'We deliberately set high demands for the gold standard'... Inclusive and exclusive pronouns in two social science cultures

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ABSTRACT

Intercommunication among the members of academic discourse communities is usually achieved through certain defined genres that aim to achieve the community's goals. As a result, language analysts have focused their attention on how scientists from different fields manipulate their readership by using personal pronouns and persuade the reader of their claims. This study analyses the use of inclusive and exclusive pronominal signals in English and Spanish research articles and investigates whether there are differences between the two languages in terms of pronominal signals frequency and usage. A corpus of 60 research articles in English and Spanish in the fields of linguistics, education and psychology was used to analyse the pronominal items. The close qualitative analysis of items indicates that the use of exclusive pronouns is higher than inclusive ones in both data sets, and that the most common type of pronoun in both inclusive and exclusive uses is *we/nosotro*s. However, the English speaking community shows an overall higher rate of personal pronouns. The results may indicate a tendency from the English speaking writers' to self-promote their competence as researchers in an international discourse community, whereas the Spanish speaking

writers prefer to detach themselves from their propositions in a more national community.

Keywords: scientific writing, pronouns, discourse community, contrastive linguistics.

RESUMEN

La intercomunicación entre los miembros de comunidades discursivas académicas generalmente se logra a través de ciertos géneros definidos que tienen como objetivo alcanzar las metas de la comunidad científica. Como resultado, los analistas del lenguaje se han enfocado en cómo los científicos de diferentes campos manipulan al lector mediante el uso de los pronombres personales para así persuadirlo de sus ideas. Este estudio analiza el uso de las señales pronominales inclusivas y exclusivas de artículos de investigación en inglés y español e investiga si existen diferencias entre los dos idiomas en cuanto a la frecuencia y uso de estas señales. Para analizar los elementos pronominales en ambos idiomas, se utilizó un corpus de 60 artículos de investigación en inglés y español en los campos de la lingüística, la educación y la psicología. El análisis cualitativo del corpus indica que el uso de los pronombres exclusivos es más frecuente en ambos idiomas, y que el tipo más común de pronombre en su uso inclusivo y exclusivo es *we/nosotros*. Sin embargo, la comunidad de habla inglesa muestra un mayor uso de los pronombres personales. Los resultados parecen indicar una tendencia de los escritores de habla inglesa a la libre promoción de su competencia como investigadores en una comunidad de discurso internacional, mientras que los escritores de habla hispana prefieren desprenderse de sus propuestas en una comunidad más nacional.

Palabras clave: escritura científica, pronombres, comunidad de discurso, lingüística contrastiva.

1. Introduction

The English language is globally considered as the language for transmission of knowledge (Crystal, 2003), and the lingua franca for scientific publication in

high impact factor journals. Because of this, the non-Anglophone scientific community has increasingly faced difficulties in publishing their work on international peer-reviewed publications. In particular, the non-Anglophone social scientists' academic profile and contributions to disciplinary knowledge may be unnoticed internationally because they often publish in more 'national' journals which language of publication is other than English. According to the Latin America, Caribbean, Spain and Portugal Scientific Journals Network (Latindex), there are over 13,000 Spanish language journals produced in the 30 countries of Latin America; however, these are not being captured in global metrics such as the Journal Citation Report.

In response to the current situation of non-Anglophone speaking scientists, extensive researh in the field of English for Research Publication Purposes (Cargill & Burgess, 2008) has been carried out in order to analyse scientific writing. Perhaps one of the most investigated genres in this field has been the research article (RA henceforth), especially in terms of the analysis of the key linguistic and rhetorical features that show the writer's ability to persuade the academic community about the data, methods and claims of his/her research (Hyland, 2005b). Hyland explains: 'the writer of an academic article wants his or her argument to be both understood and accepted... There is always more than one plausible reading for data, and readers always retain the option of rejecting the writer's interperetation' (Hyland, 2005b, p. 90).

One way academic writers try to persuade the readership about their research is by making themselves present in the text and interacting with the reader by means of pronominal signals. Writer and reader pronouns can perform a number of functions when used by academic writers which include organising the text and guiding the reader, acknowledging funding bodies or constructing a relationship with members of a discourse community. Extensive research on the use of writer and reader pronouns has been conducted in academic texts from a linguistic perspective (Tarone, *et al.* 1981; Bernhardt, 1985; Ivanic, 1998; Kuo, 1999; Tang and John, 1999; Hyland, 2001, 2002; Harwood 2003, 2005a, 2005b; Starfield and Ravelli, 2006). Language analysts have also studied the use of pronominal signals in academic communities across languages, especially in English and Spanish (Martinez, 2005; Mur-Dueñas, 2007; Sheldon, 2009; Carciu, 2009; Lorés-Sanz, 2011; Chávez Muñoz, 2013), English and Italian (Molino, 2010), and English and Bulgarian (Vassileva, 2001).

