

Title: MULTIPLE MODIFICATION IN ENGLISH AND SPANISH NPS:
A CORPUS-BASED CONTRASTIVE STUDY

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ABSTRACT

This paper is an English-Spanish corpus-based contrastive study of multiple modification within the boundaries of the noun phrase. This issue is particularly problematic when comparing English and Spanish, and causes difficulties in foreign language learning as well as in translation processes between the two languages. The aim of this study is to unveil the interaction between meaning and grammar in this linguistic area in English and Spanish, revealing the different grammatical structures used in the two languages to actualise a particular meaning. The approach followed in this paper is a functional one (Bondarko 1991; Chesterman 1998). The empirical data on which the study is based are instances of authentic language in use extracted from two large monolingual reference corpora, Cobuild/Bank of English and CREA (Reference Corpus of Contemporary Spanish). The contrastive analysis consists of three stages: description, juxtaposition and a contrastive stage in which functional-semantic correspondences are suggested on the basis of meaning.

Key words: contrastive analysis, multiple modification, reference corpora, English-Spanish.

MULTIPLE MODIFICATION IN ENGLISH AND SPANISH NPS: A CORPUS-BASED CONTRASTIVE STUDY¹

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1. INTRODUCTION

This paper is an English-Spanish corpus-based contrastive study of multiple modification used attributively, i.e. within the scope of the noun phrase (NP). I understand by multiple modification the catenation of two or more qualitative modifiers characterising one single head noun. This issue is especially problematic when comparing English and Spanish, and causes difficulties in foreign language learning as well as in translation processes between the two languages.

The approach followed in this paper is a functional one. The contrastive analysis consists of three stages: a descriptive stage in which the data are analysed independently in both languages; the juxtaposition of results in English and Spanish; and the contrastive stage in which functional-semantic correspondences are suggested on the basis of meaning (Chesterman 1998). The syntax-semantics interface is a clear starting point here. The meaning analysed in this paper is the semantic function of characterisation or qualitative modification in both languages. The actualisation of this meaning differs in English and Spanish. Using meaning as a basis, I will first establish a list of grammatical structures employed by native speakers of English and Spanish in order to convey the semantic function of multiple characterisation within the NP. This is a step from meaning to form. Then, the different formal resources will be assigned particular semantic nuances, which implies going from form to meaning. It is only meaning that can be contrasted in two languages, so the contrast is centred on the different grammatical realizations of several specific semantic functions in English and Spanish.

The study is based on the proposal made by Bondarko (1991) for explaining the interaction between meaning and grammar. Bondarko suggests that for every meaning there are one or two central grammatical structures to actualise it in a particular language. Other options may exist, but are more peripheral. The main aim of this study is to draw functional-semantic fields for multiple modification in English and Spanish. These fields will show the typicality of occurrence of specific grammatical resources associated with the expression of particular meanings. A contrast of these fields will yield useful information as to the language structures employed by both languages for conveying the same meaning. The data will be based on authentic language in use extracted from two large monolingual corpora. The applicability of the results is centred mainly on the field of translation, as we will attempt to present translators with a set of the most typical grammatical options that convey a particular meaning in the target language.

The attributive modification of nouns in English and Spanish presents one essential difference based on typological issues. Adjectives, traditionally the linguistic units most closely linked to the modification of nouns, occupy opposite unmarked positions in these two languages: a premodifying position in English – a predominantly Germanic language in its syntax (Baugh & Cable 2002: 184), and a postmodifying position in Spanish – a Romance language, although premodification may also occur in Spanish with particular semantic connotations.

Considering this disparity on the most basic level with one single modifier, it comes as no surprise that multiple modification should pose serious problems in the interaction between these two languages. When we start considering different grammatical structures in addition to adjectives, such as nouns, prepositional phrases

(PPs), or relative clauses, the complexity increases. Nouns, for example, cannot normally be used in Spanish to modify other nouns, with few exceptions. And some modifiers may be closely associated to the expression of one particular meaning in English and to a different one in Spanish. The issue becomes still more complex if we consider the high frequency of occurrence of multiple modification in English NPs. The different use and distribution of multiple modification in both languages is a major problem when translating English texts into Spanish. The use of unnatural constructions in Spanish when translating these complex NPs from English has a pervasive effect on all kinds of texts, and this feature often makes translations easily identifiable. It is our aim to equip translators with potential correspondences in Spanish when problems arise in this particular area.

Section 2 in this paper deals with the semantics of nominal modification, where I describe three meaning-based dichotomies that could be useful for a classification of multiple modification in the two languages: implicitness vs. restrictiveness, complement vs. modifier and description vs. classification. A series of formal criteria are also outlined to help classify the data using the same procedure for English and Spanish. Section 3 is a brief overview of the main theoretical approaches to multiple modification in the two languages. In section 4 I give a detailed description of the corpora used for the analysis (Cobuild/Bank of English and CREA), and I devise a particular working procedure for the selection of relevant data. Section 5 contains the description of the data carried out separately for English and Spanish, listing all the formal combinations of multiple modification found in our data, as well as all the meaning combinations isolated for each language. The juxtaposition and contrast of these data are presented in sections 6 and 7, respectively, focusing exclusively on

meaning and trying to reveal the formal resources that are favoured by each language to express a particular combination of semantic functions, especially in the case of the most frequent of these combinations, i.e. two descriptive modifiers, classifying and descriptive modifiers, and descriptive modifiers followed by complements. These results summarise the functional-semantic equivalents between English and Spanish in the field of multiple modification, and thus contributes to improving the translation process between the two languages.

2. THE SEMANTICS OF NOMINAL MODIFICATION

This section will be devoted to the search for semantic criteria that could be used in our analysis for the classification of modifiers in English and Spanish. Nominal modifiers can be classified from a functional-semantic perspective according to several criteria, and I will focus here on the following ones:

- Implicitness vs. restrictiveness
- Complement vs. modifier
- Description vs. classification

2.1. Implicitness vs. restrictiveness

Adjectives occupy opposite unmarked positions in English and Spanish. However, there are exceptions in both languages. A handful of English constructions allow the postposition of an adjective, particularly in noun compounds (*attorney general, heir apparent*) or when the head is an indefinite pronoun (*something awful, nothing interesting*). In Spanish, on the other hand, premodifying adjectives may occur and usually mark affectivity: *un viejo actor (an old actor)*. The situation becomes more

complex when more than one unit is employed to modify a single noun. A clear distinction has to be drawn between the different types of meaning conveyed by pre and postmodifiers before considering further topics.

In view of the opposite unmarked position of adjectives in English and Spanish, it seems obvious that the semantic nuances associated with pre and postmodification do not coincide in the two languages. In English the premodifying position is usually filled by nouns or adjectives. Premodification is thus associated with more condensed forms, from the structural point of view. From a semantic perspective, the relationship between a head noun and its premodifier is “generally less explicit than that of postmodification” (Quirk et al. 1985: 1321). Premodification entails an implicit relationship between the adjective and the head noun. In contrast, postmodification is typical of longer structures, such as PPs, clauses, etc., complying with the principle of end-weight focus. Semantically, there is a more explicit relationship between nouns and their postmodifiers. Some authors claim there is a cline of explicitness, finite clauses being more explicit than non-finite clauses, and these more explicit than PPs (Biber et al. 1999).

In Spanish, the unmarked position for all noun modifiers is the one following the noun. Accordingly, the semantic differences between pre and postmodification are limited to the pre and postmodification by means of adjectives, the only modifiers that may appear before the noun in this language. From a semantic point of view, postmodification is associated with restrictive meanings. Alternatively, premodifying adjectives are considered non-restrictive, supplying “information that is habitually known as the normal characterisation of the individual in question” (Givón 1990: 473). It is often the case that premodifying adjectives in Spanish yield a modified sense of the

expression (*un hombre pobre, un pobre hombre (a poor man (not rich) vs. a poor man (unfortunate)*), or even form idiomatic expressions that cannot be turned around (*la mala suerte (bad luck); *la suerte mala*). Stylistic and rhythmic features also play a role here, as well as the number of syllables of the adjective. Shorter adjectives show a stronger tendency to be preposed than those that are longer than the head noun (Penadés Martínez 1988: 58). The close link between syntax and semantics is self-evident in the two positions for adjectives in Spanish.

