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# The Literal Translation Hypothesis in ESP Teaching/Learning Environments

## Abstract

Research on the characteristics of specialized vocabulary usually replicates studies that deal with general words, e.g. they typically describe frequent terms and focus on their linguistic characteristics to aid in the learning and acquisition of the terms. We dispute this practise, as we believe that the basic characteristic of terms is that they are coined to restrict meaning, i.e. to be as precise and as specific as possible in a particular context. For instance, around 70% of English and Spanish accounting terms are multi-word terms, most of which contain more than three orthographic words that syntactically behave in a way that is very different from the syntactic behaviour of the node on which they are formed (Fuertes-Olivera and Tarp, forthcoming). This has prompted us to propose a research framework that investigates whether or not the literal translation hypothesis, which has been addressed in several areas of translation studies, can also be applied in ESP teaching/learning environments. If plausible, the assumptions on which this hypothesis is based can shed light on how learners disambiguate terms they encounter. Within this framework, this paper presents evidence that the literal translation hypothesis is possible in ESP; it offers the results of a pilot study that sheds light on how this hypothesis may work, and also discusses its usability in the context of ESP learning. In particular, this paper presents strategies for teaching multi-word terms that are different from those currently based on corpus data. We believe that exercises such as “cloze”, “fill in” and similar “guessing” exercises must be abandoned in ESP teaching/learning environments. Instead, we propose exercises that reproduce L1 teaching and learning activities, i.e., exercises that are typically used

when acquiring specialised knowledge and skills in any domain, e.g. taking part in meetings and giving presentations in a business context.

**Keywords:** Literal translation hypothesis, specialized texts, cognitive linguistics, ESP teaching, ESP learning.

## 1. Introduction

Nation (2001, 2006) and Laufer and Nation (1995, 1999) have investigated how much vocabulary typically needs to be learned in a foreign language at each stage of proficiency. They have claimed that second language learners do not need to know a very large quantity of words during the first stages of the learning process (e.g. Laufer and Nation, 1995, 1999). This view may not apply in ESP teaching/learning environments, as ESP courses typically target experienced language students, i.e. students who have been learning English for several years before entering tertiary education, e.g. eight years in Slovenia (Jurković, 2007) and similar figures in other European countries. This means that ESP teaching/learning environments are usually environments for intermediate to advanced students, i.e. environments in which learners must use a larger stock of words or terms for both the reception and the production of English specialized texts (Sarani and Sahebi, 2012).

Nation and colleagues (as well as many researchers working in the field of ESP) seem to have taken for granted that the process of learning general words, i.e. words that usually crop up in texts dealing with general matters, is similar to the process of learning technical words or terms, i.e. words that have a specific meaning or use in a particular domain (Chung and Nation, 2003, 2004). Gajšt summarises this view in relation to the use of corpus data for teaching purposes:

A common feature of corpus-based research of technical terminology is that it has been performed for teaching purposes. That is, the research into technical terminology of a particular scientific discipline or profession is considered to be a helpful starting point for defining the contents of English for specific purposes (ESP) courses. For example, Curado-Fuentes (2001) shows how an analysis of lexical units (individual words and collocations) in academic and technical corpora (i.e., English for information science and technology) can facilitate ESP development. (Gajšt, 2013: 34)

This paper disputes the above claims, which are usually based on incidental evidence. For instance, Fuertes-Olivera and Tarp (forthcoming) have found that around 5,000 out of 6,500 accounting Spanish terms (around 76%) are multi-word terms that typically comprise more than four orthographic words. Similarly, around 5,200 of the more than 7,400 English lemmas in the *Diccionario Inglés-Español de*

*Contabilidad* (Fuertes-Olivera et al., 2012) are multi-word terms. Table 1 shows English terms that contain *method*, distributed by the number of orthographic words in the term:

Orthographic words	Number	%
one-word terms	0	0
two-word terms	33	28.7
three-word terms	51	44.3
four-word terms	26	22.6
five-word terms	1	0.8
six-word terms	2	1.6
seven-word terms	2	1.6
TOTAL	115	100

Table 1: Method terms in the English-Spanish accounting dictionary (Fuertes-Olivera et al., 2012)