2. The study of pronominal signals

2.1. Categorisation of pronominal signals

Pronominal signals form part of what Thompson and Thetela (1995) have labelled *naming* in written text which includes:

a) *Verb forms referring 1st and 2nd person pronouns* (we, us, our, I, me, my, you, your/ *Yo, me, mi, mi / mis, mio/ -os/ -a/ -as, nosotros, nos, nuestro/ -os/ -a/ -a, tu, te, ti, tu/ tus, tuyo/ -os/ -a/ -as , usted, lo/ la/ le, Su/ sus, suyo/ -os/ -a/ -as*),

b) *Referential switching* , that is, when the writers switch between referring to themselves "we/*nosotros*" and the name of the company/research group/institution they belong to,

c) *Other lexical items* such as indefinite pronouns (e.g. both/*ambos*, one/*uno,* let's).

Stirling and Huddleston (2002: 1463) explain the English personal pronouns system according to the "utterance- act roles of speaker and addressee". They classify such system into: 1st person- used for the speaker or a group including at least one speaker, 2nd person-used for the addressee or a group including at least one addressee but no speaker, and 3rd person-the residual category- not 1st or 2nd.

In English the subject pronoun is obligatorily expressed for the sentence to be grammatically correct, whereas Spanish is a null subject language in which the grammar does not require the obligatory and explicit use of subject pronouns (Lujan, 1999). It is the verb endings that provide information about the person and number in a sentence. Because of this, the categorisation of pronominal signals in my study has been called verb forms referring 1st and 2nd person pronouns. This terminology encompasses the occurrence of pronominal signals in both English and Spanish.

This brief null subject explanation introduces some aspects of the research design in terms of the framework for the analysis of the data. The categorisation of pronominal signals in Spanish was different from that of English due to its null subject nature (the subject pronoun is obligatorily expressed). For the classification of pronominal signals in Spanish an explicit/implicit categorisation

was used. The explicit category is represented by personal pronouns, whereas the implicit signals were identified according to the form of the verb.

2.2. Inclusive and exclusive pronouns in academic writing

Inclusive we refers to the writer and the reader together, whereas exclusive *we* refers only to the writer or writers associated with the production of the text. Filomonova (2005), explains that: "the terms 'inclusive' and 'exclusive' are traditionally used to denote forms of personal pronouns which distinguish whether an addressee (or addressees) are included in or excluded from the set of referents which also contains the speaker" (Filimonova, 2005: ix). However, it is not always easy to decide whether specific instances of *we/nosotros* are inclusive or exclusive, since there is no formal difference between these two uses. Harwood (2005c) has discussed the exclusive/inclusive ambivalence in pronominal signals in academic writing and specifically discusses the possibility of exploiting the ambiguity of exclusive/inclusive pronouns for the writers' own ends, and the strategic use of inclusive pronouns to make the reader feel involved.

In the light of these issues, this study aims to identify the frequency and use of pronominal items in English and Spanis RAs. The research questions of this paper are:

RQ1- What pronominal signals are used in in English and Spanish RAs?

RQ2- Are there any differences and/or similarities between the two languages when using pronominal signals?

3. Method

3.1. Data

A total of 60 research articles (RAs) in linguistics, psychology and education in English and Spanish were collected for the analysis, resulting in a corpus of 483 436 words. The selection of RAs for this study was based on a series of principles that aimed to make the data as reliable as possible. The criteria for the selection of texts were as follows:

1. The selected RAs from each journal are empirical studies and include the following sections: introduction, methodology, results and discussion/ conclusion (IMRD).

2. The RAs were all published between 2005 and 2007.

3. All the texts were written by native speakers or near native speakers of English or Spanish.[1]

4. The articles have been published in leading journals of each discipline, according to the Impact Factor made by the Thompson Institute of Scientific Information for the English data set, and the 36 basic characteristics that journals included in the Latindex database must meet in order to be added to their system for the Spanish data set.

Familiarity with the disciplines and the "more culturally bound" nature of social sciences compared to pure sciences (Mur-Duenas, 2007:146) are the two main factors that influenced the selection of these particular fields for the analysis of pronominal signals.

3.2. Approach for the analysis

The first stage of the analysis of pronominal signals was performed using the lexical analysis software WordSmith Tools (Scott, 2012). The selected texts were obtained in PDF format from the journals and then converted into plain text format. All footnotes, endnotes, reference lists, acknowledgements, quotations and citations were deleted to make a clean corpus. For the case of subject pronouns in Spanish, the items had to be tagged by verb endings for the plural forms (*nosotros *amos, *emos, *imos*). The search for verb endings for the singular forms of *yo, tu, usted* and the plural *ustedes* in Wordsmith would have been problematic as the verb endings (*yo:* -o; *tu:* -as, es; *usted:* -a, -e; *ustedes:* -an, -en) can be found in many other words of the corpus. Thus, these verbs were tagged manually. The second stage

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[1]   It was not tested whether they were native speakers of English or Spanish; however the fact that the articles have been published in high quality journals suggests that the writers had a high command of the language.

of the analysis of self-mentions and addressee features[2] involved identifying the pronominal signal and classifying it as either inclusive or exclusive. The qualitative analysis was based on the intuition of the researcher and the detailed analysis of the item's cotext (Janney, 2004; Harwood, 2005a).