This brief overview has shown that the semantic constraints in this field are based on different factors in the two languages: implicitness versus explicitness in English, and non-restrictiveness versus restrictiveness in Spanish. It is not easy to carry out a contrastive analysis on the basis of a criterion that is valid for only one of the two languages, since it may not be relevant when applied to the other language, as in this case. However, a semantic criterion of some kind is needed in order to contrast two languages, since meaning represents the only guarantee of functional-semantic equivalence between two languages when the grammatical structures diverge. Let us now take a closer look at the next semantic dichotomy.

2.2. Complement vs. modifier

English and Spanish have a wide range of grammatical structures available to modify nouns, both in pre- and postmodifying positions. By far the most common type of nominal postmodifier is the PP (Biber et al. 1999: 634), and the distinction between complements and modifiers is one that applies in particular to PPs. The term ‘modifying PPs’ refers to those that express purely adjectival or qualitative meanings: *a man of great dignity, the woman in red, un joven de 14 años (a 14-year old), un escritor con*

una prosa envidiable (a writer with an enviable prose), etc. In contrast, ‘complement PPs’ do not add any specific quality to the noun they go with, but rather complement its meaning using specific prepositions selected by the head noun: *her faith in the new project, the search for new solutions, su respaldo a la nueva política (his/her support of the new policy), mi preocupación por el medio ambiente (my concern about the environment)*, etc.

This dichotomy between complements and modifiers derives from a parallelism that many authors detect between the internal structure of NPs and clauses: “The relationship between the head and the post-head dependents we are calling complements parallels that between the predicator and its complements in clause structure” (Huddleston 1984: 260). Verbs control the structural pattern in the clause, and similarly, nouns can be considered to determine to some extent the structure of the NP in which they occur, in particular with reference to PP that may follow them. In other words, some nouns seem to require modification by a PP headed by a specific preposition and not by other prepositions.

This is especially noticeable in the case of deverbal nouns, which seem to have inherited the link to the preposition from their corresponding verb. It may be said in these cases that the PP is to some extent expected in discourse. Nouns that require a specific preposition form with the PP following it fixed or semi-fixed patterns, as in *their belief in God, his dependence on alcohol*. In the case of deverbal nouns, there is often clausal equivalent with a verb complement: *they believe in God, he depends on alcohol*. Similar noun-complement patterns have been observed in Spanish (Escandell 1997; Rigau 1999), paralleling nouns and verbs as lexical nodes that may be expanded by PPs headed by the same preposition in the two cases. In *Juan lucha por la libertad*

(*Juan fights for freedom*), the verb requires a complement headed by the preposition *por*. When the corresponding deverbal noun is used in context, *la lucha por la libertad* (*the fight for freedom*), it requires the same preposition in its nominal complement.

Traditionally, only clauses have been considered noun complements, and only with a small number of head nouns, such as; *the idea that ...*; *the fact that ...*; *el hecho de que ...* (*the fact that ...*); etc. Noun complementation by means of clauses is not regarded as a proper modifying resource of the noun (Biber et al. 1999: 645), and in this paper I will not consider it as a characterising resource. However, noun complementation by means of PPs shows somewhat different characteristics. Firstly, it affects a much wider range of nouns. Secondly, PPs can also have standard modifying functions on top of complementing functions, as exemplified above. In this paper I will take into account all the occurrences of PPs affecting a head noun, be they of the complement type or of the modifier type.

Complement PPs occur relatively frequently in English and Spanish. Phrases headed by *of/de* show peculiar features that distinguish them from all other PPs, and I will therefore refer to them separately as *of/de*-phrases and employ the abbreviation PP for phrases headed by other prepositions. Complement patterns are easier to detect in PPs than in *of/de*-phrases. The prepositions *of/de* have little lexical content of their own and communicate a variety of relationships between the head noun and the noun in the *of/de*-phrase. Some authors do not even regard *of/de* as prepositions, but suggest they should be classified as a separate type of particle (Sinclair 1991: 82). I will consider complement *of/de*-phrases cases such as *the list of requirements*, *the description of the effects*, *the result of the test*; *una cuestión de imagen* (*a matter of image*), *una muestra de caridad* (*a sign of charity*), *un ejemplo de la economía* (*an example of the economy*),

etc., where the content of the *of/de*-phrases does not convey any type of qualitative meaning, but rather complements the meaning of the head noun.

It is not always easy to determine whether a particular PP or *of/de*-phrase is a complement or a modifier. Complementation involves some type of collocation relationship between the head noun and the preposition following it, whereas modification establishes a freer type of association. There are number of clines in the criteria that determine how fixed or how free particular lexical patterns are (Carter 1987: 174). Every lexical item in the language has its own individual and unique pattern of behaviour, and some cases are clearly complementing patterns, whereas others are open to interpretation. Noun+complement patterns have to be treated individually and cannot be further classified semantically.

The distinction between complements and modifiers will be of great help in the analysis, but we still need to go a step further and look for a more delicate semantic classification in the case of modifiers. Modifiers may communicate a variety of meaning nuances which will be examined in detail in the following section.

2.3. Description vs. classification

Noun modifiers can be broadly classified as being either descriptive or classifying in meaning. Even though adjectives seem to be the most obvious resource for characterising nouns, there are a number of additional syntactic categories that can be used to express similar meanings. We may include in this group nouns, adverbs, adjectival phrases, PPs, relative clauses, appositions or any other grammatical construction that may be used to modify nouns. It may be claimed that these elements “do not constitute a single, unified linguistic category” (Siegel 1980: 1), but this is only

true from a structural point of view. From a functional-semantic perspective, all these linguistic elements communicate comparable meanings.

The semantic function of nominal modification is a very wide field indeed and includes many types of meaning that have to be classified into smaller groups. Considering adjectives as the most straightforward of noun modifiers, I will take semantic classifications of adjectives as a starting point, and subsequently apply them to non-adjectival modifiers. Teyssier (1968) and Warren (1984) put forward a three-fold typology distinguishing between identifying, classifying and descriptive meanings of adjectives. However, since identifying meanings (e.g. *same* in *the same person*) cannot be considered properly characterising, more recent approaches tend to focus mainly on the distinction between descriptive and classifying meanings, sometimes with varying terminology, (Ferris 1993; Halliday 1994; Tucker 1998; Biber et al. 1999).

This broad division - descriptors versus classifiers - has one big advantage: it accounts for both semantic and syntactic features of modifiers at the same time. Adjectives with a descriptive meaning add a quality to the head noun that is not an intrinsic part of the nature of that noun, “information about a participant that is in some sense gratuitous” (Jackson 1990: 124), as in *a dangerous man*, *un problema grave* (*a serious problem*). The syntactic features of descriptive adjectives indicate that they may appear in attributive as well as in predicative positions (*the man is dangerous*, *el problema es grave* (*the problem is serious*)) and they are susceptible of modification (*a very dangerous man*, *un problema muy grave* (*a very serious problem*)). Descriptive adjectives are the most typical or central adjectives in the category, the highest on the scale of adjectivity, or, as some others want to call them, *bona fide* adjectives (Warren 1984: 87).

In contrast, adjectives with a classifying meaning “delimit or restrict a noun’s referent, by placing it in a category in relation to other referents” (Biber et al. 1999: 508), as in *a polar bear*, *una situación social* (*a social situation*). In these cases, we are not adding any quality to the noun, but opposing one class of *bears*, *polar bears*, to other classes or types such as *grizzly bears*, *panda bears*, etc. The same occurs with the Spanish example, where *una situación social* (*a social situation*) categorizes the situation as a member of the group formed by *una situación económica* (*an economic situation*), *una situación política* (*a political situation*), etc. As for the syntactic features, classifying adjectives occur exclusively in attributive position, immediately before the head noun in English, and immediately after the head noun in Spanish: **the bear is polar*, **la situación es social* (**the situation is social*). This implies that in Spanish premodifying adjectives carry only descriptive meanings (*un buen coreógrafo* (*a good choreographer*), *un gran hombre* (*a great man*)), which is a useful syntactic feature to consider for any semantic classification. Classifying adjectives may not be modified, since they do not add any gradable quality to the head noun, but categorize it: **a very polar bear*, **una situación muy social* (**a very social situation*). Classifying adjectives have a much closer relationship with the head noun than descriptive adjectives and often tend to form lexical bundles with it.

The distinction between descriptive and classifying meanings is a cline, and a number of cases may lie at some intermediate point along the scale, although one of the two options can usually be considered the dominant one.

