Cross-linguistic investigation of Greek and Latin prefixes: Spanish and English contrastively

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Abstract

This manuscript sets forth an in-depth study of competing pairs of prefixes of Greek and Latin origin: *hyper-* vs. *super-*, *micro-* vs. *mini-*, and *poly-* vs. *multi-* from a contrastive Spanish-English perspective. Two major source corpora, the *Corpus de Referencia del Español Actual* for Spanish, and the *British National Corpus* for English were used for the purpose of this research. The prefixes were further analysed within the framework of a corpus of 200 translational equivalences, compiled from a lexicographic bilingual source, the *Oxford Spanish Dictionary* (2003); the results were then corroborated with the use of the prefixed words in a bilingual text-based online source, *Linguee*. This research sheds light on similarities and differences between such pairs of prefixes. The present contribution confirms the higher use of prefixation in Spanish. A much more frequent use of Latin prefixes, mainly *super-* and *multi-*, is attested in both languages. The cross-linguistic study reveals that prefixes seem to overlap semantically and syntactically across Spanish and English. Nevertheless, a representative percentage of Spanish prefixed words contrastively exhibit a non-morphological equivalence in English. Hence, a single different word, or a multiword unit may be used in English where derivational expansion of the base is preferred in Spanish.

Keywords: word-formation; prefixation; contrastive linguistics; Spanish-English; Greek and Latin prefixes.

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1. Introduction theoretical paradigm

To suit the naming needs for new concepts in a speech community, a frequent linguistic resource is the combination of existing morphemes into complex lexical items, a process which results in lexical expansion (Kastovsky, 1980). A previous study of the author (Montero-Fleta, 2011) centred on the creation of new words by means of suffixes, an investigation which estimated the productivity of suffixes in scientific registers. Findings attested a difference in behaviour of some suffixes across scientific registers, and confirmed that morphological productivity is subject to register variation. This paper focuses on a particularly complex area of linguistic studies i.e., affixation processes which incorporate prefixes to a given stem or root.

The use of existing prefixes as a coinage process has received little attention so far compared with suffixes, as the latter have been empirically considered much more productive than the former (Zacarías Ponce de León, 2010). As stated by Lefer and Cartoni (2010a), among the different word-formation processes, prefixes have been underexplored. In a survey on contrastive lexical morphology, Lefer and Cartoni (2011b: 88) documented that "compounding and suffixation have been the main focus of attention, while prefixation, conversion and other word-formation processes, e.g., clipping, blending and abbreviation have been neglected". Lehrer (1994) justified the higher attention paid to suffixes on the grounds of the greater interest of morphological studies in English in the phonological and syntactical aspects of affixation, closely related to suffix change of stress and structure of the base. But, despite the higher prevalence of suffixal formations, Sager (1993) still acknowledges the productive word-formation role of prefixes, not only in English and Spanish but also in German and other Romance languages, such as French (Olmo Cazevieille, 2008).

The most debated controversy regarding pre-

fixation is its difference from compounding. However, as Dimela and Melissaropoulou (2009) posit, the similarities between prefixation and compounding and the question as to whether they constitute distinct morphological processes are controversial topics in linguistic theory not resolved yet. When revising scholarly literature on the topic, the differences between prefixation and compounding are often blurred (see Bauer, 1983, 2005 [2003]; Booij, 2005; or Stekauer and Lieber, 2005, among others). Some authors study prefixation as a derivation process, while other authors see it as compounds undertaking expansion processes. Marchand (1969), in his treaty on word-formation, highlights derivation and expansion processes; Marchand includes suffixation, a morphological process which uses free morphemes and derivation affixes to form new words of a different grammatical category, in derivation. On the other hand, prefixation and compounding, processes that do not imply a grammatical change of the new terms involved, are included in expansion. In an attempt to solve the controversy on the borderline between these processes, the terms *affixoid* and *semiaffix* (Marchand, 1969; Fleischer, 1969) were devised to refer to "morphemes which look like parts of compounds, and do occur as lexemes, but have a specific and more restricted meaning when used as part of a compound" (Booij, 2005: 5). They both are independent lexemes; they are often combined with a number of roots loosing grammatical independence; even their meaning is specific and more restricted when used as part of a compound. However, this new view was not generally accepted by the linguistic community and, as stated by Kenesei (2007: 267), Marchand's *semiaffix* "did not catch on". Postulating a category of *semiaffixes* or *affixoids* did not solve affixal derivation (Booij, 2005) and, on the other hand, it was argued that "there is no sharp boundary between compounding and derivation" (Booij, 2005: 6). Relatedly, scholars as, e.g., Bauer (1983) argue for a cline, i.e., a movement along a

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scale from compounding to derivation rather than the introduction of intermediate terminology. Some authors as, for example, Ten Hacken (2000) put forth that these intermediate classes between derivation and compounding seem to be restricted to an episode in German linguistics of the 1970s. All in all, after exploring the state of the art of the process under study, I have to admit the large area of overlap between derivation and compounding and the high controversy held in the linguistic community. For the purpose of the present investigation, prefixes are considered bound morphemes, i.e., morphemes which cannot stand alone and, consequently, occur in combination with basic forms. Conversely, compounds are made up of free morphemes which can stand on their own.

The present contribution undertakes a Spanish-English study of prefixation from a morphological and contrastive perspective. Among the variety of possible parameters of study, the present paper is concerned with traditional prefixes. The study has been devised following the two major steps in contrastive analysis propounded by James (1980): description, where the languages compared are described, and juxtaposition, the phase where comparison takes place. The organization of the paper has the following format: once the theoretical framework has introduced the topic under study in this section, section 2 describes the languages compared from the Greek and Latin prefixation perspective. Section 3 presents the criteria adopted in cross-linguistic comparisons of lexical morphology, an explicit specification of the *tertium comparationis* or initial comparability criterion (Kreszowsky, 1990; Lefer, 2011). Section 4 introduces the methodology used. Section 5 compares the processes observed in both languages with the platform of reference decided. Section 6 sheds light on the conclusions reached.