4. Results and Discussion

There are a total of 1589 pronominal signals in the English research articles (ERAs) and a total of 792 signals in the Spanish research articles (SRAs). In the ERAs, 1301 are self-mentions and 288 are addressee features. The number of items are less in the Spanish data, with 604 self-mentions and 188 addressee features. However, because the ERAs corpus was larger than the SRAs corpus (there was a difference of 72 668 words), the comparison and counting of raw frequencies did not provide an accurate account of the presence of pronominal items in the two data sets. In order to make both corpus comparable the data was normalised by adjusting the raw frequency of pronominal items per 10 000 words (see Biber, Conrad and Reppen, 1998).
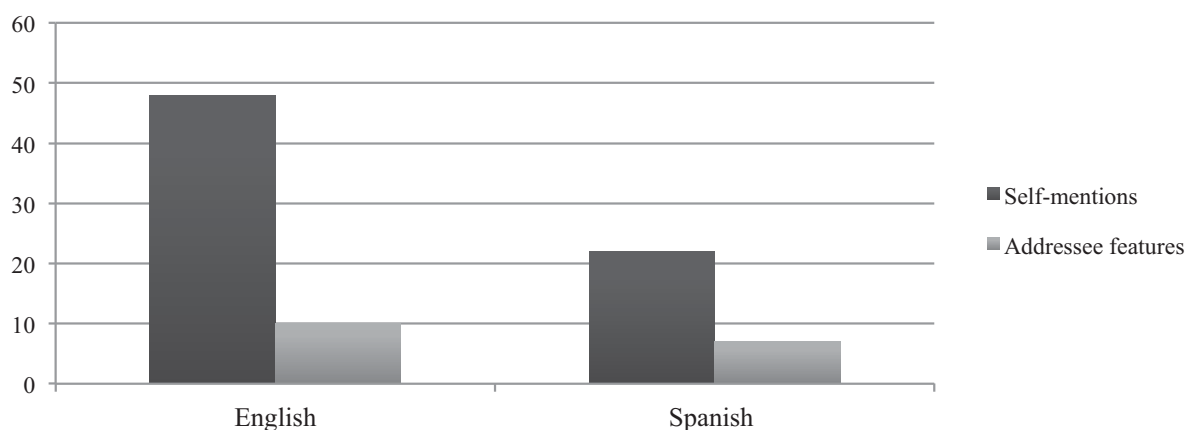

Figure 1. Total of pronominal signals per 10 000 words in English and Spanish

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[2] Note that exclusive pronominal signals are labeled as self-mentions of the writer only, and inclusive pronominal signals as addressee features. The latter category includes both the features that signal the reader exclusively and features that signal writer and reader together.

Figure 1 shows the results after normalising the data. There were a total of 58 pronominal signals in the ERAs (48 self-mentions and 10 addressee features) and 29 signals in the SRAs (22 self-mentions and 7 addressee features). Self-mentions in both English and Spanish are more frequently used compared to addressee features. This similarity may be explained in terms of the nature of the genre being analysed, in which the extensive use of self-mentions shows the writers' active role in the text and the actions being explained in it. In this way the RA is a space where writers are able to communicate and promote their work by showing the quality of their work and making a contribution in the construction of knowledge. However, there is still a difference between the amount of self-mentions in English and Spanish, as self-mentions in the English data are twice as frequent as in the Spanish. This could be interpreted in a preliminary way as the English writers being more active and confident in their research, perhaps with a sense of selling the research process to the reader by making themselves present. This may also be explained in terms of Spanish academic writing tendency to be indirect and polite when putting arguments across, and does not necessarily mean that Spanish writers are not confident or sellers of their propositions.