Some examples:

two-word terms: *acquisition method*

three-word terms: *cost plus method*

four-word terms: *method of revenue recognition*

six-word terms: *method of recognising income as invoiced*

Table 1 shows that more than 70% of the English terms present in the specialised domain of accounting, are typically composed of three or more orthographic words. These are difficult, most of them impossible, to spot with existing technologies that extract corpus data, as these are only reliable when searching for terms composed of one or two orthographic words. This may be the reason that scholars usually only report the working of multi-word terms that are formed by two orthographic words, i.e. they report only about a quarter of the vocabulary stock that is present in specialised domains (e.g. Gavioli, 2005; Gajšt, 2013). Therefore, teachers of ESP must acknowledge that almost 70% of terms in many domains are never discovered with existing corpus technologies, and that this understanding has two implications.

The first implication is that extracting corpus data for use in ESP teaching and learning environments may not be highly recommended, as it will only address a small part of the vocabulary stock present in a specialized domain. The second implication is that we need more than corpus data for investigating how learners deal with terms. This approach must take into consideration that ESP learners are very different from other learners, e.g. high school students in a typical language learning environment.

Most ESP learners know, or should know, the factual characteristics of terms, as these are typically used in the subject field in which they are enrolled. For instance, Spanish students of Business English should know the encyclopaedic/semantic characteristics of most Business English terms before coming into contact with them. These should have been learnt in their specific subjects and therefore we can use this situation for upgrading the learning process, e.g. making use of the literal translation hypothesis described in this paper.

We believe that terms enter into a domain through different methods of term formation, the literal translation being the one we focus on in this paper. If we can demonstrate the plausibility of a literal translation hypothesis (section 2 below), then we can (and must) take into consideration the existence of a drive for verbatim translations that will be present in our students' minds. In other words, if students of a particular ESP program are inclined to form verbatim translations of English terms, then we will approach the teaching and learning of ESP terms in a way that is different from the approaches typically described in the literature on ESP learning, which are often based on corpus data, i.e. on the existence of frequent patterns.

The plausibility of a literal translation hypothesis is investigated (Section 2) and its implications examined in a pilot study (Section 3). The results obtained are discussed (Section 4), with a view to offering some recommendations for teaching English terms to foreign learners (Section 5). A final conclusion summarises the main ideas discussed.

## 2. The literal translation hypothesis

To understand the "nature of semantic differences between words and their apparent translation equivalents in different languages" Croft and Cruse (2004: 19) use the profile/frame domain distinction. According to them, a profile refers to the concept symbolized by the word in question, whereas a frame or domain is any system of concepts related in such a way that to understand any one of them one has to understand the whole structure in which the concept fits (Fillmore, 1982). This distinction may explain the existence of culture-dependent and culture-independent domains, the former being characterised by the existence of specific and idiosyncratic items that are specific to a culture. For instance, the difference between English *amortisation* and *depreciation* does not apply to Spanish, which uses *amortización* for both English terms.

Without taking into account the existence of cultural differences in specialized domains, recent research in the field of specialized lexicography has signalled the existence of several forces that contribute to diminishing such differences. For instance, Fuertes-Olivera and Nielsen (2011, 2012 and 2013) have indicated that both the role of English as lingua franca and the way professional translators translate some terms, for instance metaphorical terms, are diminishing differences between culture-bound and culture-independent domains. They illustrate their view with several examples taken from dictionaries such as the *Diccionario Inglés-Español de Contabilidad* (Fuertes-Olivera et al., 2012) in which they demonstrate the existence of a globalized trend towards cultural uniformity in the field of accounting.

The introduction of *acción fantasma* into Spanish is an example of a new term that enters the language as a verbatim translation of English *phantom share*. This novel metaphor was introduced into Spanish by the compilers of the above-mentioned

dictionary after analyzing several possibilities for its English equivalent term. Its introduction not only increases the number of Spanish accounting terms and diminishes the cultural difference between English and Spanish accounting texts, but it also maintains conceptual affinity with its English counterpart.