I will argue in this paper that all linguistic units capable of modifying nouns within the scope of a NP may be classified according to the same semantic criteria as adjectives. Nonetheless, the inclusion of grammatical resources of such different nature

as PPs, relative clauses, nouns as modifiers of other nouns, etc. requires a more delicate semantic classification. Especially PPs headed by prepositions such as *in*, *at*, *en*, etc, often present a clear semantic nuance, in this case ‘location’: *a house in Majorca*; *her home at Stockbridge*; *la vida en la peninsula (life in the peninsula)*, etc. It would be difficult to consider here either description or classification as dominant meanings, since ‘place’ is probably the most appropriate label for this semantic function. Adverbial nuances may also be conveyed by relative clauses with adverbial pronouns, indicating time as in *the day when I can relax*, or place as in *el mundo en que vivo (the world I live in)*, among other adverbial meanings. We will consider the descriptive function as being an intrinsic part of the meaning of any nominal modifier. Additional semantic features of an adverbial nature, such as time, place or manner, may overlap with this basic descriptive function.

The following diagram summarises the different semantic groupings that we will take into account in our analysis of nominal modification in English and Spanish:

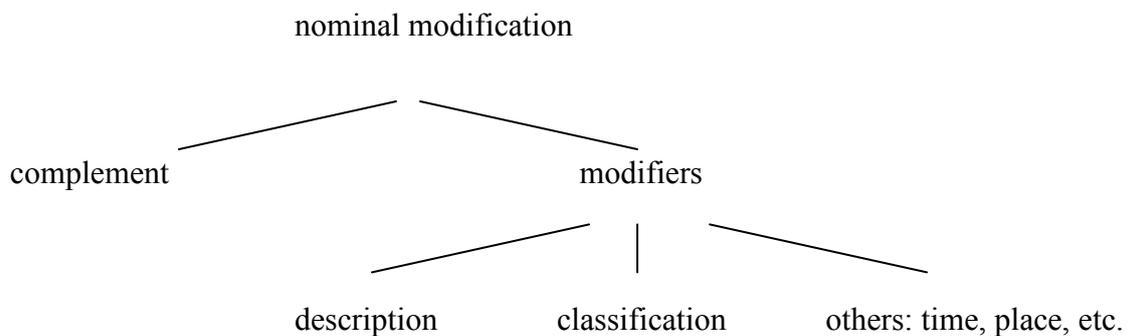


Figure 1: Semantic classification of nominal modifiers.

The criteria followed in applying this classification to non-adjectival modifiers will be outlined in the following section.

2.4. Formal criteria in establishing meaning: the syntax-semantics interface

In the previous sections I have explored semantic typologies that could be assigned to grammatical resources that modify nouns. Conversely, the syntax-semantics interface relates specific formal characteristics to particular meanings. A number of criteria were revealed and employed in order to apply the descriptive-classifying dichotomy onto grammatical units other than adjectives.

Nouns modifying other nouns have long been considered as conveying mainly meanings closely related to those of classifying adjectives (Coates 1971, Levi 1978), as in *election time*, *tennis coach*, *market day* or *luxury home*. The modification of nouns by means of other nouns is an almost inexistent resource in Spanish and occurs in postmodifying position. However, it also conveys classifying meanings when it occurs: *coche cama* (*sleeping car*), *hombre rana* (*frogman*), *café concierto* (*café with life music*), etc.

As far as modifying *of/de*-phrases are concerned, in *a man of great dignity*, the *of*-phrase modifying the noun is of the descriptive type, conveying a quality that is not intrinsic to the head noun and that does not include it in any category as opposed to other units. In contrast, in *the world of business* the same grammatical structure conveys a type of meaning that is closer to the classifying end of the cline, distinguishing the *world of business* from *the world of finance*, *the world of fashion*, etc. I have already identified somewhere else (Ramón García 2003) that the syntactic feature that may be relevant for this distinction could be related to the presence or lack of determiners and/or modifiers in the NP that follows the preposition *of*. In the descriptive example, *a man of great dignity*, the noun *dignity* is modified by an adjective, whereas in the classifying example the noun following the preposition *of* is not modified and does not

carry any determiner. Similar patterns have been observed in Spanish (Gutiérrez Ordóñez 1997), although they are not as clearly delimited as in English. When the preposition is followed by a noun with no determiner nor modifier, the classifying meaning is clear: *una revista de mujeres* (a women's magazine), *tiempo de guerra* (time of war), *un diálogo de sordos* (to talk at cross purposes). However, classifying meanings may also be found in cases with determiners: *el mundo del toro* (the world of bullfighting), *el mundo de la biología* (the world of biology), etc. Every case has to be considered separately, but this criterion will be used as a formal indicator to help in the semantic classification.

Relative clauses constitute a special case in the ascription of descriptive or classifying meanings. Jackson considers that “classificatory relative clauses are often referred to as ‘restrictive’ relative clauses, and descriptive ones as ‘non-restrictive’.” (Jackson 1990: 131). I do not agree with this proposal for a number of reasons. Bearing in mind the semantic and syntactic features associated to descriptive and classifying meanings, I claim that no relative clause, restrictive or non-restrictive, can be considered to express classifying meanings, but is mainly descriptive in nature, with occasional adverbial nuances in the case of adverbial relative clauses indicating time, place or other adverbial meanings. In *the man who won the war, a group which is reluctant to ...*, or *el mundo que lo rodea* (the world that surrounds him), *un argumento que no puede tomarse ...* (a claim that cannot be taken as ...), for instance, no classifying meaning can be detected whatsoever. Classifying modifiers categorize their head nouns and tend to form lexical units with them, irrespective of whether they are adjectives, nouns modifying other nouns, or *of/de*-phrases, as described above. However, this close semantic relationship between a head noun and its modifier cannot

be paralleled by relative clauses due to their syntactic features: they are longer and more complex structures than other modifiers. The presence of an explicit formal marker in the relative clause, be it adverbial or prepositional (*where, when, in which, donde, en el cual, etc.*), was used to classify that particular clause as temporal (*the day when I can relax, el día en que me dieron de baja (the day when I was made redundant)*), locative (*the world they are in, el mundo en que vivo (the world I live in)*), etc. If no such marker was present, the descriptive function was assigned to it, thus working as a default category.

These criteria were employed to unveil the meanings underlying particular formal structures, illustrating that “the grammatical behaviour of words is governed by subtle semantic ‘rules’” (Wierzbicka 1996: 379). The empirical data for this analysis are extracted from language corpora that require formal inputs. It is therefore essential in this case to be able to adopt formal criteria to help in determining semantic functions, at least partially.

3. MULTIPLE MODIFICATION OF SINGLE HEAD NOUNS

Within an NP the head noun may be modified by more than one constituent, and these modifiers may be coordinated or juxtaposed. In English as well as in Spanish multiple modification has traditionally been studied from the point of view of adjectives and their catenations within the NP (Bache 1978; Rojo 1975). In English, chains of two, three or even more premodifying adjectives are not uncommon in the written language, especially in careful descriptions of people or things: *silver-haired, witty, unflappable star; the eternal deep brown lumpy gravy*. The Spanish linguistic tradition has approached the issue of multiple modification of a single noun in a similar way,

focusing primarily on sequences of two or more adjectives: *un hombre alto y Delgado* (*a tall thin man*). The order of adjectives in an NP has been explained suggesting a scale going from more subjective meanings to less subjective ones, from the less permanent to the more permanent, from description to class.

In the case of two or more constituents modifying the same head noun, those with a clearly classifying meaning will occupy the position closest to the head, immediately before it in English and immediately after it in Spanish. This is a rule of thumb that is valid for adjectives, nouns modifying nouns, or any other grammatical constituent with a classifying function. Classifying modifiers present a very close semantic link with their head nouns and tend to form independent lexical units with them (*winter coat*, *puerto marítimo* (*sea port*)). If this unit is to be modified by a descriptive adjective, it will have to premodify the unit in English (*a thick winter coat*), since that is its unmarked position, and it will generally postmodify it in Spanish (*un puerto marítimo enorme* (*a huge sea port*)), although the premodifying position is also possible: *un enorme puerto marítimo* (*a huge sea port*).