4.1. Categories of self-mentions and addressee features in English

Figure 2 shows the results in each of the categories in self-mentions and addressee features. Each item was classified into the category they belonged to: verb forms referring to 1st and 2nd person pronouns, referential switching or other lexical items. A manual count of the categories was then performed. All categories in Figure 2 include both exclusive and inclusive pronominal signals.
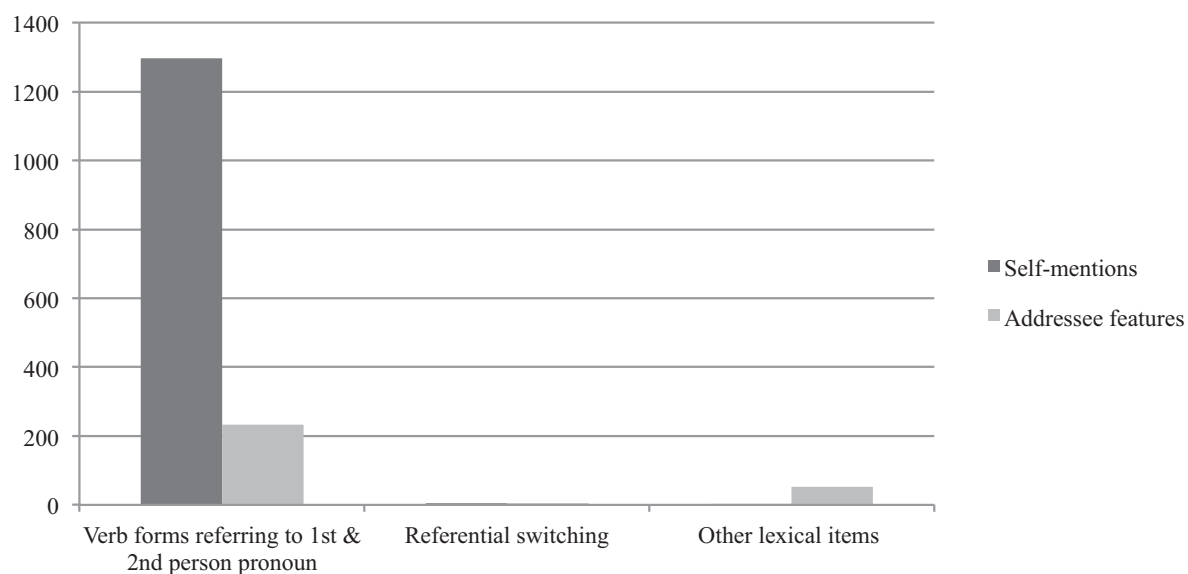
Figure 2. Type of self-mentions and addressee features in English

4.1.1. Verb forms referring to 1st and 2nd person pronouns

The most frequent item in verb forms referring to 1st and 2nd person pronouns was *we* acting as both self-mentions and addressee features. That is, exclusive *we* and inclusive *we* were the most frequently used item to signal the presence of the writers and to show explicit awareness of the reader. As suggested by Pennycook (1994) there is an assumption of authority and communality when using *we*, as will be explained in detail in the category of verb forms referring to 1st and 2nd person pronouns.

Exclusive *we* is the most frequently used item in the category of verb forms referring to 1st and 2nd person pronouns (72%), followed by *our* (23%), *us* (3%), *I* (1%), and finally *my* (3%). There are no occurrences of *me, myself, mine, ourselves* and *ours* in the ERAs. Thus, exclusive plural forms are far more frequent than singular forms. This partly coincides with Hyland's (2003) results of the frequency of self-mentions in soft-fields RAs (only Marketing and Sociology RAs showed a higher frequency of plural forms). These results are also of course related to the number of articles in the data that are multiple authored: 25 multiple authored ERAs compared to 5 single authored ERAs. On the other hand, in rhetorical

terms the high frequency of plural forms in the ERAs could be explained according to the rhetorical purposes of the writers: to show their authority, expertise and confidence in the field, and to gain in this way the reader allegiance about the decisions taken in the research paper as the right ones. Examples 1 and 2 illustrate the case of plural forms for multiple authored ERAs.

(1) From the above percentages <u>we</u> obtain a naive estimate for the ratio between the real number of errors and the number of hits of the error dictionaries, which is presented in Table 17. (LIE.RA1)

(2) Compared to related work (cf. Section 5), <u>our</u> results achieve lower scores because the task is more difficult... (LIE.RA2)

In examples 1 and 2 the writers present themselves as competent and capable contributors to the field. As for cases of singular forms, example 3 shows the case of single authorship in the category of verb forms referring to 1st and 2nd person pronouns.

(3) As <u>suggested by sociologists</u>, computer networks are social networks (Wellman, 2001). A social network here is defined as those individuals with whom a person is in some sort of regular and sustained contact (Fahy et al., 2001; Ridley & Avery, 1979)... In this social network, learners assume various roles while interacting with one another. <u>I agree that the interaction in an online discussion offers us a "gold mine of information concerning the psycho-social dynamics" among participants (Henri, 1992, p. 118)</u> because student participation in and contribution to an online discussion are conscious activities that entail learning. (EDUE.RA1)

In example 3 the writer establishes himself as a knowledgeable member of the discourse community who is able to agree with previous contributions of sociologists and fellow members of the discourse community. That is, he creates a sense of both authority and communality by agreeing to other propositions.

In a few texts of my data the writer of an article was a single person but the author nevertheless makes use of plural forms to refer to him/herself. See example 4.