2. Prefixation in Spanish and English

The word prefix derives from the Latin *præ-* *fixus*, 'fixed in front' (from *præ*, before + *figere*, 'to fasten' or 'to fix'). Prefixation is a process that incorporates three main fields of study: morphology, contrastive linguistics, and lexicology (Lefer, 2011). Alemany y Bolufer (1920) and Nebrija (1492) were for many years the only referent for studies on Spanish word-formation. The grammar edition published in 1931 by the Real Academia Española (RAE), the official Spanish institution responsible for regulating the Spanish language, did not provide any definition for prefixation so as to frame prefixation in a specific word-formation process. As stated in Serrano-Dolader (2001), new studies started to appear in the 1990s to fill in the gap, the most representative ones being these by Lang (1990), Thiele (1992) and Rainer (1993). Paradoxically, none of them were written in Spanish. Only Lang's publication was translated into Spanish (1996). Scholarly research followed this pioneer study, e.g.: Alvar Exquerra (1993), Miranda (1994) and Almela Pérez (1999), among others. These recent incorporations made Serrano-Dolader (2001) contend that lexicogenesis was no more the *parent pauvre* of Spanish linguistics.

The recently published edition of the Spanish grammar, *Nueva Gramática de la Lengua Española* (2010) by the Real Academia Española and Asociación Academias Americanas, posits that contemporary grammar includes prefixation in derivation processes. This institution groups prefixes according to the following tenets:

(i) Category of the words they form.

(ii) Formal dependence or independence.

(iii) Meaning.

(i) Word category. Unlike suffixes, prefixes do not normally alter the grammatical category of the base when forming a derived word (e.g., from the noun *bar* [Sp + En], the noun *minibar* [Sp + En] is derived). However, the prefix *multi-* as well as *pro-, pre-, pos(t)-, mono-,* and *tri-* are exceptions to this rule, because when combined with some

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nouns, they derive words that may have an adjectival category, as they can be modifiers of other nouns, e.g., *seguros multiriesgo* [EN: *all-risks coverage*] vs. **seguros riesgo*. However, the *RAE* (2010) highlights the absence of adjective-noun concordance in *seguros multiriesgo* (**seguros multiriesgos*) and treats this singular lexeme, *multirriesgo,* as an apposition rather than an adjective, as in Spanish the number and gender of an adjective depend on the noun involved.

(ii) Formal dependence or independence. The *RAE* (2010) identifies non-separable prefixes, also called bound prefixes vs. separable prefixes, according to their dependence or independence from the base. Thus, some prefixes may be used independently, unlike others which have no meaningful existence on their own, and have to be used in combination with a base. Lang (1990) highlights the independent function of a number of prefixes today used as prepositions or adverbs, i.e., *super-* or *ex-*, a fact that makes him posit that prefixes are not always bound morphemes.

(iii) Meaning. Among the diversity of meanings provided by prefixes, the *RAE* (2010: 175) adopts the following semantic classification, that, although not exhaustive, contains a representative number of the prefixes in their class:

TABLE 1

Prefixes in Spanish

Semantic classification	PREFIXES
Spatial	*ante-, circun-, endo-, entre-, exo-, extra-, infra-, intra-, peri-, re-, retro-, sobre-, sub-, super-, tras-*
Time	*ante-, ex-, post-, pre-*
Aspect	*re-*
Quantity	*bi-, mono-, multi-, pluri-, poli-*
Degree and scalar	*archi-, cuasi-, hiper-,*

	infra-, re-, semi-, sobre-, sub-, super-, vice-
Negative	*a-, des-, dis-, in-*
Orientation	*anti-, contra-, pro-*

As for the English literature on the topic under study, representative approaches on prefixes are those by Marchand (1969), Adams (1973), Quirk et al. (1980), Bauer (1983) or Plag (1999, 2000, 2003) to name a few. As aforementioned referring to Spanish, in English most important prefixes are also class maintaining, i.e., they do not normally effect a change of grammatical class, and do not alter the natural stress of the lexemes to which they are attached. Exceptions in English are *be-, en-* and *a-*, also called conversion prefixes (Quirk et al., 1980), which are prefixes which do change the base into a different grammatical class. They are not very productive, in English, though.

The English language offers a large list of prefixes, a representative summary of which is exhibited in Table 2, following Quirk et al. (1980: 982):

TABLE 2

Prefixes in English

Semantic classification	PREFIXES
Negative prefixes	*un-, non-, in- (ill-, im-, ir-), dis-, a-*
Reversative or privative prefixes	*un-, de-, dis-*
Pejorative prefixes	*mis-, mal-, pseudo-*
Prefixes of degree or size	*arch-, super-, out-, sur-, sub-, over-, under-, hyper-, ultra-, mini-, maxi-*
Prefixes of attitude	*co-, counter-, anti-, pro-, super-, sub-, inter-, trans-*
Locative prefixes	*super-, sub-, inter-, trans-*
Prefixes of time and order	*fore-, pre-, post-, ex-, re-*

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Number prefixes	uni-, mono-, bi-, di-, tri-, multi-, poly-
Neoclassical prefixes	auto-, neo-, pan-, proto-, semi-, vice-
Conversion prefixes	be-, en-, a-

As Table 1 and 2 illustrate, there is a high rate of coincidence of the prefixes used in Spanish and English, many of them from Greek and Latin origin. The semantic role of prefixes stated in both tables was out of the scope of the present study; however, a sample of the Greek and Latin origin prefixes shown was the point of departure of this research.

Some recent investigation on prefixation has been addressed with different perspectives and objectives. Cabré et al. (2000) surveyed prefixed proper nouns in Spanish and Catalan; Lehrer (1994) studied prefixes in English. Hamawand (2011) centred on prefixes of degree and negative prefixes. In fact, negative prefixes have been the most frequent focus of research, from the pioneer studies by Jespersen (1917) or Zimmer (1964), to more recent ones: Cortés (2006) undertook an English-Spanish contrastive study of negative prefixes; Dzuganova (2006, 2008) investigated prefixes in medical English; Lutzky (2004) studied the prefixes *dis-, in-, mis-* and *un-* in Middle English; Lefer and Cartoni (2011a, 2011b) and Cartoni and Lefer (2011) inquired into negative prefixes in English, French and Italian, contrastively. Intensive prefixes in Spanish were analyzed by Martín García (1988); Andor (2005) undertook research on amplifying prefixes in English and Hungarian. Van Roey (1990) studied English-French word-formation, contrastively. Martin (1998) focused on Spanish degree prefixes, Kučerová (2007) examined Spanish prefixes from a neologism perspective. Gaeta and Ricca (2003) surveyed the productivity of Italian prefixes. However, Spanish-English contrastive studies have been the target of few scientific studies to my knowledge.