The maintenance of conceptual affinity, as well as the difficulty that professional translators and students of ESP have to understand some concepts when dealing with specialized texts, offers ground for hypothesizing that both translators of specialized texts and students of ESP are primed for accepting verbatim translations of terms, e.g. terms originally coined in English.

This priming for verbatim renderings has been explored by translation scholars (Baker, 2001), and by researchers concerned with analyzing the role of similarity and frequency in the bilingual mental lexicon. For example, Levelt (1989), Lowie, (1998), and Lowie & Verspoor (2004), among others, have investigated the so-called translation equivalence effect, i.e. the "relationship between receptor and message should be substantially the same as that which existed between the original receptors and the message" (Nida 1964: 159). We follow suit and re-elaborate on this translation hypothesis assuming three premises. Firstly, students of ESP are cognitively inclined to offer literal renderings that invariably lead to a proliferation of literal, semantic, and pragmatic cognates in specialized texts (as the examples already commented show). This means that students, particularly when working with texts referring to cutting-edge knowledge, intuitively notice cognates sooner when there are similarities among orthographic, phonetic, syntactic, and/or semantic properties.

Secondly, the priming for literal translation renderings has an effect on both the conceptual scenarios and the discourse of the target language. Identity of conceptual scenarios leads to eliminating cultural differences, as do borrowings and loans in specialized texts. This means that experts are so familiar with working with texts written in a lingua franca, e.g. English, that they copy this language without questioning this practice. For instance, on October 30, 2011, a well-known Spanish expert explained in *El País Negocios* (a weekly newspaper) the decisions taken in the European summit that took place on October 26, 2011. His 1,230-word article, which was directed at interested Spanish laypersons, contained a very large number of loan translations, borrowings and calques. Here is a list of terms, as they were used in the above-mentioned text. These terms are not included in the Spanish wordlist of two recent editions of well-known Business/Economics dictionaries<sup>1</sup>: *crisis soberana*, *contagio*, *credit event*, *CDS* (credit default swap), *facilidad de estabilidad financiera*, *EFSF* (European Financial Stability Facility), *hoja de ruta*, *gobernanza*, *CDS desnudos*, *cortafuegos*, *estados periféricos*, *vehículos SPV* (Special Purpose Vehicles), *obligaciones de deuda colateralizada* (CDO, collateralized debt obligation), *tramos senior y mezzanine*, *tramo equity*, *vehículos fuera de balance* (SIV, structured investment vehicles), *core tier one* (CT1), *capital buffer*, *riesgo sistémico*, and *European Banking Authority* (EBA). To the best of our knowledge, nobody reacted

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<sup>1</sup> The dictionaries are: *Diccionario de Términos Económicos, Financieros y Comerciales* (Alcaraz y Hughes, 2008); *Diccionario LID Empresa y Economía* (Elosúa, 2007).

negatively to the text, which is surprising as the above English loans, borrowings, and calques were repeated several times, thus making the reception of the text impossible for most potential readers.

The absence of reaction may be connected with a new trend (not-much-investigated so far) towards using calques, loans and borrowings in specialized texts. We postulate that this trend must be inclusive and must also affect the syntactic features of the target language. In other words, the third assumption widens the literal translation hypothesis by including syntactic calques in the working of the hypothesis. We investigate this trend by performing a pilot study with a translated semi-specialized text.

### 3. The pilot study

This section describes a pilot study carried out to shed light on some of the cognitive processes taking place during the act of working with foreign language texts and to offer arguments in support of the literal translation hypothesis.

The pilot study has the role of a “laboratory” for a follow-up investigation of what is going on inside the mind of an L2 student and which effects the literal translation hypothesis has on the target discourse. In this sense, we used the identified and reported instances of unnatural Spanish as clues of term formation process taking place inside the mind of L2 speakers who prefer to follow the linguistic pattern of the source language.

The pilot study consists of three steps. Firstly, we have chosen a translated specialized text from English into Spanish that was published in a daily newspaper. The text chosen was published on February 14 2010, and was included in the economy supplement of *El País*, a Spanish daily that is widely circulated in Spain, especially on Sundays. The selection of a text published in a well-respected daily assumes that the text can be received by any educated Spanish reader, especially as the text’s author is a Nobel Laureate, and that such a text is presented as a genuine text in the target culture.