(4) <u>We</u> experimented with two variations in the clustering setup: (1) For the selection of the verb data, <u>we</u> considered a random choice of German verbs in approximately the same magnitude of number of verbs (900 verbs plus the preliminary verb set), but without any restriction on the verb frequency. (LIE.RA2)

A possible explanation for this phenomenon is the use of authorial *we* to refer to the group of researchers working on that project in the *Department of Computational Linguistics*. Alternatively, *we* may refer to a research related action performed by the single writer of the text. In Harwood's (2006, 2007) account of pronoun use in political science, the use of *we* to refer to a single author's work throughout a thesis is discussed with Harwood's interviewees. This phenomenon is explained as an attempt to have a polite tenor by using *we* instead of *I* repeatedly for the sake of a "misplaced sense of politeness" (Harwood, 2006: 432). Similarly, Myers (1989) also explained how exclusive pronouns such as *we* instead of *I* may help to prevent the writers from expressing their propositions and instead give the audience the option for disagreeing.

Figure 2 shows the type and frequency of verb forms referring to 1st and 2nd person pronouns items in addressee features in English.

In terms of addressee features, the most frequently used item is inclusive *we* (69%), followed by inclusive *us* (18%) and *our* (12%). These results coincide with Hyland's (2004) analysis of dialogic features in essay reports of students, in which *we, us* and *our* were also the most frequent engagement items. There were only 3 items that address the reader directly: *you* and *your,* however these will be discussed at the end of this section. Let us look at examples 5 and 6 which illustrate the case of the use of inclusive *we* in addressee features.

(5) *Implications for learning, teaching, and research*
Learning and knowledge construction require students to be in an environment that they can interact with one another and engage cognitively at all levels. As, <u>we</u> should be very clear about learning goals and outcomes, and design appropriate activities that engage students in learning and useful strategies that assist them in moving between levels of cognitive engagement... (EDUE.RA1)

(6) The assumption in writing-to-learn is that writing is not 'just' a way to express or display <u>our</u> knowledge. (EDUE.RA3)

In example 5, *we* is inclusive as the writer makes reference to a common experience with other members of the same discourse community. This may signal an attempt at positive politeness and communality (Harwood, 2005c), in which writers acknowledge the practices of other members of the discourse community and suggest possible instruction practices to improve the current state of the art (*critiquing disciplinary practices* in Harwood's, 2005c terms). On the other hand, this strategy could also be interpreted in terms of negative politeness. In this case, writers diminish their propositions and "protect their face" (Harwood, 2005c: 348) by including the reader.

In example 6 the item *our* signals an inclusive relationship with the reader in a more general way, referring to *the way we express our knowledge* (as humans). In this case, the writers position themselves in unity with everyone about the assumption of *writing to learn*.

4.1.2. Referential switching

In terms of referential switching perhaps the most noteworthy aspect is that there are very few occurrences. There are a few items such as the *experimenter* and *the researcher* that signal the presence of the author (Example 7).

> (7) Subjects were tested one at a time, and the <u>experimenter</u> remained in the room
> to make certain the subjects were following the instruction. (LIE.RA6)

Item 7 could be interpreted as the writers' belief about the inappropriateness of using of *I*. Alternatively, it may show a detachment from a particular methodological step, perhaps to avoid the criticisms of the audience about the rigour of this particular step. These kinds of items had very low frequency in my data. This low frequency of exclusive lexical items could be explained in terms of the rhetorical purpose of the writers, which is to present themselves as the competent performers of methodological steps and contributions to the field.

In terms of addressee features, the item *the reader* appears only 4 times making the reader of the text a direct participant in the discourse. (Example 8)

(8) For a detailed description of hierarchical clustering techniques and an intuitive interpretation of the similarity measures, <u>the reader</u> is referred to, for example, Kaufman and Rousseeuw (1990). (EDUE.RA2)

In example 8 writers anticipate and show awareness of the reader's needs, as *the reader* in this case functions as a signal of shared membership, interests and goals by creating a sense of communality.

4.1.3. Other lexical items

As stated previously, lexical items such as *one, both* and *let's* have also been considered in the analysis of pronominal signals. Overall, there are 52 items of this category in addressee features: 43 *one* items and 9 *let's/let us.*

(9) Another explanation, based on the idea of grounding, was put forward by Wittenbaum and Bowman (2004). They argued that group members attempt to validate <u>one's</u> thoughts and ideas by assessing their accuracy and appropriateness through comparison with others. (EDUE.RA6)

In example 9 the writers review previous work from members of the discourse community and explain the argument by using inclusive *one* in a general way as part of everyone. On the other hand, example 10 is a discourse community related item, in which disciplinary practices are described (*describing disciplinary practices* in Harwood's, 2005c terms). The use of *let us* is exemplified example 10.

(10) <u>Let us</u> now turn to fixations on the correct location (Fig. 5B) in these same two. Immediately upon hearing the word corresponding to the correct location (box or towel), participants looked to the corresponding location in the visual world... (LIE.RA4)

Example 10 takes the reader to a part of the text where the results of their research are explained. In this way the writers direct the attention of the reader and show the importance of these results by involving the reader in the unfolding of the argument.