3. Scope of the study and research questions

To fill in the gap, the innovative aspect of the present paper is the Spanish-English contrastive approach of traditional pairs of bound morpheme prefixes from a Greek and Latin origin. The choice of the prefixes analysed responds to a selection of all the possible items under the category of Greek [G] versus Latin [L] prefixes:

- [G] hiper- [Sp] / hyper- [En] vs. [L] super-,
- [G] micro-   vs. [L] mini-,
- [G] poli- [Sp] / poly- [En]   vs. [L] multi-.

Fábregas (2010) observed the presence in modern Spanish of some prefixes which are not formally identical to prepositions, but historically come from Latin or Greek prepositions. The prefixes here analysed mainly correspond to prepositions that were initially non separable from the base, and adjectives, the case of *micro-* and *mini-*. The selection was considered to be representative of the typology of Greek and Latin prefixes, so as to provide an overview of the morphological process under study. Spanish was taken as the source language, and English as the target language for the purpose of research. However, although the prefixed formations studied may have entered the Spanish language directly through Greek or Latin, it is not discarded that they may have entered the Spanish language through English.

Following Lefer (2011), to undertake data comparability, explicit and coherent criteria should be established to reach the designated aim. The *tertium comparationis*, an explicit specification of the initial comparability criterion (Chesterman, 1998; Lefer, 2011) determines the starting point to establish the similarities and differences between the phenomena compared (Krzeszowski, 1990). Relatedly, the concepts that cross-linguistic studies need are the shared features on the basis of which a cross-linguistic comparison can be made. Quoting James (1980: 169): "The first thing we do is make sure that we

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are comparing like with like: this means that the two or more entities to be compared, while differing in some respect, must share certain attributes. This requirement is especially strong when we are contrasting, i.e., looking for differences, since it is only against a background of sameness that differences are significant". With these paradigms in mind, the present paper addresses two main research questions:

1. Are Latin prefixes preferred to Greek ones in the Spanish and English major corpora used in this research?

2. Is there a morphological equivalence of Greek and Latin prefixes in Spanish and English sources?

4. Methodology

Two major corpora were taken as a first point of departure to find out the prefixed words they contained. Type ratio, a measure of vocabulary variation within the corpora analysed was calculated. Type ratio is the number of different words with a given prefix, as opposed to token frequency, i.e., the total frequency of use of all the words of that particular type. For example, if 300 different nouns with the prefix *mini-* were found in a corpus, the type frequency of this noun-forming prefix would be 300. The token frequency could be much higher than the type, as it counts the total number of times of occurrence of each type, which includes all repetitions of the same item. The source corpora used were:

- The *Corpus del Español Actual* (herafter CREA), compiled by the *Real Academia de la Lengua* (RAE), which contains about 160 million words, taken from written and spoken sources from 1975 to 2004.

- The *British National Corpus* (2000, hereafter BNC), a corpus which contains 100 million words drawn from a wide range of sources written and spoken, designed to represent a wide cross-section of British English from the latter part of the 20th century.

Despite the smaller size of the *BNC,* as types were going to be used in the investigation, not tokens, both corpora were considered adequate to undertake data comparability. Theoretical saturation, a principle used in content analysis, was taken into account for data comparability of the sample, indicating that no new prefixed words would emerge with a larger data collection.

A lexicographic source by Galimberti et al. (2003), *The Oxford Spanish Dictionary: Spanish-English / English-Spanish* (hereafter *OSD*), was also used, so as to be able to attempt the contrastive study of prefixes in Spanish and English. The absence of many of them in bibliographical sources may respond to the idea of their ephemeral life, but also to the fact that their meanings are sometimes easy to guess from their morphological components. Although some prefixed words are not attested in dictionaries, nevertheless, for the purpose of this study, both major corpora together with the bilingual dictionary used were deemed to be able to provide different and complementary data. The lexicographic corpus of prefixed words compiled amounted to 200 types; the sample was considered sufficient so as to observe the morphological trends of the prefixes under study in both languages. The first English meaning provided in the dictionary as a translation of the Spanish entry was taken for the purpose of the present contribution.

Data obtained were then contrasted with parallel equivalences of Spanish and English prefixed formations in authentic texts supplied by an online tool, *Linguee,* which as stated in its webpage, is an extensive online dictionary that checks sentence pairs that have already been translated by humans. *Linguee* searches the web for occurrence of words in context in the pair of languages Spanish - English, among others. *Linguee* contains over 100 million example sentences per language.

The sources used were incorporated into the

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investigation as follows: the study of Greek and Latin prefixes was mainly based on the two major source corpora for the languages compared, the CREA for Spanish and the BNC for English. The study of the Spanish - English prefixes equivalences was grounded on the entries of prefixed formations in the OSD (2003). To analyse text-based Spanish-English prefixation from authentic sources, Linguee was used.

5. Data analysis and findings

WordSmith Tools (Scott, 1996) were used for the electronic processing of the corpus. The result of the process produced raw frequency data, that is, a long list of words with prefixes which had to be cleaned, e.g.: *ministry* does not represent instances of proper prefix, since *-stry* is not morphemic. A manual refinement of the wordlist obtained was tackled, so as to discard word counts which did not contain the expected prefixes, as some prefixes obtained were, instead, part of the lexeme. *CREA* wordlists include a higher presence of prefixes than the *BNC*. The main reason behind this may be that, as a result of the word-formation process, morphemes are added to the base form of a word to express grammatical meanings. Relatedly, in Spanish, word and morphemes very often do not coincide because of its extensive inflection, contrarily to English. Hence, for the Spanish *hipertensión* [N] or *hipertensionar* [V], as well as other inflected forms of the same verb: *hipertensionas, hipertensionamos, hipertensionáis*, just one word can be found in English, i.e., *hypertension* [N + V].

The research questions posed will now be answered separately in response to the results obtained from our analysis:

5.1. *Research question 1*: Are Latin prefixes preferred to Greek ones in the Spanish and English major corpora used in this research?

WordSmith searches in the *CREA* and the *BNC* pinpointed the following number of words

formed from combinations of an independent base and a Latin or Greek prefix:

TABLE 3

CREA. Greek-Latin pairs of prefixes in Spanish corpus

Greek prefixes in the Spanish corpus: *CREA*.		Latin prefixes in the Spanish corpus: *CREA*.	
hiper-	430	*super-*	1740
micro-	473	*mini-*	462
poli-	789	*multi-*	916
Total	1692	Total	3118

As can be seen in Table 3, the total number of Latin prefixed types compiled from the *CREA* (3118) nearly doubled the Greek types (1692). The table shows that *super-* is the prefix which accounts for the highest number of types in the corpus, four times more frequent than its Greek counterpart *hiper-*. *Multi-* ranks 27% higher than the Greek prefix *poli-* (916 vs. 789). However, *micro-* and *mini-* attest similarly in the *CREA, micro-* slightly over, though.