But adjectives are not the only modifiers of nouns in English or Spanish. Several other grammatical resources may fulfil a similar semantic function. The type of grammatical structure used for modifying the head noun and the semantic function associated with it will influence its position with respect to other modifiers in the same NP. Structural issues have to be taken into account here, since some of the modifying resources are whole clauses or PPs, and these units tend to be relegated to final positions in the NP because of their length and weight.

Noun complements are closely linked to the head noun they accompany, and therefore tend to go immediately after it. But this does not mean that the head noun may

not be further modified by other elements. Descriptive and classifying adjectives in English will be placed before the head in their usual unmarked position, as in *a firm belief in God*. In contrast, in Spanish descriptive and classifying adjectives can be placed between the head noun and its complement, as in *un respaldo enorme a su labor* (*a tremendous support for his work*), where we have a complement PP paralleling a similar construction with the corresponding verb *respaldar a ...* (*support ...*) This is so because the unmarked position for adjectives is the postnominal one in Spanish, whereas PPs and *de*-phrases are longer constructions that by nature tend to occur after shorter units following the principle of end-weight focus.

In English, multiple modification can occur before the noun - multiple premodification, generally two or more adjectives - and/or after the noun - multiple postmodification, generally complex syntactic constructions such as PPs, relative clauses, etc. Combinations of pre and postmodifying elements also occur frequently in English. The approach is different in Spanish, a language in which multiple premodification may occur, but only exceptionally. There was not one single example in our corpus. Multiple modification in Spanish refers generally to multiple postmodification only, or to a combination of one premodifier and one or two postmodifiers. We will not include in our analysis comparative or superlative constructions, since in both languages these are discontinuous structures where the second element is triggered by the mark of degree in the adjective (Oostdijk & Aarts 1994). These constructions cannot be considered spontaneous groupings of two modifiers: *the biggest house in town*; *la casa más grande que tiene* (*the biggest house he owns*).

In our contrastive analysis we will try to establish clear functional-semantic patterns of behaviour for the different combinations of modifiers in English and Spanish to shed more light on this issue.

4. CORPORA AND DATA SELECTION

The empirical data for the analysis have been extracted from two large monolingual corpora in English and Spanish: Cobuild/Bank of English and CREA (Reference Corpus of Contemporary Spanish). The results will thus be based on authentic contemporary language in use. The use of semantic criteria in the analysis of real language samples implies that functional-semantic equivalents will be established for the same meaning in the two languages. When different forms are found to be used to express similar functions in two different languages we can speak of translational equivalents.

The two corpora employed were selected among those available because of similarities in their internal structure, scope and representativeness in their respective languages. Several subcorpora within these two large reference corpora were selected in order to ensure comparability. The subcorpora used included only written texts (fiction, non-fiction, press and ephemera in similar proportions in the two languages), texts produced between 1990 and 2000, and texts produced in the European varieties of these two world languages, i.e. British English and European Spanish. Comparable corpora “consist of original texts in each language, matched as far as possible in terms of text type, subject matter and communicative function” (Altenberg and Granger 2002: 7-8). The two resulting subcorpora were similar, and, in a broad sense, ‘comparable’ in most

aspects, including text mode, text type, date, origin, and size - slightly over 30 million words in each language.

Only written texts were included because complex NPs with more than one modifier are more frequent in written texts than in oral texts. Previous studies have shown that the amount of complex NPs increases across registers, from very few instances in conversation, to more in fiction and news, and the highest number of complex NPs can be found in academic writing (Biber et al. 1999: 578). The two sample corpora used were considered to be broadly representative of contemporary written English and Spanish and no register differences have been considered for this analysis.

The two corpora are not semantically tagged and can only yield data on the basis of formal inputs. A specific strategy had to be devised to obtain relevant formal data for the purpose of analysing nominal modification. What input should we use in order to get NPs with multiple modifiers? Quirk et al. note that in a sample corpus they analysed “less than a quarter of complex noun phrases are subjects” (1985: 1351), which means that NPs with multiple modification are not normally to be found in subject position, but rather in other alternative grammatical slots. Previous studies on modification and grammatical functions have shown that the highest concentration of multiple modification occurs when the NP functions as a subject complement (Ramón García 2002a: 157). From a syntactic perspective, this makes sense, since this function is closely related to the description of a specific entity: the noun in the subject slot. It was therefore decided that the formal input in both corpora should attempt to reproduce this pattern as closely as possible. The copular verbs *to be* and *ser* were chosen as part of the input in the form of the third person singular of the present tense, followed by the

indefinite article, to ensure that the concordances would include a NP in the subject complement slot. Articles are determiners that appear in the NP before modifiers. Orthographic and morphological variations had to be taken into account, so the two forms selected for the English language were *is+a* and *is+an*, limiting the analysis to singular head nouns, but including both orthographic possibilities. The input for the Spanish corpus was *es+un* and *es+una*, also limiting the analysis to singular nouns, but including both masculine and feminine items. Any type of noun may appear in the NP, which is an essential factor in accounting for all possible nouns without any specific lexical constraints. This searching procedure will not yield NPs headed by pronouns or proper nouns, which have very limited chances of being modified at all.

In both English and Spanish, NPs differ in the type of modification they may adopt according to the type of determiner placed before the noun. The indefinite article has been chosen instead of the definite one for several reasons. The indefinite article is typically used when the referent has not been mentioned before in the text, thus leading to a greater likelihood of having a qualitatively modified noun. In addition, “the indefinite article is strongly associated with the complement function in a clause (...) and it has a descriptive role similar to that of predicative adjectives” (Quirk et al. 1985: 273). Furthermore, indefinite NPs present fewer constraints as regards restrictive modifiers in general: *a very intelligent girl*, **the very intelligent girl*. I am aware of the fact that indefinite articles do not have identical semantic patterns in English and Spanish. However, in structures as the ones that will be investigated here, that is, after copulas, indefiniteness is the major semantic function in the two languages.

Due to the large size of our two comparable corpora – over 30 million words each – the number of instances of each of our copula plus article chains was very large

and beyond the scope of this analysis. The following statistical formula was employed in order to reduce the number of concordance lines to a manageable sample and determine exactly how many instances were needed to allow statistical significance of the whole sample:

$$n = \frac{N}{(N-1) E^2 + 1}$$

The element n is the final sample we will analyse, N is the whole sample of occurrences, and E is the estimated error, in this case 0.05 for a 95% confidence margin. A total of 1,546 concordance lines were collected for the analysis: 762 in English and 784 in Spanish. Table 1 shows the exact number corresponding to each construction.

Table 1. Data selection process.

Total number of occurrences in our sample corpora	Sample analysed
is+a: 26,647	394
is+an: 4,531	368
es+un: 21,714	393
es+una: 17,098	391
	Total: 1,546

A very high percentage of the examples isolated showed some type of qualitative modification. As refers to multiple modification, in the English sample there were 191 instances of two or more modifiers, 25.06% of the total, and in the Spanish sample there were 170 cases of multiple modification, 21.68% of the total. Previous studies had revealed that “roughly one noun phrase in eight has (...) multiple modification” (Willis 1990: 43), which amounts to about 12.5% of all the NPs. The fact that we have almost doubled this figure in our sample corpora confirms that our searching procedure has been successful.

5. DESCRIPTION

In both samples, most of the instances of multiple modification correspond to combinations of only two modifiers. The more modifiers involved, the less frequent the combinations (Ramón García 2002b: 856). Table 2 shows the frequency of occurrence of the different combinations found in our sample corpora in English and Spanish:

Table 2: Modifying chains in English and Spanish.

	ENGLISH	SPANISH
Two modifiers	75.39%	81.76%
Three modifiers	18.32%	13.52%
Four modifiers	5.75%	2.94%
Five modifiers	0.52%	1.76%
Total	99.98%	99.98%

These figures illustrate that multiple modification with three and four modifiers is slightly more common in English than in Spanish, whereas there is a higher percentage of two-modifier chains in Spanish. Catenations of five modifiers with a single head noun are very infrequent in the two languages. Multiple modification in NPs is thus not an uncommon phenomenon in Spanish, contrary to what some authors have claimed (Rigau 1999), at least in the particular syntactic environment of the NPs analysed in this paper. The Spanish linguistic tradition of nominal modification has focused on the analysis of adjectives mainly, neglecting the existence of additional grammatical resources used to carry out similar semantic functions. This paper approaches nominal modification from a more comprehensive perspective taking into account any potentially characterising structures, in an attempt to contribute to a more detailed analysis of this phenomenon in Spanish, something still missing in the literature. Long modifying chains may not be exceptional in Spanish, but the parallel phenomenon in English leads to difficulties in the translation process between the two

languages. The explanation lies in the different distribution across semantic functions of a range of structurally very similar grammatical resources.