4.2. Categories of self-mentions and addressee features in Spanish

The analysis of pronominal signals in Spanish was carried out according to both pronominal signals and pronoun drop usage. First, the search for pronominal signals (e.g. *nos, nosotros, nuestro, yo, tu, usted,* etc.) was made using WordSmith tools (Scott, 2012). The computational search of items was done by searching for the verb ending **amos, *emos, *imos* for the plural forms. The results are shown in Figure 3.
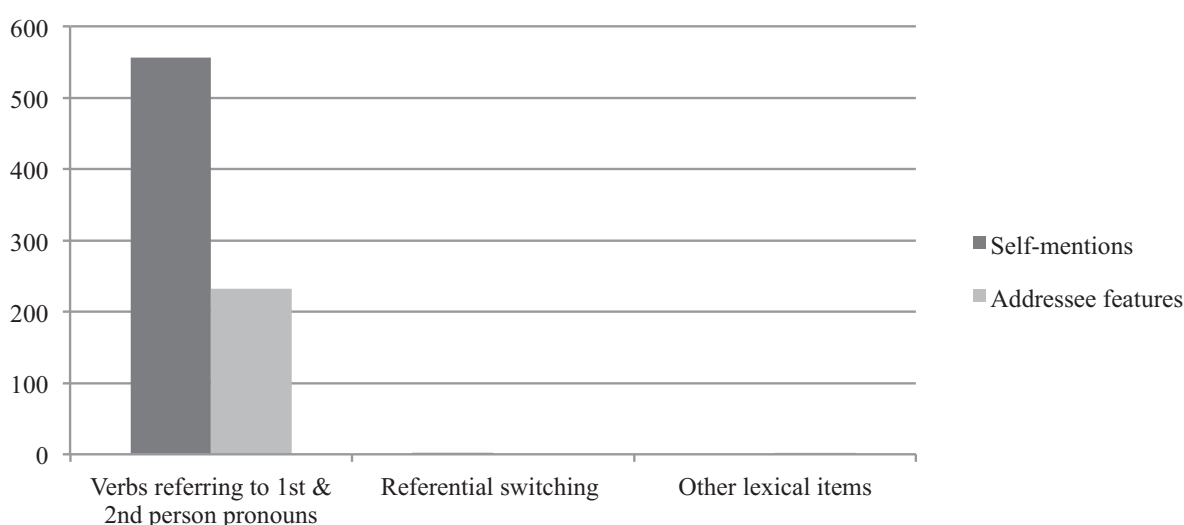

Figure 3. Type of self-mentions and addressee features in Spanish

In both self-mentions and addressee features in verb forms referring to 1st and 2nd person pronouns are the most frequent type items. There is a very low frequency of referential switching and other lexical items. It is worth mentioning that in the category of verb forms referring to 1st and 2nd person pronouns a total of 248 pronominal signals were identified: 199 of the 556 self-mentions were realized by pronominal signals such as *me, mi,* exclusive *nos, nuestro* etc., and 49 of the 232 addressee features were pronominal signals such as inclusive *nos, nuestro* etc. For practical purposes the *nosotros* and *yo* forms will be employed except when specifically stated to refer to both pronominal signals and to pronoun drop self-mentions and addressee features (the latter one in the case of inclusive plural forms) signaled by the presence of a verb in the 1st person plural and singular forms.

4.2.1. Verb forms referring to1st and 2nd person pronouns

In terms of verb forms referring to1st and 2nd person pronouns, again self-mentions are more frequent than addressee features in the SRAs. The most frequent item used by writers in self-mentions is the *nosotros* form, accounting for 56% of the total of signals. This percentage represents only pronoun drop uses of *nosostros/as*. The second most frequently used pronominal signal is the item *nos* with a total of 114 occurrences (see example 11 below), followed by *nuestro* (65 items) (see example 12), *yo* (64 items), *me* (10 items) and *mi* (10 items). A literal translation of the Spanish texts has been made in order to assist the reader to make a transparent comparison between the two languages.

> (11) Para los fines que aqui <u>nos *atañen,*</u> <u>nos acogeremos</u> a la *definición* que sobre esta disciplina hacen Richards, Platt y Platt (1997, p. 25). (*For <u>our purposes, we will take the definition</u> that Richards, Platt and Plat make about this discipline*) (EDUS.RA4)

> (12) ... en general, <u>encontramos</u> similares en la medida en que <u>nuestros sujetos</u> han sido niños escolarizados, de zona urbana ... ... *in general, <u>we find</u> similarities as long as <u>our subjects</u> have been educated, from urbanized zones...* (EDUS.RA7)

In rhetorical terms in example 11 the writers narrow down their research intentions by giving focus and organising the text. They also adopt a particular approach proposed by other members of the discourse community (*nos acogeremos a la* definición-we will take the definition). Thus, writers seem to emphasise their methodological choices and reinforce the quality of their work by pointing out the practices of other members. In example 12 the writers also point out an aspect of their methodology, perhaps to guarantee the quality of their work and boost their adequate methodological procedure.