Data displayed in Table 4 record the results obtained from quantifying the types of prefixes compiled from the English corpus, the *BNC*:

TABLE 4

Greek-Latin pairs of prefixes in the English corpus *BNC*

Greek prefixes in the English corpus: *BNC*.		Latin prefixes in the English corpus: *BNC*.	
hyper-	352	*super-*	981
micro-	745	*mini-*	673
poly-	275	*multi-*	961
Total	1372	Total	2615

As in the results displayed for Spanish in Table 3, Table 4 also shows a more significant global use of Latin types than Greek ones in the English corpus: the total amount of Latin prefixes nearly doubles the Greek types. *Super-* occurs nearly three times more often than the Greek prefix *hy-*

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per-. The Latin prefix *multi-* outnumbers by three its Greek counterpart *poly-* in the *BNC*. However, types with the Greek prefix *micro-* are recorded just slightly over *mini-*.

Studying Spanish and English contrastively from Tables 3 and 4, a higher global use of types can be attested in the Spanish corpus *CREA*. Latin prefixes show in both corpora nearly a double number of types than the Greek ones. As for the prefixes used, a strikingly more prolific presence of *super-* and *multi-* is revealed in Spanish and English vs. their counterparts, *hiper-, poli-* [Sp] / *hyper-, poly-* [En]. In Spanish, the types *super-* and *poli-* nearly outnumber by two the types in English. However, *micro-* and *mini-* record a much more balanced use in both languages: no such outstanding differences can be documented between the Greek and the Latin source. In both languages, *micro-* attests a slightly higher number of types than its counterpart *mini-*.

5.2. *Research question 2*: Is there a morphological equivalence of Greek and Latin prefixes used in Spanish and English sources?

The contrastive study of Spanish-English prefixed formations from the lexicographic source used exhibited more similarities than differences in word-formation in both languages. Our focus of research addressed the differences encountered. The following table reveals the number of entries recorded in the *OSD*:

TABLE 5

Number of entries of the prefixes in *OSD* (2003)

Prefixes	Spanish	N of entries in *OSD*
Greek Prefixes	*hiper-*	23
	micro-	41
	poli-	41
Latin Prefixes	*super-*	46
	mini-	12
	multi-	38

The purpose of studying Spanish-English prefixed formations contrastively was to examine the equivalents attested in the lexicographic source, and to confirm or refute Lang's statement (1990) on the higher preference of English for different etymologies or a compound where derivational expansion of the base is preferred in Spanish. To study the equivalences in both languages, Cartoni and Lefer (2011)'s morphological and non-morphological criteria were used:

- Morphological equivalence, i.e., both languages may either use the same prefix, or use a different but semantically similar one.

- Non-morphological equivalence where the equivalent of a prefixed word in the target language is either a single word or a multiword unit, i.e., a special type of collocate in which the component words comprise a unit of meaning; these multiword units are considered lexemes, even if they are built of more than one lexical morpheme.

Prefixes are dealt with separately to highlight the data obtained from their presence in the lexicographical source used, the *OSD*, and the online source, *Linguee*:

Hiper- [Sp] / *hyper-* [En] is a prefix of degree or size, from Greek origin, *huper-*, meaning 1.'over'; 'beyond'; 'above', 2.'excessively'; 'above' (*Concise Oxford English Dictionary*, 2008). Quoting Aguado de Cea (2006), *hyper-* is the most productive prefix in this decade, together with *ciber-* and *inter-*, as a result of internet technologies. In fact, despite the fact that the *OSD* is not a technical dictionary, some of the Spanish entries for *hiper-* [Sp] recorded in the *OSD* are semantically related with scientific domains. Table 6 summarizes Spanish-English rates of equivalence.

As shown in Table 6, 65.21% of the Spanish *hiper-* entries analyzed shared the same prefix, *hyper-*, with English, thus showing total morphological equivalence. The use of a different prefix ranked lower, only 18.18% as, e.g., the use of the

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TABLE 6

Hyper- and *super-*: Spanish-English equivalences in the *OSD*

Spanish-English equivalence (*OSD*)		hiper-/ hyper-	super-
Morphological equivalent	Same prefix	*65.21%*	65.21%
	Different prefix	*18.18%*	19.56%
Non-morphological equivalent	Single word	----	----
	Multiword unit	*18.18%*	15.21%

Germanic *over-*, in *hipersensible* [Sp] = *oversensitive* [En]. Contextualized examples in *Linguee* also confirmed different prefixes of Germanic origin, as in *hiper-* or *hipofuncionando* [Sp] = *overactive* or *underactive* [En]. Some examples were detected that express the concept provided by the Spanish prefixed structure by means of a multiword unit, thus avoiding the use of the prefix, as, e.g., in *hiperresistente* [Sp] = *high-strength* [En]. The word *hipermétrope* [Sp] also illustrated this non-morphological equivalent, as it is recorded in English as *farsighted* or *longsighted*. However, the equivalent for the Spanish noun *hipermetropía* in the *OSD* is *farsightedness* and *longsightedness*, and only, but as a third meaning, the specialized term *hypermetropia* is attested in the *OSD*. Among the variety of interpretations found in online authentic texts shown in *Linguee*, *farsighted* seemed to be the most generalized English equivalent for the Spanish entry *hipermétrope* (see Appendix). A point worth mentioning is that a new prefix can be appended to an already prefixed lexeme, as frequently attested in Spanish, e.g., *anti-hiper-glucemiante*.