Our analysis will focus on combinations of two modifiers in English and Spanish, since it is by far the most common type of catenation. In addition, we intend to carry out a semantic analysis of every modifying instance, and this analysis will be based on the three-fold classification outlined above (see 2.2. & 2.3.): complement, descriptive and classifying modifiers, distinguishing also minor adverbial nuances, such as locative or temporal meanings, if necessary. I will describe combinations of two descriptive or two classifying meanings, combinations of the two, and combinations including complement patterns or adverbial meanings. This implies a high number of combinatory possibilities for two-modifier chains, and many more possibilities in the case of three, four or even five-modifier chains. Nevertheless, the type of semantic function associated with a particular grammatical structure will generally be the same, irrespective of the number of additional modifiers in the NP.

5.1. Onomasiological stage: from meaning to form

The onomasiological component of the analysis will consist in establishing the list of grammatical resources employed in English and Spanish for conveying the meaning of multiple modification. A subsequent semasiological component will assign semantic subcategories to the different grammatical resources.

Our sample corpus contained 22 structurally different sequences of two modifiers in English and 23 in Spanish, which shows that there is a wide range of possible combinations. It is not easy to establish a closed list of combinations, since in a larger corpus we would probably find additional combinations. Table 3 shows the eight

most common sequences of two modifiers found in indefinite NPs in English and Spanish, with the percentage of occurrence within the total of two-modifier chains. These eight combinations amount to over 80% of the occurrences in both languages.

Table 3: Combinations of two modifiers in English and Spanish.

ENGLISH	SPANISH
Adj ¹ . + N + <i>of</i> -phrase (22.91%)	N + Adj. + rel. clause (17.98%)
Adj. + N + rel. clause (15.27%)	N + 2 Adjs (16.54%)
Adj. + N + PP (14.58%)	N + Adj. + <i>de</i> -phrase (12.94%)
2 Adjs. + N (10.41%)	Adj. + N + <i>de</i> -phrase (11.51%)
N + N + PP (6.25%)	N + Adj. + PP (8.63%)
Adj. + N + -ed clause (6.25%)	N + <i>de</i> -phrase + relative (7.91%)
Adj. + N + N (4.86%)	Adj. + N + PP (4.31%)
Adj. + N + -ing clause (4.16%)	N + 2 <i>de</i> -phrases (3.59%)
TOTAL 84.69%	TOTAL 83.41%

Table 3 shows that there is a strong preference in English for having a premodifying adjective as the first element of multiple characterising chains, whereas multiple postmodification seems to be the general trend in Spanish. Only two of the combinations present a premodifying adjective in Spanish as part of the multiple modification structure, with the head noun then followed by another modifier, a *de*-phrase or a PP. In English the second modifying constituent appears either after the head noun – the most common option - or is another adjective or a noun forming thus a chain of two premodifiers (*a hard and diligent worker, a hard-working family man*). The variety of possible combinations is only apparent, since it is largely restricted to a number of different structures in the postnominal position in both languages.

The most outstanding pattern in English includes a premodifying adjective followed by the head noun plus an assortment of other modifiers, mainly *of*-phrases (*a precise description of the effect*), relative clauses (*a dangerous man who mixes with*

¹ The abbreviation Adj. includes instances of single adjectives as well as compound adjectives and adjectival phrases.

dangerous people) and PPs (*a raging argument about ways of being*). These three combinations are the most common ones in the whole sample and amount to over 50% of the total. Other postmodifying options that may appear after a premodified head noun, although to a lesser extent, are *-ed* and *-ing* clauses. Similar patterns can be observed in Spanish, where the adjective is usually the first postmodifier followed by either a relative clause (*una sustancia química que llega al cerebro (a chemical substance that reaches the brain)*), a second adjective (*una pareja admirable y valiente (an admirable and courageous couple)*), a *de*-phrase (*un chico sano de 21 años (a healthy young man of 21)*), or a PP (*un escritor estupendo, con una prosa envidiable (a good writer with an enviable prose)*). The alternative of a premodifying adjective and a postmodifying *de*-phrase is the fourth most common combination in Spanish (*una gran muestra de ostentación (a great display of ostentation)*).

In English only one of the combinations shown in the table does not include a premodifying adjective as the first element, but a premodifying noun, followed by the head noun plus one of the usual postmodifiers, namely a PP (*a tennis coach with attitude and the will to win*). The ability of nouns to premodify other nouns is a well-known feature of the English language, and it is not a surprise to find this structure among the list of multiple modification constructions within an NP. No formally equivalent structure is found among the most common options in Spanish.

The data confirm the trend to locate adjectives in the first position within a chain of two or more modifiers in both English and Spanish. This is a clear example of end-weight focus, the principle that determines that longer and heavier elements such as relative clauses or PPs of any type tend to appear in final positions, especially when combined with shorter units such as adjectives. But form is nothing without meaning,

and the semantic analysis in the following section will determine the meanings most commonly associated to particular structures in both languages.

5.2. Semasiological stage: from form to meaning

A contrastive study cannot be based on structural grounds only, but requires a detailed semantic analysis. All individual modifiers found in two-modifier chains have been assigned particular semantic functions within the general field of characterisation. This will allow us to compare the structures used by native speakers of English and Spanish in order to express particular combinations of meanings. This will be the semasiological part of our study.

Single modifiers may be assigned complement, descriptive or classifying functions depending on their meaning in context. Complement patterns are restricted to one particular form, PPs and *of/de*-phrases, but their semantic peculiarities justify the existence of a separate semantic group for these meanings. In addition, PPs and *of/de*-phrases may also have descriptive or classifying meanings, so there is no one-to-one association between form and meaning. The most common combinations of modifiers found in our corpora are listed in Table 4 according to their frequency of occurrence.

Table 4: Combinations of meanings expressed by two modifiers in English and Spanish.

COMBINATION	ENGLISH	SPANISH
2 descriptive modifiers	34.02%	43.16%
1 class. + 1 descriptive	22.91%	15.10%
1 descr. + 1 complement	22.22%	15.82%
1 class. + 1 complement	8.33%	7.91%
1 descr. + 1 classifying	5.55%	4.31%
1 compl. + 1 descr.	2.08%	5.03%
2 classifying modifiers	0.69%	3.59%
TOTAL	95.08%	94.92%

Only the three most common combinations exceed a 10% frequency rate in the whole sample of two modifiers. Additional combinations including modifiers with some type of adverbial meaning (time, place, manner, etc.) were also found, but they showed a very low frequency of occurrence and are not represented in the table above. No separate headings can be attached to these combinations, except in the case where the two meanings coincide. So, two descriptive modifiers undoubtedly communicate description, and two classifying modifiers communicate classification. But in the case of two modifiers with different meanings, the resulting combination presents a semantic content formed by the joint meanings of its two separate constituents.

6. JUXTAPOSITION

The juxtaposition of the data consists in representing the list of resources for one particular combination in English and Spanish, so that the two lists can be compared and the similarities and differences observed and evaluated.

6.1. Two descriptive modifiers in English and Spanish

The descriptive function is the commonest of all noun-modifying functions. Every characterising element will contain descriptive meanings to some extent, although other functions may overlap with it and be predominant in some cases. Of all combinations of meanings analysed here, the one including two descriptive modifiers is by far the most frequent in both English (34.02%) and Spanish (43.16%).

Table 5 lists the structures used in English and Spanish and their percentage of occurrence within this group of double descriptive modification. We include here only the combinations that occurred at least twice in the sample corpus. In English there were

three additional combinations with only one occurrence each, and in Spanish there were eight additional combinations. This explains why the combinations amount to 93.86% of the whole sample in English and to a somewhat smaller percentage in Spanish.

Table 5: Two descriptive modifiers in English and Spanish.