The second step rests on the assumption that texts published in the economy supplement of a national daily are frequently read only by experts, semi-experts and interested laypeople, but not by the rest of the population who tend to skip over them. This assumption is an important aspect of this study, as it assumes that respondents unfamiliar with the texts published in the economy section will react differently than respondents who read them. In other words, we assume that different types of readers will react differently when questioned about language aspects of these texts, e.g. about what they considered examples of natural/unnatural Spanish.

The concept of natural language is used as a proxy for literalness. A natural language is the language that arises in an unconscious way and is typically produced and understood by native speakers in an unpremeditated fashion (Lyons, 1991). In this paper, this concept assumes that the respondents' subjective responses when asked to identify instances of disjoint syntax, loans, and lack of idiomaticity will be very much influenced by some combination of background knowledge, experience, and nativeness (Fuertes-Olivera and Gómez Martínez, 2004). This should lead to reactions such as these:

- Readers familiar with the topic (economic issues in this text) will only consider unnatural gross translation mistakes. The explanation for this is that Spanish experts are used to reading English economic texts and making automatic ad-hoc Spanish translations for their own understanding (Fuertes-Olivera, 2011). Respondents in this group, for example, will automatically and unconsciously interpret *dividendos automáticos* when they are reading *automatic dividends* in an English text. In other words, Spanish experts in business/economics will not identify instances of syntactic mistakes, although these might be self-evident.
- Readers unfamiliar with the topic but used to translating regularly will consider unnatural instances that contain translation mistakes and some translation solutions (Fuertes-Olivera, 1998). Respondents in this group will react to translations such as *no aguanten la respiración* instead of *no contengan la respiración* (Eng: Don't hold your breath). The explanation is that persons used to translating tend to focus on instances of difficult translations, or on examples of wrong translations, e.g., those that are usually described in the translation literature. They are not expected to spot many instances of wrong syntax, especially those mistakes discussed in Spanish prescriptive grammars with which they are not familiar.
- Readers unfamiliar with the topic and with English, but who teach Spanish and know rules and prescriptive norms will find unnatural instances of translation mistakes and many more instances of syntactic errors (Fuertes-Olivera, 2002). This is a typical example of unnatural Spanish for this group: "*Y con un Partido Republicano que ha renunciado a cualquier responsabilidad a la hora de hacer que las cosas funcionen es perfectamente normal que los senadores se sientan libres para tomar al país como rehén hasta que se financien sus proyectos*" (Eng: And with the national G.O.P. having abdicated any responsibility for making things work, it's only natural that individual senators should feel free to take the nation hostage until they get their pet projects funded). The explanation of the unnatural sentence rests on their knowing of Spanish rules and syntax. For example, in the above example, Spanish will begin with an expression of uncertainty, will not use "y" at the beginning of the sentence, and will use subjunctives to refer to hypothetical facts.

The third step consists of selecting informants according to their level of background knowledge and experience in business/economics, translation from English into Spanish, and Spanish grammar. We selected 15 respondents, distributed into groups of five, and asked them to read the text and underline instances of what they perceived as unnatural Spanish.

Group 1 (G.1) was formed of five Spanish professors of business/economics who are used to reading texts published in the economy supplement of national dailies, especially those written by Nobel Laureates as the one chosen in this pilot study. Five Spanish professors of English, who read English texts regularly, sometimes translate into Spanish, but tend to skip the supplement, formed the second group (G.2). Group 3 (G.3) was formed of five Spanish professors of the Spanish language who read English occasionally and with difficulty but have never translated English texts into Spanish or Spanish texts into English. All these 15 respondents were Spanish professors at the University of Valladolid, i.e. educated native speakers. They were briefed on the task to be carried out and instructed as follows:

1. You will receive an anonymous Spanish text.
2. Please read the text (it will take around 10 minutes).
3. Once you have read the full text, please underline words, phrases or sentences that sound like unnatural Spanish.

Once the participants completed the task, we selected the translations that occurred three or four times as we believe that they are representative of trends. These were presented alongside their English originals (Table 2) and identified by group (Table 3).