Super- is a prefix of degree, size, or even place of Latin origin, meaning 1.'above'; 'over'; 'beyond'; 2.'to a great or extreme degree'; 3.'extra large of its kind'; 4.'having greater influence, capacity, etc. than another of its kind'; 5.'of a higher kind' (*Concise Oxford English Dictionary*, 2008). From the total Spanish entries in the *OSD* for *super-*, 65.21% had morphological equivalents in English, both languages sharing the same prefix. The use of a different prefix instead ranked 19.56%, e.g., *superávit* [Sp] = *surplus* [En], *superficie* [Sp] = *surface* [En], *superpoblación* [Sp] = *overpopulation* [En]. Non morphological equivalents provided by multiword units were used for *superdotado* [Sp] = *highly gifted* [En], *supercarburante* [Sp] = *high-octane* [En], *supercarretera* [Sp] = *freeway* [En] or *superventas* [Sp] = *best-selling* [En]. Moreover, longer paraphrases were also common: *supercuenta* [Sp] = *high-interest account* [En] or *superbloque* [Sp] = *large apartment building* [En]. The latter, however, always kept the morphological equivalent *superblock* in English, in *Linguee* searches (see Appendix).

Table 7 illustrates *micro-* and *mini-* rates of use in the *OSD*:

TABLE 7

Micro- and *mini-*: Spanish-English equivalences in the *OSD*

Spanish-English equivalence (*OSD*)		micro-	mini-
Morphological equivalent	Same prefix	*92.68%*	83.33%
	Different prefix	-----	-----
Non-morphological equivalent	Single word	*2.43%*	8.33%
	Multiword unit	*4.87%*	8.33%

Micro-, from Greek *mikros* meaning: 1.'small', 'reduced or restricted size'; 2.'denoting a factor of one millionth' (*Concise Oxford English Dictionary*, 2008). This prefix exhibited morphological equivalents in most of its entries in both languages (92.68%). Only 2.43% showed a different equivalent, as a single different word, e.g., *microteléfono* [Sp] = *receiver* [En], a different etymology multiword unit, e.g., *microbús* [Sp] = *small bus* [En], or *microlentilla* [Sp] = *contact lens* [En]. The latter, however, was recorded in *Linguee* as *micro-lens*, thus adopting the Greek prefix instead of the Latin counterpart (see Appendix).

Mini-, a Latin prefix expressing size, meaning 'very small' or 'minor of its kind' (*Concise Oxford*

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English Dictionary, 2008), recorded mostly morphological equivalents in both languages, as in *miniseries* [Sp] = *miniseries* [En]. 8.33% exhibited a non-morphological structure as a result of translating the meaning of small size provided by the prefix into an adjective: *minifundio* [Sp] = *smallholding* [En]. Some interpretations of its meaning were the source of alternative equivalents, as in *minijuego* [Sp] = *puzzle* [En] (see Appendix). Pre-prefixed formations were very frequently attested in Spanish, as in *mini-pre-temporada*, or English, e.g., *micro-trans-fusion*. The duplication of the prefix was also documented in, e.g., *miniminibikini*, thus emphasizing the very short size of the garment.

Poli- [Sp], *poly-* [En], from Greek *polus* 'much', *polloi* 'many' (*Concise Oxford English Dictionary*, 2008), shows the following differences compared with the Latin *multi-*, regarding its Spanish-English equivalences:

TABLE 8

Poli-/poly- and *multi-*: Spanish-English equivalences in the *OSD*

Spanish-English equivalence (*OSD*)		poli- / poly-	multi-
Morphological equivalent	Same prefix	77.04%	72.50%
	Different prefix	2.40%	7.50%
Non-morphological equivalent	Single word	4.87%	5.00%
	Multiword unit	16.63%	15.00%

As demonstrated in Table 8, 77.04% of the entries of the prefix *poli-* in the *OSD* have their morphological equivalent *poly-* in English, as in *poliinsaturado* [Sp] = *polyunsaturated* [En]. A small percentage (2.4%) is shown in some bases using a different prefix, as in *polifásico* [Sp] = *multiphase* [En]. Non-morphological translation is determined by means of a single word, e.g., *polivalente* [Sp] = *versatile* [En], and more frequently by a multiword unit (16.63%), as in *policultivo* [Sp] = *mixed farming* [En], or *polipiel* [Sp] = *synthetic*

leather [En]. The latter, however, alternates in *Linguee* with *polyleather* or *polyskin* (see Appendix).

Multi-, a prefix from the Latin *multus*, meaning 1.'more than one'; 2.'many' (*Concise Oxford English Dictionary*, 2008), exhibited 72.50% morphological equivalents in both languages, as in *multicelular* [Sp] = *multicellular* [En]. Some instances were found of words not sharing the same prefix, such as *multicopiar* [Sp] = to *duplicate* [En]. An equivalent multiword unit was attested in 15% of the words analysed, e.g., *multipropiedad* [Sp] = *time share* [En] (see Appendix).

With the aforementioned data on every prefix, a global average estimation of the parameters analyzed was calculated. On the whole, as graphically illustrated in Figure 1, the Latin and Greek prefixes studied, *hyper-/super-, micro-/mini-, poly-/multi-*, accounted for a high rate of coincidence in Spanish and English:

FIGURE 1

Spanish versus English: Global average coincidence of *hiper-, hyper- / super-; micro/mini-; poli-, poly- / multi-*
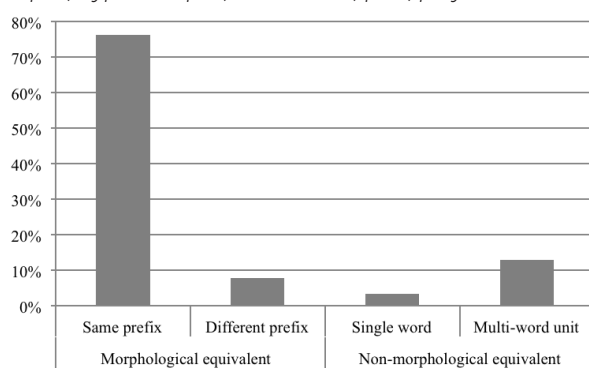
From the global average occurrences of prefixes shown in Figure 1, 76.16% documented the same prefix in both languages; 7.94% of equivalences showing a different prefix was attested, while a different single word in English as an equivalent of the prefixed word in Spanish only amounted to 3.43% of the words analysed. A glo-

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bal 13.02% demonstrated the preference highlighted by Lang (1990) for different etymologies in English, attested by means of multiword units or a compound where derivational expansion of the base is preferred in Spanish.