ENGLISH	SPANISH
2 Adjs. + N (28.57%)	N + Adj. + relative clause (28.33%)
Adj. + N + relative clause (26.53%)	N + 2 Adjs. (25%)
Adj. + N + PP (16.32%)	N + Adj. + PP (8.33%)
Adj. + N + -ed clause (12.24%)	N + <i>de</i> -phrase + relative clause (6.66%)
Adj. + N + -ing clause (6.12%)	Adj. + N + relative clause (6.66%)
Adj. + N + <i>of</i> -phrase (4.08%)	N + participle clause + relative clause (5%)
	N + 2 relative clauses (5%)
TOTAL 93.86%	TOTAL 84.98%

Table 5 illustrates that a premodifying adjective is used in every single case in English, combined with either another premodifying adjective or the usual assortment of postmodifying structures. Postmodifying combinations are predominant in double descriptive modification in Spanish. The only exception is the sequence of a premodifying adjective followed by the head noun and a relative clause. Premodifying adjectives are generally descriptive in Spanish, and can only be considered as classifying modifiers in certain idiomatic expressions (Ramón García 2003).

The two most common combinations for conveying two descriptive meanings in English and Spanish are formal equivalents in the two languages and present a similar frequency of occurrence. A sequence of two adjectives is the most common combination in English (*an attractive, quieter resort*) and the second most common one in Spanish (*un hombre violento y atrabiliario (a violent and aggressive man)*), in their respective unmarked positions. On the other hand, the combination of an adjective in its unmarked position and a relative clause is the second most common combination in English and the first one in Spanish: *a smooth talker who could sell anything to*

anybody; una persona dinámica, que gusta de enfrentarse con (a dynamic person who likes confronting ...) In consequence, adjectives and relative clauses seem to be in both languages the most typical resources for expressing descriptive meanings.

The combination of an adjective in its unmarked position and a PP is the third most common combination in both English and Spanish, although this catenation is twice as frequent in English as in Spanish (*a romantic retreat with a first-class restaurant; un socio joven con sólo 14 años de pertenencia (a young associate with only 14 years of membership)*).

As we have already seen, in all cases a premodifying adjective appears in English, whereas in Spanish there are several combinations with no adjective at all, but rather with other postmodifying resources, such as *de*-phrases and participle clauses followed by relative clauses (*un boxeador de 25 años que ha disputado 33 combates (a 25-year old boxer who has fought 33 times); un cineasta nacido en Hong Kong al que su padre ... (a cinema director born in Hong Kong whose father ...)*, or even two relative clauses (*una cosa que urja, que agobie (something urgent, that overwhelms)*). Other less common combinations in English show the standard pattern of a premodifying adjective followed by the head noun and an *-ed* clause (*a small group formed in 1970*), an *-ing* clause (*a superb plant growing slowly into ...*), or an *of*-phrase (*a blood-curdling riot of pain and paranoia*).

6.2. Classifying and descriptive modifiers in English and Spanish

Another important type of meaning combination found relates to sequences of a descriptive and a classifying modifier. Table 6 shows the combinations of two modifiers, one classifying plus one descriptive, which occur at least twice in the corpus.

There were five additional combinations in English with a frequency of occurrence of one each, and two additional ones in Spanish.

Table 6: Classifying and descriptive modifiers combined in English and Spanish.

ENGLISH	SPANISH
Adj. + N + relative clause (24.24%)	N + 2 Adjs. (28.57%)
N + N + PP (24.24%)	N + Adj. + relative clause (23.8%)
N + N + relative clause (12.12%)	N + Adj. + PP (19.04%)
Adj. + N + -ed clause (9.09%)	N + <i>de</i> -phrase + relative clause (19.04%)
Adj. + N + -ing clause (9.09%)	
N + N + -ed clause (6.06%)	
TOTAL 84.84%	TOTAL 90.45%

Table 6 shows that only premodifying adjectives and nouns carry classifying meanings in that position in English, whereas all the descriptive modifiers are postmodifying. These postmodifiers are the usual descriptive structures: relative clauses, PP or –ed clauses, combined with either a premodifying adjective or noun (*a vegetarian cookbook that goes easy on the worthiness ...; a guitar spectacular with those old maestros; an adventure story that leaves you up ...*). The figures illustrate that there is a wider range of possibilities in English. In contrast, the four most common resources are nearly the only ones in Spanish, and show very a high frequency of occurrence.

In Spanish we find two adjectives as the most common combination of these two meanings (*una pieza jurídica muy sólida (a very solid legal item)*), a combination that was not found in the English corpus. This means that there will be little formal equivalence in these cases and that translators will have to take into account the high frequency of occurrence of two adjectives to realize grammatically this combination of meanings in Spanish. The next most common options in Spanish combine the usual classifying adjective, close to the noun, with a descriptive relative clause (*una esfera*

gaseosa que vibra con unas frecuencias ... (a gaseous sphere that vibrates with frequencies ...) or a PP (*un ciudadano español con negocios en Florida (a Spanish citizen with business in Florida)*). Apart from adjectives, the only other resource used in Spanish with a classifying meaning is the *de*-phrase, followed by a descriptive relative clause (*una historia de amor que no me interesa (a love story that does not interest me)*). To some extent, this type of *de*-phrase shows an analogy with the premodifying noun in English, since both are the main alternative option for classifying meanings apart from adjectives, although premodifying nouns are much more consistently related to that particular semantic function in English than *de*-phrases in Spanish. The most common combination in English of a classifying noun with a descriptive unit is with a relative clause, a pattern similar to *de*-phrase plus relative clause in Spanish.

6.3. Descriptive modifier and complement in English and Spanish

The high frequency of occurrence of *of/de*-phrases and PPs as noun complements in both languages leads to numerous combinations of these complements with other descriptive modifiers. Table 7 shows the combinations found for these two types of meaning when they modify the same head noun, with their corresponding frequency of occurrence. There were 32 concordances with this meaning pattern in the English corpus and 22 in the Spanish corpus.

Table 7: Descriptive modifiers and complements combined in English and Spanish.

ENGLISH	SPANISH
Adj. + N + <i>of</i> -phrase (78.12%)	Adj. + N + <i>de</i> -phrase (68.18%)
Adj. + N + PP (21.87%)	Adj. + N + PP (13.63%)
	N + Adj. + PP (9.09%)
	N + Adj. + <i>de</i> -phrase (4.54%)
	N + PP + <i>de</i> -phrase (4.54%)
TOTAL 100%	TOTAL 100%

We can see that in both cases there is one combination that stands out as the central one, while the remaining options are less frequent. The meaning pattern and the structural patterns run parallel in English and Spanish in this particular case, although there is a wider range of options in Spanish due to the double possibility of pre and postmodification by descriptive adjectives. The combination of a premodifying adjective followed by an *of/de*-phrase shows the highest degree of typicality in both languages: *a precise description of the effect*; *una vieja exigencia de la dirección* (*an old demand of the governing body*), and the premodifying adjective followed by a PP is the next most common option (*a steady demand for farm buildings*; *una furibunda crítica al sistema imperante* (*a devastating criticism of the existing system*)). In both cases the Spanish adjective is in the marked position, which is due to the end-weight of *de*-phrases and PPs, that prefer a position as close as possible after the head noun. It is also possible in Spanish to locate an adjective between the head noun and the complement, but this occurs less frequently: *una llamada apremiante a la conversión* (*a pressing call for conversion*); *una muestra evidente de una prolongada exposición al sol* (*a clear sign of long exposure to the sun*).

6.4. Classifying modifiers and complements in English and Spanish

The combination of a classifying modifier followed by a complement occurs in 8.33% of double modification instances in English and in 7.91% in Spanish. Table 8 shows the combinations found for these meanings, with their corresponding frequency of occurrence.

Table 8: Classifying modifiers and complements combined in English and Spanish.

ENGLISH	SPANISH
Adj. + N + <i>of</i> -phrase (41.66%)	N + Adj. + <i>de</i> -phrase (81.81%)
Adj. + N + PP (33.33%)	Adj. + N + PP (9.09%)
N + N + <i>of</i> -phrase (16.66%)	N + <i>de</i> -phrase + PP (9.09%)
N + N + PP (8.33%)	
TOTAL 100%	TOTAL 100%

The figures show clearly that this meaning pattern has a prototypical structure in Spanish, whereas it has a more varied distribution across a number of different combinations in English. The most central sequence in English is the formal equivalent of the Spanish one, thus constituting another case of structural and functional equivalence. The combination of an adjective in its unmarked position followed by an *of/de*-phrase is the most typical resource for this meaning pattern in both languages: *an international association of copyright collection agencies*; *una situación social de carencia (a social situation of scarcity)*. The second most common combination is also formally equivalent in both languages, although the frequency in Spanish is much lower. All classifying elements are either adjectives or nouns in English, but one interesting fact is that in Spanish we find the possibility of combining a classifying *de*-phrase with a complement PP: *una nota de prensa sobre un dictamen que no existe (a press release on a report that does not exist)* This means that a classifying *de*-phrase in Spanish may carry out the semantic function of a classifying adjective or premodifying noun in English.