The analysis shows that plural forms were commonly found in the analysis of verb forms referring to1st and 2nd person pronouns in Spanish. This is in part due to the number of multiple authored articles in the SRAs corpus: 11 single authored and 19 multiple authored articles. There were also cases of use of exclusive plural forms in single authored articles, as in example 13.

(13) En el presente artículo <u>aportamos</u> antecedentes acerca de un proyecto en marcha en la Pontificia Universidad Católica de Valparaíso, Chile, centrado en la recolección, construcción y descripción de un corpus de discurso escrito... (*In the present paper <u>we contribute</u> with background information about an ongoing project at the Pontificia Universidad Católica de Valparaíso, Chile, focused on the collection, construction and description of a written discourse corpus*). (LIS.RA7)

Frequent use of plural forms in Spanish academic discourse even in the case of single authors (authorial *we*) is generally accepted. One main reason is that in academic writing in Spanish the use of *nosotros* denotes a polite and indirect way of self mention, this being a particular feature of the language. A second and less common reason is that writers talk on behalf of the institution/university they work for and produce research for (e.g. Universidad Central de Venezuela, Escuela de Idiomas Modernos). This applies to example (14) above, where *aportamos* shows the writer contribution on behalf of the research group. As for the use of single forms, all items in the 64 items of *yo* category were null subject forms items (example 14).

(14) En la muestra de habla oral que <u>(yo)</u> acabo de mencionar, estos marcadores son los siguientes... (*In the oral sample that <u>I</u> have just mentioned, these markers are the following...*). (LIS.RA2)

The exclusive signal (*yo) acabo de mencionar* is the writer's reminder of what was mentioned earlier. In this way she considers the needs of the reader and at the same time reinforces the methodology and argument by pointing to a previous point in the text. Finally*, me* and *mi(s)* also show a low frequency of items, all of them occurring in the same two texts of the SRAs. Thus, the use of *me* and *mi(s)* is relatively uncommon in my SRAs dataset, but still it represents the particularity that singular forms do nevertheless occur in Spanish academic discourse, contrary to the norm of polite indirectness of Spanish language, in which writers prefer to use plural forms as I have mentioned above. Interestingly, Spanish writers signal their presence in their propositions more often than English writers. However, the number of single authored SRAs must be taken into account before drawing any conclusions, as the percentage of single-authored ERAs was lower than in the SRAs.

In terms of addressee features, the most frequent item in the category of verb forms referring to1st and 2nd person pronouns in Spanish is inclusive *nosotros* (79%), all being null subject form items. This is followed by *nos* (17%) and *nuestro* (4%). In comparative terms, plural forms are more frequent in both English and Spanish RAs. There are no cases of *tu, te, ti, tu(s), tuyo, usted, le, su(s)*. Thus, inclusive plural forms were more commonly found in my data. Similar to English academic discourse 2nd person pronouns are rare in academic writing. In the particular case of Spanish, no formal or informal personal pronouns such as *usted, tu, tus* etc occur in my data. In any case, the reader is never addressed directly and individually in the text, but always in an inclusive way with the writer. Example 15 illustrates the case of inclusive plural forms in the SRAs.

> (15) <u>Podemos concluir</u> diciendo que el análisis del discurso en el aula puede convertirse en una valiosa herramienta para evaluar <u>nuestro</u> trabajo de cada día adaptándolo a las necesidades concretas de cada momento y grupo para así **mantenernos** en la búsqueda continua de la optimización de nuestra labor como docentes. (*<u>We can conclude</u> stating that discourse analysis in the classroom can become a valuable tool to evaluate <u>our</u> everyday work by adapting it to the specific needs of every moment and group to <u>keep us</u> in the search of the improvement of our work as teachers*). (EDUS.RA4)

In item 15, writers first present their conclusions using an exclusive signal *podemos concluir*, and this is then followed by inclusive *nuestro trabajo,* in which writers refer to the practices of the discourse community. Then, the writers continue with the inclusion of the reader in their argument by encouraging the further actions of the discourse community: this is done by using *mantenernos en la busqueda*. In this way, writers pull the reader into their final conclusions by making him/her participant in their claims.

As expected, there are also some cases of fuzziness in classifying the items into inclusive or exclusive. For instance in the following example:

> (16) Por último, <u>encontramos</u> un 13,55% de estas construcciones negativas, como el siguiente ejemplo... (*Finally, <u>we find/found</u> 13.55% of these negative constructions, for example...*). (LIS.RA5)

The *(nosotros) encontramos* in the example could either be inclusive or exclusive. The form represents both the present tense and the simple past tense of the verb *encontrar* (to find). It is inclusive if the writer is using the present tense to refer to the unfolding discourse taking place as the reader reads the text. On the other hand, it could also be exclusive if the verb is intended to be in the past tense, and it refers to the action of the analysis of text in the research carried out; in this case it would refer exclusively to the results found by the researchers. Another similar case is in the following example where *nos* could be either exclusive or inclusive.