6. Discussion and conclusion

This study has aimed to shed light on Greek and Latin prefixes, a field frequently overlooked by morphologists and lexicologists. Besides, its English vs. Spanish contrastive perspective has contributed to fill in the gap in a field where cross-linguistic studies are relatively rare. The shared features, as well as the major areas of differences were investigated in the comparison phase of the investigation by means of a mixed methodological framework which included extensive corpora, a bilingual lexicographic source as well as an online source of authentic parallel sentences. Explicit criteria were applied based on the studies by Altenberg (1999, 2007), Chesterman (1998), James (1980), Krzeszowsky (1990) and Lefer (2011). The *tertium comparationis* revealed an outstanding preference for the Latin *super-* and *multi-* vs. the Greek *hyper-* and *poly-*, both in the Spanish and English corpus. The imbalance in favour of Latin prefixes was not shown for *micro-* and *mini-*, which documented a similar number of types in the Spanish and English corpora. Latin prefixes *super-* and *multi-* were found to display the highest frequency of types both in the *CREA* and the *BNC*. *Super-* was by far the most prolific representative of all the prefixes studied. Data analysis attested a higher global use of the prefixes in the Spanish corpus than in the English corpus.

Concerning the cross-linguistic equivalence of the prefixes studied, the data analysis demonstrated more similarities than differences. Nevertheless, research undertaken confirmed that despite the high rate of coincidence of prefixes in Spanish and English, a small but representative percentage of prefixed Spanish words adopt a different process in English as a word-forming device: the use of non-morphological equivalents for the Spanish prefixed words was attested in English.

The contrastive analysis here addressed has singled out new insights into the linguistic phenomenon of the pairs of prefixes studied. Further research will deal with the topic of morphological rivalry, the use of hyphenation or mutual correspondence of prefixes in the languages studied. Other word-forming processes, such as combining forms or neoclassical words, often found in academic learned vocabulary domains, may also be interesting issues of further study. Other large parallel corpora will be incorporated in forthcoming investigations.

7. Bibliographic references

Adams, Valerie, 1973: *An Introduction to Modern English Word-Formation*, London: Longman.

Aguado de Cea, Guadalupe, 2006: "De bits y bugs a blogs y webs: Aspectos interdisciplinares, socio-culturales y lingüísticos de la terminología informática" in Consuelo Gonzalo García and Pollux Hernúñez: *Corcillum: Estudios de traducción, lingüística y filología dedicados a Valentín García Yebra*, Madrid: Arco Libros, 693-719.

Alemany y Bolufer, José, 1920: *Tratado de la formación de palabras en la lengua castellana: la derivación y la composición estudio de los sufijos y prefijos empleados en una y otra*, Madrid: Librería general de Victoriano Suárez.

Almela Pérez, Ramón, 1999: *Procedimientos de formación de palabras en español*, Barcelona: Ariel.

Alvar Exquerra, Manuel, 1993: *La formación de palabras en español*, Madrid: Arco Libros.

Álvarez García, Manuel, 1979: *Léxico-génesis en español: Los morfemas facultativos*, Sevilla: Publicaciones de la Universidad de Sevilla, 47.

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ANDOR, József, 2005: "A lexical semantic-pragmatic analysis of the meaning potential of amplifying prefixes in English and Hungarian: a corpus-based case study of near synonymy" in *Proceedings Corpus Linguistics 2005 - Centre for corpus research*, University of Birmingham [available from http://www.birmingham.ac.uk/research/activity/corpus/publications/conference-archives/2005-conf-e-journal.aspx, accessed 28 June, 2012].

ALTENBERG, Bengt, 1999: "Adverbial connectors in English and Swedish: Semantic and lexical correspondences" in Hilde HASSELGÅRD and Signe OKSEFJELL: *Out of corpora: Studies in honour of Stig Johansson*, Amsterdam: Rodopi, 249-268.
ALTENBERG, Bengt, 2007: "The correspondence of resultive connectors in English and Swedish", *Nordic Journal of English Studies* 6/1, 1-26.

BAUER, Laurie, 1983: *English word-formation*, Cambridge: Cambridge University Press.
BAUER, Laurie, 2005 [2003]: *Introducing linguistic morphology*, Edinburgh: Edinburgh University Press.

BOOIJ, Geert, 2005: "Compounding and derivation: evidence for construction morphology" in Wolfgang U. DRESSLER et al. (eds.): *Morphology and its demarcations*, Amsterdam/Philadelphia: John Benjamins, 109-32.

BRITISH NATIONAL CORPUS - BNC, 2001: Oxford University Computing Services on behalf of the BNC Consortium.

CABRÉ, Maria Teresa, Janet DECESARIS and M. Rosa BAYA, 2000: "Nombre propio y formación de palabras" in Gert WOTJAK (ed.): *En torno al sustantivo y al adjetivo en el español actual. Aspectos cognitivos, semánticos, (morfo)sintácticos y morfogenéticos*, Frankfurt: Madrid Vervuert-Iberoamericana, 191-206.

CARTONI, Bruno and Marie Aude LEFER, 2011: "Negation and lexical morphology across languages: Insights from a trilingual translation corpus",

Poznam Studies in Contemporary Linguistics 47/4, 795-843.

CHESTERMAN, Andrew, 1998: *Contrastive functional analysis*, Amsterdam/Philadelphia: John Benjamins Publishing Company.

CORTÉS RODRÍGUEZ, Francisco, 2006: "Negative affixation within the lexical grammar model", *Revista Electrónica de Lingüística Aplicada* 5, 27-56.

DIMELA, Eleanora and Dimitra MELISSAROPOULOU, 2009: "On prefix like adverbs in modern Greek" in *Patras Working Papers in Linguistics*, 1. *Special issue: Morphology* [available from http://pwpl.lis.upatras.gr/index.php/pwpl/article/viewFile/17/14, accessed 20 June, 2012].

DZUGANOVA, Bozena, 2006: "Negative affixes in medical English", *Bratisl Lek Listy* 107, 8, 332-335.
DZUGANOVA, Bozena, 2008: "Synonymy of negative prefixes concerns also medical English", *Bratisl Lek Listy* 109/5, 242-244.

FÁBREGAS, Antonio, 2010: "On Spanish prepositional prefixes and the cartography of prepositions", *Catalan Journal of Linguistics* 9, 55-77.

FLEISCHER, Wolfgang, 1969: *Wortbildung der deutschen Gegenwartssprache*, Leipzig: Bibliographische Institut.

GAETA, Livio and Davide RICCA, 2006: "Frequency and productivity in Italian derivation: a comparison between corpus-based and lexicographical data", *Italian Journal of Linguistics / Rivista di linguistica* 15/1, 63-98.

