

References

Al-Harbi, L. & J.M. Swales (2011), "Arabic and English abstracts in bilingual language science journals: Same or different?" Languages in Contrast 11: 69-85.

Bennett, K. (2007). "Epistemicide! The tale of a predatory discourse". The Translator 13: 151-169.

Bennett, K. (2009). "Academic discourse in Portugal: A whole different ballgame?" Journal of English for Academic Purposes 8: 21-32.

Bittencourt dos Santos, M. (1996). "The textual organization of research paper abstracts in applied linguistics". Text 16: 481-499.

Burgess, S. (2002). "Packed houses and intimate gatherings: Audience and rhetorical structure" in J. Flowerdew (ed.), 196-215.

Burgess, S. & P. Martín-Martín (2010). "Interpersonal features of Spanish social sciences journal abstracts: A diachronic study" in R. Lorés-Sanz, P. Mur-Dueñas & E. Lafuente-Millán (eds.), Constructing Interpersonality: Multiple Perspectives on Written Academic Genres, 99-115. Newcastle: Cambridge Scholars Publishing.

Busch-Lauer, I.A. (1995). "Textual organization in English and German abstracts". Anglicana Turkuensia 14: 175-186.

Catford, J.C. (1965). A Linguistic Theory of Translation. Oxford: Oxford University Press.

Connor, U. & A. Moreno (2005). "Tertium comparationis: A vital component in contrastive rhetoric research" in P. Bruthiaux, D. Atkinson, W.G. Eggington, W. Grabe and V. Ramanathan (eds.), Directions in Applied Linguistics, 153-164. Clevedon: Multilingual Matters.

Dahl, T. (2004). "Some characteristics of argumentative abstracts". Akademisk Prosa 2: 49-67.

Dahl, T. (2009). "Author identity in economics and linguistics abstracts" in E. Suomela-Salmi & F. Dervin (eds.), 123-134.

Dayrell, C. & S. Aluísio (2008). "Using a comparable corpus to investigate lexical patterning in English abstracts written by non-native speakers". LREC 2008 Workshop on Comparable Corpora, 61-66. URL: http://repository.dlsi.ua.cs/251/ 1/workshops/w12 P [02/01/10]

Divasson Cilveti, L. & I.K. León Pérez (2006). "Textual and language flaws: problems for Spanish doctors in producing abstracts in English". Ibérica 11: 61-79.

Flowerdew, J. (ed.) (2002), Academic Discourse. Harlow, Essex: Pearson Education.

Graetz, N. (1985). "Teaching EFL students to extract structural information from abstracts" in J.M. Ulign & A.K. Pugh (eds.), Reading for Professional Purposes: Methods and Materials in Teaching Languages, 123-135. Leuven: Acco.

Hartley, J. (2004). "Current findings from research on structured abstracts". Journal of the Medical Library Association 92: 368-371.

Hyland, K. (2000). Disciplinary Discourses: Social Interactions in Academic Writing. London: Longman.

Hyland, K. (2001). "Humble servants of the discipline? Self-mention in research articles". English for Specific Purposes 20: 207-226.

Hyland, K. (2005). "Stance and engagement: A model of interaction in academic discourse". Discourse Studies 7: 147-171.

Johns, T.F. (1992). "It is presented initially": Linear dislocation and interlanguage strategies in Brazilian academic abstracts in English and Portuguese". Ilha do Desterro 27: 9-32.

Lorés, R. (2004). "On RA abstracts: From rhetorical structure to thematic organization". English for Specific Purposes 22: 25-43.

Lorés-Sanz, R. (2009). "Different worlds, different audiences: A contrastive analysis of research article abstracts" in E.Suomela-Salmi & F. Dervin (eds.), 187-198.

Martín-Martín, P. (2003). "A genre analysis of English and Spanish research paper abstracts in experimental social sciences". English for Specific Purposes 22: 25-43.

Melander, B., J.M. Swales & K.M. Fredrickson (1997). "Journal abstracts from three academic fields in the United States and Sweden: National or disciplinary proclivities?" in A. Duszak (ed.), Culture and Styles of Academic Discourse, 251-272. New York: Mouton de Gruyter.