Spanish Translations	English Text
EE UU no se ha perdido	America is Not Yet Lost
el reinado de EE UU	America's reign
Pero la mayoría de nosotros imaginábamos que la caída, cuando llegase, sería algo grandioso y trágico	But most of us imagined that our downfall, when it came, would be something grand and tragic.
Hoy, el Senado de EE UU por lo visto está decidido a conseguir que el Sejm parezca bueno comparado con él.	Today, the US Senate seems determined to make the Sejm look good by comparison.
Pero el senador Christopher Bond, representante por Misuri, había solicitado el aplazamiento de su nombramiento para presionar al Gobierno a fin de que éste aprobase un proyecto en Kansas City.	But Senator Christopher Bond, Republican of Missouri, had put a "hold" on her appointment to pressure the government into approving a building project in Kansas City.
Este dudoso logro puede que haya inspirado al senador republicano por Alabama Richard Shelby.	This dubious achievement may have inspired Senator Richard Shelby, Republican of Alabama
¿Qué confiere a los senadores individuales esta clase de poder? Gran parte del funcionamiento del Senado depende de la aprobación unánime: es difícil conseguir que algo se haga a menos que todo el mundo esté de acuerdo con el procedimiento.	What gives individual senators this kind of power? Much of the Senate's business relies on unanimous consent: it's difficult to get anything done unless everyone agrees on procedure.
Pero eso era entonces.	But that was then.
¿Hasta qué punto es grave? Es tan grave que echo de menos a Newt Gingrich	How bad is it? It's so bad that I miss Newt Gingrich.
Fue una acción fea y radical, pero al menos Gingrich tenía unas demandas específicas.	It was ugly and extreme, but at least Mr. Gingrich had specific demands
Lanzan vituperios contra el déficit	They inveigh against the deficit
Y con un Partido Republicano que ha renunciado a cualquier responsabilidad a la hora de hacer que las cosas funcionen es perfectamente normal que los senadores se sientan libres para tomar al país como rehén hasta que se financien sus proyectos	And with the national G.O.P. having abdicated any responsibility for making things work, it's only natural that individual senators should feel free to take the nation hostage until they get their pet project funded.
No aguanten la respiración	Don't hold your breath.

Va directa a los capilares	it goes straight for the capillaries
Claro, eso seguro que tiene eco entre los votantes.	Yep, that will really resonate with voters.

Table 2. Instances of Unnatural Spanish and their English Original Counterparts.

Unnatural word and/or expression	G.1	G.2	G.3
EE UU no se ha perdido		N = 3	
el reinado de EE UU	N = 4	N = 4	N = 4
Pero la mayoría de nosotros imaginábamos que la caída, cuando llegase, sería algo grandioso y trágico			N = 3
Hoy, el Senado de EE UU por lo visto está decidido a conseguir que el Sejm parezca bueno comparado con él.			N = 4
Pero el senador Christopher Bond, representante por Misuri, había solicitado el aplazamiento de su nombramiento para presionar al Gobierno a fin de que éste aprobase un proyecto en Kansas City.			
Este dudoso logro puede que haya inspirado al senador republicano			N = 3
¿Qué confiere a los senadores individuales esta clase de poder? Gran parte del funcionamiento del Senado depende de la aprobación unánime: es difícil conseguir que algo se haga a menos que todo el mundo esté de acuerdo con el procedimiento.			N = 4
Pero eso era entonces			N = 3
¿Hasta qué punto es grave? Es tan grave que echo de menos a Newt Gingrich			N = 4
Fue una acción fea y radical, pero al menos ....		N = 3	
Lanzan vituperios contra el déficit		N = 3	N = 4
Y con un Partido Republicano que ha renunciado a cualquier responsabilidad a la hora de hacer que las cosas funcionen es perfectamente normal que los senadores se sientan libres para tomar al país como rehén hasta que se financien sus proyectos			N = 4
No aguanten la respiración		N = 4	N = 4
Va directa a los capilares	N = 4	N = 4	N = 4
Claro, eso seguro que tiene eco entre los votantes.		N = 3	N = 4

Table 3: Instances of unnatural Spanish identified by the three groups of informants

## 4. Discussion

The following discussion offers our explanation for the data reported in Table 1. As expected, respondents in G.1 only found two instances of unnatural Spanish: "el reinado de EE UU" and "va directa a los capilares". Both are inappropriate translations and easily detectable (respondents in G.2 and G.3 also report them as 'unnatural': It is common knowledge in Spain that the United States is not a kingdom (reinado) and that the idiomatic expression is "va directa a la yugular", not to the "capilares" ("capilar" in Spanish refers to 'hair').