6.5. Descriptive and classifying modifiers in English and Spanish

The combination of meanings including a descriptive modifier followed by a classifying one occurs in a very limited number of instances, due to the fact that

classifying modifiers must be located immediately before the head noun in English and immediately after it in Spanish. This leaves very little space for an additional descriptive element before the classifier in English, or before the head noun in Spanish.

There were only eight instances of this combination in English (5.55%) and six in Spanish (4.31%) in our sample corpora. In English seven concordances contained a premodifying descriptive adjective followed by a premodifying noun (*a wealthy hunt master*) and the only other example corresponded to two premodifying adjectives (*an essential minor predator*). In Spanish four concordances included a premodifying adjective and a postmodifying adjective (*un gran colapso circulatorio (a great traffic jam)*). A premodifying adjective followed by a *de*-phrase was also found to communicate the same meaning (*un importante foco de atracción (an important source of attraction)*), and the remaining combination used was a premodifying adjective followed by a postmodifying noun (*una formidable cura anti-edad (an extraordinary anti-aging cure)*). Nouns rarely modify other nouns in Spanish, but there are a number of cases where the influence of the English language, where nouns are commonly used to modify other nouns, has contributed to spread the use of this option, though always in postmodifying position.

In both languages there seems to be one clearly central structure for expressing this type of meaning, which may lead us to consider these two combinations as functional-semantic equivalents that have to be taken into account by translators.

6.6. Complements and descriptive modifiers in English and Spanish

In all cases of complements plus descriptive modifiers the complement was an *of/de*-phrase. This type of sequence shows a very low frequency in both languages, with

only three cases in English (2.08%) and seven in Spanish (5.03%). In all instances the descriptive modifier is located after the *of/de*-phrase. In English, two cases correspond to an *of*-phrase followed by an -ing clause (*a highlight of the London season, attracting some 80 ...*) and the other case corresponds to an *of*-phrase followed by an adjective phrase (*a source of inspiration available to all*). In all cases the descriptive modifier affects the lexical unit formed by the head noun and the complement *of*-phrase. In Spanish the central combination (four concordances out of seven) includes an -ed clause (*un ejemplo de la economía del esfuerzo llevado a sus máximas consecuencias (an example of the economy of effort taken to the extremes)*). The other two options include relative clauses: *una visión del descubrimiento de América desde la que ... (a vision of the discovery of America from which ...)*. It can be observed that the descriptive options in both languages vary a lot when there is a complement *of/de*-phrase next to the head noun. The basis of the study is semantic, so the structural patterns found for the Spanish language are the ones that can be considered by translators as the functional-semantic equivalents of the English resources with the same meaning. However, in this case the number of examples is very low and may not be sufficiently significant.

6.7. Two classifying modifiers in English and Spanish

A classifying modifier does not add a quality to the head noun, but places it in a particular category. In consequence, it is not common to find two classifying elements modifying the same head noun. These combinations are very rare. There was only one case in English (0.69%), a combination of two premodifying nouns modifying a third noun, the head: *an England Under-21 international*. Descriptive grammars state that two classifying adjectives may appear together in English if one of them means

provenance (*the English social system*). The Spanish sample corpus included five examples of this type of combination (3.59%). Four instances correspond to two postmodifying adjectives (*una operación política y no comercial (a political but not commercial operation)*) and one to a combination of a postmodifying adjective followed by a *de*-phrase: *una gramática descriptiva de referencia (a descriptive reference grammar)*. This combination is very infrequent and the number of examples is too small to extract any significant results.

One noteworthy point is that there were no combinations of complements and classifying modifiers in the corpus. This type of sequence is impossible in both English and Spanish, since complement structures with PPs and *of/de*-phrases cannot be premodifiers, and classifying meanings must be located immediately next to the head noun. Another six concordances in the English corpus and seven in the Spanish corpus presented combinations of descriptive or classifying modifiers with less common meanings of the adverbial type, especially place and time: *an annual holiday in the sun; es un mercado muy natural donde nuestra tecnología es ... (it is a very natural market where our technology is ...)*. The number of occurrences is not sufficient to carry out a contrastive analysis of these cases.

7. CONTRAST AND CROSS-LINGUISTIC CORRESPONDENCES

After the description and juxtaposition of the data in English and Spanish, this final section of the contrastive analysis consists in focusing on the differences spotted beforehand to determine cross-linguistic correspondences that can be considered potential translation equivalents. I will limit this contrast to the three most common types of meaning combinations found (Table 4). They include the catenation of two

descriptive modifiers, the catenation of a classifying plus a descriptive modifier, and the chain formed by a descriptive modifier followed by a complement.

7.1. Contrasting combinations of two descriptive modifiers

Figures imitating inverted pyramids are used to present the results in this section. Figure 1 represents the functional-semantic correspondences in English and Spanish when two descriptive modifiers co-occur in one NP. The inverted pyramid has been constructed with the frequency percentages obtained (see Table 5 for the exact figures) and the bars correspond to the grammatical structures that are listed on the left-hand side for English and on the right-hand side for Spanish. The use of this type of figure provides not only a list of translational options, but also information about the degree of typicality of these options in the two languages based on authentic language in use.

As in the previous juxtaposition, only the constructions that occurred at least twice in our sample corpora are represented here.

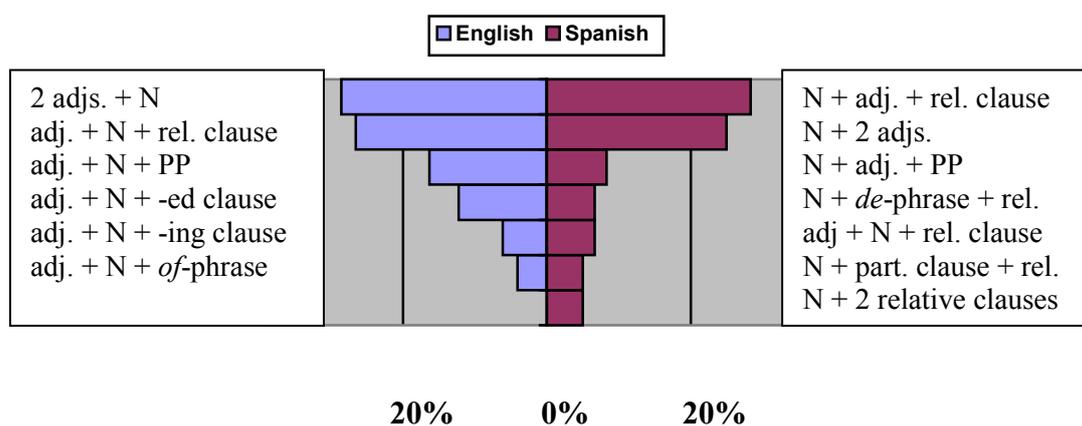


Figure 1: Two descriptive modifiers in an English-Spanish contrast.

The inverted pyramid in Figure 1 has an irregular shape. The English half is relatively even, which means that there is a gradual decrease in frequency between the

different grammatical combinations that can carry two descriptive modifiers. In contrast, in Spanish there is a wide gap between the two most widely used combinations and the remaining ones. This shows a clear preference on the part of native speakers of Spanish for one of the first two combinations. This means that several structures in English will correspond to one of two structures in Spanish, thus limiting to a certain extent the translational options available.

The prototypical combinations for conveying two descriptive meanings are formal equivalents in the two languages and have a similar frequency. This means that combinations of two adjectives or of an adjective and a relative clause in English with these particular meanings will commonly yield the same type of structures in Spanish translations of English texts. On the other hand, when a translator is confronted with the combination of an adjective and a PP in English, he may employ either the same construction in Spanish with the adjective in its unmarked position, or one of the two more central combinations, which show a higher frequency.