Mendiluce Cabrera, G. & A.I. Hernández Bartolomé (2005). "La matización asertiva en el artículo biomédico: una propuesta de clasificación para los estudios contrastivos inglés-español". Ibérica 10: 63-90.

Montesi, M. & B.G. Urdiciain (2005). "Recent linguistics research into author abstracts: Its value for information science". Knowledge Organization 32: 64-78.

Mur-Dueñas, P. (2008). "Analyzing engagement markers cross-culturally: The case of English and Spanish business management research articles" in S. Burgess & P. Martín Martín (eds.), English as an Additional Language in Research Publication and Communication, 197-213. Berlin: Peter Lang.

Pho, P. D. (2008). "Research article abstracts in applied linguistics and educational technology: A study of linguistic realizations of rhetorical structure and authorial stance". Discourse Studies 10: 231-250.

Rounds, P.L. (1982). "Hedging in written academic discourse". (mimeo) Department of Linguistics, University of Michigan.

Samraj, B. (2002). "Disciplinary variation in abstracts: The case of wildlife behavior and conservation biology" in Flowerdew, J. (ed.), 40-

Suomela-Salmi, E. & F. Dervin (eds.) (2009). Cross-linguistic and Cross-cultural Perspectives on Academic Discourse. Amsterdam: John Benjamins.

Stotesbury, H. (2003). "Evaluation in research article abstracts in the narrative and hard sciences". Journal of English for Academic Purposes 2: 327-341.

Swales, J.M. (1990). Genre Analysis: English in Academic and Research Settings. Cambridge: Cambridge University Press.

J.M. (2004). Research Swales, Genres: Explorations and Applications. New York: Cambridge University Press.

Swales, J.M. & S. Van Bonn (2007). "Similarities and differences in French and English EAP research article abstracts: The case of ASP" in K. Fløttum (ed.), Language and Discipline Perspectives on Academic Discourse, 260-276. Newcastle: Cambridge Scholars Publishing.

Swales, J.M. & M.D. Perales-Escudero (2009). "Matched pairs of Spanish and English research abstracts: Do the differences lie in the details?" Paper presented at the Fifth Conference on Intercultural Rhetoric and Discourse. Ann Arbor, Michigan, June 13 2009.

Valero Garcés, C. & C.M. Calle-Martínez (1997). "Contrastive rhetoric and ESP: A cross-linguistic analysis of finite verb profiles in English and Spanish medical abstracts". ALSED-LSP Newsletter 20: 22-36.

Van Bonn, S. & J.M. Swales. (2007). "English and French journal abstracts in the language sciences: Three exploratory studies". Journal of English for Academic Purposes 6: 93-108.

Moisés Perales-Escudero is a doctoral candidate in English and Education at the University of Michigan. He works in cross-cultural text analysis and reading comprehension. Forthcoming publications include The split infinitive past and present (JEngL), and Texts and contexts: Literacy in Mexican EFL Teacher Education (Universidad Autónoma de Puebla, México).

Although **John M. Swales** officially retired from the University of Michigan in 2007, he remains active on a number of EAP-related projects. Forthcoming publications (both with Christine Feak) include Navigating academia: Writing supporting genres and Creating contexts: Writing introductions (University of Michigan Press)

NOTES

¹ As both anonymous reviewers have pointed out, a comparison with high impact ISI journals would remain appropriate if the researcher's objective is to develop tools for non-native academics to publish their articles in such journals.

² We have decided to label these abstracts as "author-written" rather than "author-translated" since the

authors who responded to our queries indicated that they did not "translate" the abstracts but instead sought to produce a new abstract in Spanish. Of course, this production of a new abstract in another language involves translational processes, which is why we have kept "translation" as a keyword. Further, our results, as those of other studies in contrastive analysis, may have some relevance for translators; this provides additional rationale for retaining "translation" as a keyword.

³ We do this in order to provide readers unfamiliar with Spanish with some sense of the stylistic originality of the language. In no way do we intend these literal translations as a critique of the abstract authors' translations or of the Spanish language itself.

⁴ This Anglophone use is somewhat comparable to the use of oeuvre in French.