> (17) Esta correlación <u>nos conduce</u> a un tercer concepto... (*This correlation <u>leads us</u> to a third concept*). (LIS.RA5)

In this case, the verb is in the present tense, which makes it unlikely that it is referring to the result of an action carried out during the research process. However, the writers might be referring to their own thought processes as the text is being written. On the other hand, it is inclusive if the writers use *nos conduce* as a form of connective and interactional signal to lead the reader to a result together with the writers.

4.2.2. Referential switching

Only two items were found for the category of self-reference: *el equipo investigador (the research team)* and *los autores (the authors)*. Compared to the ERAS, the SRAs seem to have fewer of these items and prefer to make use of first person verb endings to signal the presence of the writer.

In term of addressee features, there is no use of referential switching items in the SRAs (such as *el lector-the reader*). This may suggest that Spanish writers try not to address the reader directly but to be more inclusive by the use of plural verbs, not even by using referential switching which are commonly used to indicate distant or formal ways of addressing the reader.

4.2.3. Other lexical items

Similar to the use of referential switching, the use of other pronominal lexical items to signal a relationship between the writer and the reader is extremely low in the Spanish data. It displays 2 occurrences only represented by *uno* and *uno mismo (one)*.

> (18) Sin el análisis de las consecuencias, cuestión que implica pensar y valorar las posibilidades del propio comportamiento así como los objetivos e intereses, <u>uno actúa</u> "con una venda en los ojos porque no sabes a dónde quieres llegar ni qué quieres lograr...". En su caso, "la vida misma" y sus acontecimientos se lo han enseñado y el conjunto de la vivencia de valores se orienta éticamente a "alcanzar la perfección humana, lo más cerca que se pueda de la perfección". (*Without the analysis of consequences, an issue that implies thinking and valuing our behaviour, <u>one acts</u> "with a veil in the eyes as you do not where you want to go or achieve..."...* (EDUS.RA10)

In example 18 the writers point out a previous point in the text in relation to what one of the subjects involved in the research process said. In this way writers and reader interact in the text and construct meaning together with the reader. This might be a persuasive strategy in which writers and reader interpret the results and participate in the process of justifying propositions.

5. Conclusion

There are three possible explanations for these differences found in the analysis of pronominal in English and Spanish. The first one refers to the influence of culture on the writers' discursive practices. On the one hand, in English speaking contexts the individualistic representation of one's identity is encouraged (Markus and Katayama, 1991; Ramanathan and Atkinson, 1999; Kim, 2009) as opposed to Spanish speaking countries where one's identity is typically constructed collectively (Hickey, 2005). Secondly, as suggested by Sheldon (2009), each language may have certain conventions related to the discourse community "culture" (*small cultures* in Holliday's (1999) and Atkinson's (2004) terms. This is possibly related to the type of audience writers have tried to address in the

research articles, and the increasingly competitive environment to publish in international journals. Because English has become the language of international scientific communication (Crystal, 2003), and as such the English data set is made up by articles from international journals, hence the contributors and standards for publication are highly competitive. These texts then may tend to show a higher frequency of pronominal signals compared to the Spanish texts, the latter one being a more "national" data set whose audience is only Spanish speaking. In other words, the articles published in Spanish speaking journals only reach the scientific community in the Hispanic world and do not compete with the international high-impact English journals. Thus, writers from different contexts may manipulate pronouns differently as a rhetorical strategy to increase the effectiveness of their arguments. Finally, the writer's personal style (Harwood, 2006) and other issues such as the status and reputation of the writer may also be considered as a possible factor (Connor, 2004), however this is outside of the scope of this study. As Harwood (2006) explains the analysis of pronouns in corpus based studies have not taken into account the writers' own style in terms of the use of pronouns. Arguably, personal style of writing may make the text more interesting to their audience (Harwood, 2006: 444).

To sum up, these differences in frequency between languages could be explained in terms of a) the collectivistic tendency of Spanish speaking cultures to emphasise group relationships, b) the Spanish writers' emphasis on giving direction to the reader when outlining results due to a more cooperative sense of knowledge building and c) the issue of "national" (Spanish texts) vs international (English texts) discourse communities in which the latter one has a higher pressure to make their research more credible and claim more authority and competence in order to compete in such an international environment.

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Appendix. Sample list of research articles in the data

Linguistics

English

Schutle im Walde, S. (2006). Experiments on the automatic induction of German semantic verb clauses. *Computational Linguistics, 32*, 159-194.

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Spanish

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Education

English

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Psychology

English

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Spanish

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