Similar patterns can be observed for the remaining combinations in English. No exact formal equivalents are among the options available in Spanish, but one of the two central combinations will carry out a similar function. All the peripheral constructions in English include premodifying adjectives, which seem to be key elements for descriptive meanings in this language. The translator may use a number of constructions not necessarily including adjectives at all, but relative clauses, which seem to be crucial elements in Spanish.

7.2. Contrasting combinations of classifying and descriptive modifiers

Figure 2 illustrates the functional-semantic correspondences in English and Spanish when a classifying modifier is combined with a subsequent descriptive modifier in a particular NP. Taking into account that the data were collected from original texts in both languages (see Table 6 for the exact percentages), the results represented in this figure can be considered functional-semantic equivalents, and therefore also translation equivalents, to the degree of typicality shown by their percentage of occurrence.

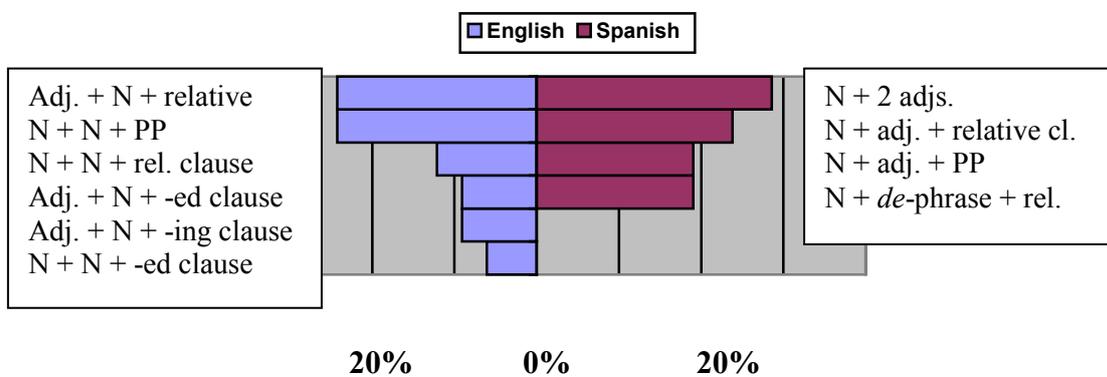


Figure 2: Classifying and descriptive modifiers in an English-Spanish contrast.

The inverted pyramid in Figure 2 has an irregular shape, with a greater variety of resources available in English and a limited number of options in Spanish. Since there are fewer options in Spanish, these have high frequencies and form a short and stout half, compared to the longer and more even shape of the English half. As in Figure 1, this will result in a limited range of translational options in Spanish for a larger variety of potential source text constructions.

The two central combinations for this meaning in English are a premodifying adjective and a postmodifying relative clause, and a premodifying noun and a PP. Their translation equivalents in Spanish will often be the two central constructions with this meaning, namely the combination of two adjectives and the combination of a

classifying adjective followed by a descriptive relative clause, a formal equivalent of the most typical construction in English. However, the two more peripheral options in Spanish are very common too (nearly 20% of cases), and may also be considered potential equivalents.

Either premodifying nouns or adjectives carry classifying meanings in English, whereas mostly adjectives and, less commonly, *de*-phrases may convey that meaning in Spanish. The range of descriptive modifiers in English – particularly –ed and –ing clauses - will have to be restricted to either adjectives, relative clauses, or PPs in Spanish translations.

7.3. Contrasting combinations of descriptive modifiers and complements

This is the last of the three most common meaning combinations in English and Spanish, amounting to about 22% of all double modification constructions in English and about 15% of all examples in Spanish. Figure 3 exemplifies the potential translation correspondences in the case of two modifiers, the first being descriptive and the second having a complement function (see Table 7 for the exact percentages). When a translator encounters one of the English structures listed on the left-hand side with this specific meaning combination, the correspondences available in Spanish will be the ones listed on the right-hand side, according to the data extracted from our two sample corpora. As in the previous cases, the percentages found illustrate graphically how this functional-semantic field is distributed in both languages.

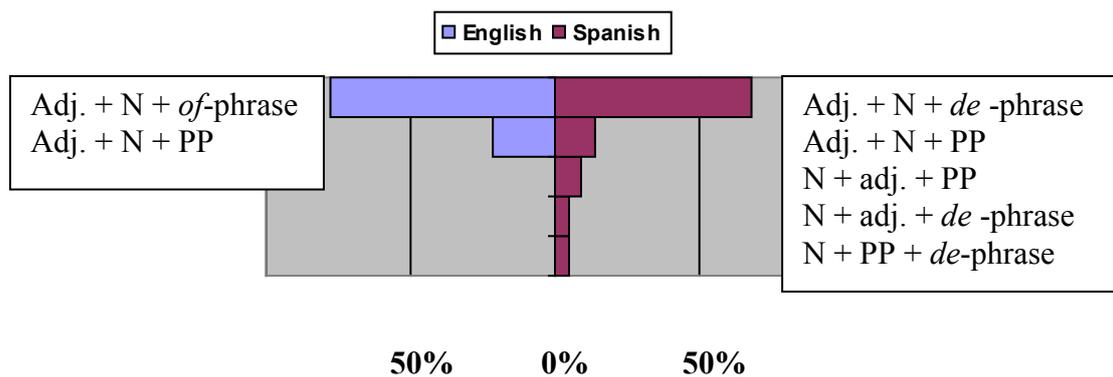


Figure 3: Descriptive modifiers and complements in an English-Spanish contrast.

The inverted pyramid in Figure 3 has a very peculiar shape, with a huge base formed by one distinctive grammatical resource in each case, and a thin top. All the remaining options are peripheral, although the Spanish half is longer, indicating a wider range of potential combinatory uses.

The central combination in both languages is the exact formal equivalent: a premodifying adjective followed by the head noun and an *of/de*-phrase. The only other construction found in English combines a premodifying adjective with a postmodifying PP, and the exact formal equivalent is also the second option in Spanish. It is rather striking that premodifying adjectives are used so commonly in Spanish, when they are normally restricted to particular stylistic variants. However, considering that the postmodifying elements are complements, this is understandable, since complements tend to follow their head nouns immediately.

The translator who encounters these combinations in English will commonly opt for exact Spanish equivalents, although he may also select the positional variant of descriptive adjectives located after the head noun and before the complement: *una llamada apremiante a la conversion* (a pressing call for conversion).

8. CONCLUSIONS

The contrastive study carried out in this paper proves that languages are not arbitrary in their distribution of meaning and form. Our cross-linguistic analysis of multiple nominal modification has shown that it is possible to reveal the subtle underlying relationships that exist between semantic functions and the grammatical structures that native speakers use to communicate those semantic functions. The contrast of such functional-semantic fields in two languages discloses actual meaning correspondences with one important advantage: semantics appears always associated to its actualisation by means of formal structures. The practical applications in the field of translation of such a type of contrast are self-evident. For the particular case of multiple nominal modification in English and Spanish I have unveiled in this paper the hidden interaction of syntactic and semantic parameters. In addition, information about the degree of typicality of the different structures is also provided, using frequency of occurrence as a reference point.

However, there are limitations that have to be recognised, and these refer mainly to what Halliday describes as “most delicate grammar” (Halliday 1961: 267), namely lexis. I agree with Partington, when he states that “every lexical item enters into particular collocational relations with the rest of the lexis of a language, a behaviour which can be studied and described in terms of frequencies and preferences.” (Partington 1998: 26-27). Consequently, every single head noun will tend to follow its own specific preferences when it comes to selecting multiple modifiers with specific meanings. In this study I have established the general list of options available in the two languages, but each noun will enter into its own combinatory patterns, thus illustrating

still more subtle and fine-grained relationships between meaning and syntax on the one hand, and lexis on the other.

The methodology employed confirms the need for meaning-based analyses in cross-linguistic studies, since meaning is the only safe common ground when two different languages are involved. The results are based on authentic language samples and this validates the distribution of grammatical resources across the different meanings. The actual contrast then reveals potential translation equivalents in Spanish of specific English constructions that convey one particular meaning. On top of that, the frequency rates observed provide information about the typicality of the various ways to actualise a particular meaning in each language. The translator is thus presented with a number of possible options arranged according to the frequency patterns of spontaneous language use on the part of native speakers of Spanish. This contrastive study has thus contributed to solving a major translation problem between the two working languages. Further studies in this semantic area should focus on specific nouns trying to go one step further and include lexis as part of the analysis.

NOTES

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