GALIMBERTI, Beatriz et al. (eds.), 2003: *The Oxford Spanish Dictionary. Spanish-English / English-Spanish*, Oxford: Oxford University Press.

HAMAWAND, Zeki, 2011: "Prefixes of Degree in English: a cognitive-corpus analysis", *Open Journal of Modern Linguistics* 1/2, 13-23.

JAMES, Carl, 1980: *Contrastive analysis*, Harlow:

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Longman.

Jespersen, Otto, 1917: *Negation in English and other languages,* Copenhagen: A. F. Høst.

Kenesei, István, 2007: "Semiwords and affixoids: The territory between word and affix", *Acta Linguistica Hungarica* 54, 263-293

Kastovsky, Dieter, 1980: "Word-formation and translation", *Meta* 35/1, 45-49.

Kreszowsky, Tomasz P., 1990: *Contrasting languages. The scope of contrastive linguistics,* Berlin: Mouton de Gruyter.

Kučerová, Denisa, 2007: *La productividad neológica de los elementos prefijales del español,* Bakalářská diplomová práce. Brno: Masarykova Univerzita. Filozofická faculta.

Lang, Mervyn Francis, 1990: *Spanish word-formation. Productive derivational morphology in the modern lexis,* London and New York: Routledge.
Lang, Mervyn Francis, 1996: *La formación de palabras en español,* Madrid: Arco-Libros.

Lefer, Marie-Aude, 2011: Contrastive word-formation today: retrospect and prospect", *Poznan studies in contemporary linguistics* 47/4, 645-682.

Lefer, Marie-Aude and Bruno Cartoni, 2011a: "Corpus-based contrastive word formation: English, French and Italian negative affixes in a trilingual translation corpus" in *Journée linguistique du cercle belge de linguistique,* Université d'Anvers.
Lefer, Marie-Aude and Bruno Cartoni, 2011b: "Prefixes in contrast. Towards a meaningful-based contrastive methodology for lexical morphology", *Languages in contrast* 11/1, 86-104.

Lehrer, Addrienne, 1994: "Prefixes in English word-formation", *Folia linguistica* 29/1-2, 133-148. Berlin: Mouton de Gruyter.

Lutzky, Ursula, 2004: "Negative prefixes in Middle English: a corpus-based study of dis-, in-, mis- and un-", *Views* 1/2, 24-51.

Marchand, Hans, 1969: *The categories and types of present-day English word-formation,* München: Beck.

Martín García, Josefa, 1998: "Los prefijos intensivos del español: caracterización morfo-semántica", *Estudios de lingüística Universidad de Alicante.* ELUA 12, 103-116.

Montero-Fleta, Begoña, 2011: "Suffixes in word-formation processes in scientific English", *LSP Journal- Language for special purposes, professional communication, knowledge management and cognition* 2/2, 4-14.

Miranda, José Alberto, 1994: *La formación de palabras en español,* Salamanca: Colegio de España.

Nebrija, Antonio de [1492]: *Gramática de la lengua castellana.* Antonio Quilis (ed.), 1984, Madrid: Editora nacional.

Olmo Cazevieille, Françoise. 2008: "La langue de la zootechnie: analyse morphologique et lexicographique", *Synergie Espagne* 1, 219-228.

Plag, Ingo, 1999: *Morphological productivity: structural constraints in English derivation,* Berlin: Mouton de Gruyter.
Plag, Ingo, 2000: "On the mechanisms of morphological rivalry: a new look at competing verb-deriving affixes in English" in Bernhard Reitz and Sigrid Rieuwerts (eds.): *Anglistentag Mainz* 1999, Trier: Wissenschaftlicher Vertrag Trier, 63-76.
Plag, Ingo, 2003: *Word-formation in English,* Cambridge: Cambridge University Press.

Quirk, Randolf et al., 1980: *A Comprehensive grammar of the English language,* London: Longman.

Rainer, Franz, 1993: *Spanische Wortbildungslehre,* Tübinga: Niemeyer.

Real Academia Española, 1931: *Gramática de la lengua española,* Madrid: Espasa-Calpe.

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REAL ACADEMIA ESPAÑOLA. Banco de datos CREA: *Corpus de referencia del español actual* [available from http://www.rae.es, accessed 20 May, 2012].

REAL ACADEMIA ESPAÑOLA Y ASOCIACIÓN ACADEMIAS AMERICANAS, 2010: *Nueva gramática de la lengua española*, Madrid: Espasa-Calpe.

SCOTT, Michael, 1996: *WordSmith Tools*, Oxford: Oxford University Press.

SAGER, Juan C., 1993: "La terminología, puente entre varios mundos" in María Teresa CABRÉ: *La terminología. Teoría, metodología, aplicaciones*, Barcelona: Antártida/Empúries, 32-38.

SERRANO-DOLADER, David, 2001: "Algunas reflexiones sobre la formación de palabras en español: notas a propósito de una publicación reciente", *Verba* 28, 407-421.

Concise Oxford English Dictionary, Catherine SOANES and Angus STEVENSON (eds.), 1980, Oxford: Oxford University Press.

STEIN, Gabriele, 1977: "The place of word-formation in linguistic description" in Herbert. E. BREKLE and Dieter KASTOVSKY (eds.): *Perspektiven der Wortbildungsforschung. Beiträge zum Wuppertaler Wortbildungskolloquium vom 9.-10. Juli 1976, Serie: Schriftenreihe Linguistik, Bd. 1*, Bonn: Bouvier Verlag Herbert Grundmann, 219-235.

STEKAUER, Pavol and Rochelle LIEBER, 2005: *Handbook of word-formation. Studies in natural language and linguistic theory*, Berlin, Dordrecht, Heidelberg, Norwell: Springer.

TEN HACKEN, Pius, 2000: "Derivation and compounding" in Geert BOOIJ, Christian LEHMANN and Joachim MUGDAN (eds.): *Morphologie - Morphology: Ein Handbuch zur Flexion und Wortbildung - A Handbook on inflection and word formation*, Berlin: Walter de Gruyter, 349-360.

THE FREE DICTIONARY. FARLEX [available from http://www.thefreedictionary.com/, accessed 20 May, 2012].

THIELE, Johannes, 1992: *Wortbildung der spanischen Gegenwartsprache*, Leipzig: Langenscheidt.

VAN ROEY, Jan, 1990: *French-English contrastive lexicology: An introduction*, Louvain-la-Neuve: Peeters.

ZIMMER, Karl Ernst, 1964: "Affixal negation in English and other languages: An investigation of restricted productivity". Supplement to *Word* 2.0: 2 5. New York.

ZACARÍAS PONCE DE LEÓN, Ramón Felipe, 2010: "Esquemas rivales en la formación de palabras en español", *Onomázein* 22, 59-82.

8. Appendix

Some representative examples extracted *Linguee* on Spanish vs. English equivalences of prefixed words dealt with throughout the paper:

1. *Hiper-/hyper-*

SPANISH	ENGLISH
Para los jóvenes *hiper activos* o para aquellos que sufren de ansiedad, [...] *ffcmh.org*	For kids who are *hyperactive* or who have anxiety, this is stimulus overload. *ffcmh.org*
Bandeja de la barra de acero *hiper-resistente* de *claas.es*	The floor section is made of *high-strength*, fine-grained *claas.com*
tiroides influyen mucho en el sistema reproductor (uctor femenino, sobre todo si la tiroides está *hiper o hipofuncionando. content.jeffersonhospital.org*	[...] gland have much to do with a woman's reproductive system, particularly if the thyroid *is overactive or underactive. content.jeffersonhospital.org*

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2. *Super-*

SPANISH	ENGLISH
El *superavit* se debe a la anulación de créditos provocada principalmente por el retraso en la ejecución de [...] *europa.eu*	The *surplus* can be explained by the cancellation of appropriations, mainly owing to delays in the implementation [...] *europa.eu*
[...] entrega tendría como consecuencia agravar las dificultades actuales vinculadas a la *superpoblación. eur-lex.europa.eu*	Any delay in delivery would exacerbate the current *overpopulation* problems. *eur-lex.europa.eu*
Asimismo, era un *superdotado* en el campo de baseball y los cazadores de talentos de la liga nacional [...] *puertorico-herald.org*	He equally was *gifted* on the baseball diamond, and major-league scouts soon took notice. *puertorico-herald.org*
[...] dos semanas después de su aparición se convirtió en un superventas del diario The New York Times. *america.gov*	To my great surprise, it became a New York Times *bestseller* only two weeks after its release. *america. gov*
Hay muy poca interacción social casual en la zona de los superbloques, dado que no existen lugares de encuentro adecuados. *lucistrust.org*	There is very little casual social interaction in the *superblock* areas, as there are no convenient meeting places. *lucistrust.org*

3. *Micro-*

SPANISH	ENGLISH
[...] flujo de vídeo, navegación completa por Internet y descargas rápidas en un *microteléfono* movil. *europa. eu.*	that allow video streaming, full web browsing and fast downloads on a *receiver. europa.eu*
[...] Madrid in confortable chauffeur-driven *microbus. viavinum.es*	Transporte desde / hasta Madrid en cómodo *microbús* con conductor. *viavinum.es*
[...] la superficie expuesta, creando una *microlentilla en* sede prepupilar. *appiotti.it*	The laser reshapes the corneal surface creating a *micro-lens in* the pre-pupillary space.*appiotti.it*

4. *Mini-*

SPANISH	ENGLISH
[...] lo hizo producir Band of Brothers (2001), una *miniserie* que sacó al aire HBO y que le hizo ganar dos Emmy. *explore-magazine.com.*	It was that passion that drove Hanks to produce the HBO *miniseries* Band of Brothers (2001), which earned him two Emmys. *explore-magazine.com* e
[...] expresión concreta de su insistencia que tanto el ecosistema como la cultura del Mediterráneo se basan en la pervivencia y el fomento del *minifundio. vino-valencia.com*	This is in the belief that the Mediterranean ecosystem and culture requires the retention and encouragement of agricultural *smallholdings ("minifundio"). vino-valencia.com*
Usa el *minijuego* a la izquierda para conseguir más dinero (haciendo clic en las figuras alineadas con sus [...] *heptagrama.com.*	Use the *puzzle* the on the left side to get more money (by clicking on matching tiles), and get victory.*heptagrama.com*

5. *Poli-/poly-*

SPANISH	ENGLISH
El primero es un hidrocarburo *poliinsaturado* originario del petróleo, que contiene forma de líquido [...]	The first is a *polyunsaturated* hydrocarbon found in oil, which is a colourless liquid with a sweet smell. *rep-*

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] *repsol.com*	*sol.com*
[...] sistemas monofásicos, trifásicos, y hasta *polifásicos* equilibrados o fuera del equilibrio. *sestech.com*	Monophase, three-phase, and even *multiphase* balanced or unbalanced systems can be specified. *sestech.com*
Los MDS 17.1 y 19.1 están adaptados para el *policultivo* / ganadería y ofrecen una mayor capacidad, [...]. *kuhnsa.fr*	MDS 17.1 and 19.1 are designed for *mixed farming* / stock raising, with larger capacity, up to 1800 litres. *kuhnsa.fr*
La tapa se fabrica en todos los tejidos y *polipiel* (de este catálogo). *delanubbi.com*	The upholstery us made in all fabrics and *synthetic leather* (in this catalogue). *elanubbi.com*
Frontal tapizado en Piel y lateral de *Polipiel* negro. *ofimax-canarias.com*	Altar frontal draped in Skin and black wings of *Polyskin*. *ofimax-canarias.com*
Tapizado *polopiel* negro, base de poliamida negro. *ofimax-canarias.com*	Draped *polyleather* black, base of poliamida black. *ofimax-canarias.com*

6. *Multi-*

SPANISH	ENGLISH
Análogamente, a nivel de un organismo *multicelular*, las células del cuerpo se ven continuamente regeneradas y recicladas por la [...]. *slowfood.it*	Similarly, at the level of a *multicellular* organism, the bodily cells are continually regenerated and recycled by the organism's [...]. *slowfood.it*
[...] través de la digitalización de todas sus actividades, reprodujo y distribuyó documentos oficiales de la Organización, incluidas la impresión de los documentos originales, su *multicopiado*, distribución y almacenamiento electrónico. *oas.org*	Now that all its activities are in digital format, the Documents Section copied and distributed official documents of the Organization, which included the printing of the original documents, their *duplication*, distribution and electronic storage. *oas.org*
Cuando adoptamos la primera normativa sobre *multipropiedad*, esperaba que la larga cola de gente que venía a contarme sus problemas [...] *europarl.europa.eu*	When we adopted our original *timeshare* legislation I hoped that the long queue of people coming to see me about problems would come to an end. *europarl.europa.eu*