As expected, respondents in G.3 found many examples of unnatural Spanish, which we explain as instances of syntactic calquing, i.e., sentences that are formed according to the syntactic rules of English, and which are presented as examples of Anglicism in Spanish prescriptive grammars:

- “Pero la mayoría de nosotros imaginábamos que la caída, cuando llegase, sería algo grandioso y trágico”: The translation of *when it came* and its place in the middle of the sentence is unnatural Spanish according to Spanish rhetorical tradition. In addition, “grandioso” and “trágico” are wrongly inflected. They should be feminine (“grandiosa” and “trágica”) as they go with the feminine noun “caída”. And *when it came* refers to a hypothetical fact and therefore should have been translated as conditional and placed before or after the main clause.
- “Hoy, el Senado de EE UU por lo visto está decidido a conseguir que el Sejm parezca bueno comparado con él”: in this case the ordering, wording and syntactic arrangement are ‘unnatural’. Instead of “hoy” Spanish-speakers would have used “Hoy en día”, an expression of uncertainty, and would have re-organized the sentence eliminating “por lo visto” and use different comparatives.
- “Este dudoso logro puede que haya inspirado al senador republicano por Alabama Richard Shelby”: the presence of the “that clause”, and the lack of a relative clause referring to Richard Shelby are ‘unnatural’ in Spanish.
- “¿Qué confiere a los senadores individuales esta clase de poder? Gran parte del funcionamiento del Senado depende de la aprobación unánime: es difícil conseguir que algo se haga a menos que todo el mundo esté de acuerdo con el procedimiento”: The use of a rhetorical question followed by its answer is unnatural Spanish, as is the word order and syntactic arrangement.
- “Pero eso era entonces.” This case is unnatural for rhetorical reasons. In natural written Spanish such sentences are considered colloquial and instances of disjointed syntax. They are somehow connected with previous or following sentences.
- “¿Hasta qué punto es grave? Es tan grave que echo de menos a Newt Gingrich”. The initial rhetorical question is not used in natural Spanish. As this is used for emphasis, natural Spanish would have included a lexical booster, e.g. *incluso*.
- “Y con un Partido Republicano que ha renunciado a cualquier responsabilidad a la hora de hacer que las cosas funcionen es perfectamente normal que los senadores se sientan libres para tomar al país como rehén hasta que se financien sus proyectos”: In this case the theme/rheme structure, especially the initial “Y” and the presence of the prepositional phrase and a relative in initial position are all unnatural.

Respondents in G.2 consider the translation of “fea” and “radical” for “ugly and “extreme” as ‘unnatural’. Both respondents in G.2 and G.3 identify three more instances of unnatural Spanish: these three are incorrect translations of idiomatic English expressions. The problems related with the translation of idiomaticity are well-discussed in the translation literature and do not merit more attention in this article: “lanzan vituperios contra el déficit” is not idiomatic Spanish. It should have been “critican el déficit con saña”. “No aguanten la respiración” should have been “No

contengan la respiración”, and “Claro, eso seguro que tiene eco entre los votantes” has two instances of unnatural Spanish: “Claro” at the start (this is colloquial and informal Spanish), and the ordering of “eso seguro que” is also colloquial. Similarly, “tiene eco” is not often used in Spanish as the preferred term/word/?? would be “resuena”. The sentence should have been translated as “Seguro que todo eso resuena entre los votantes”.

In sum, the pilot study here lends support to the premises upon which the working of the literal translation hypothesis works in a semi-specialized text. The number of unnatural issues found is larger than expected considering that the text was published in a daily newspaper and aims at informing educated Spanish readers on different socio-political issues. This may be explained by accepting that the translators of the English texts followed the language patterns of English (i.e., translators translated the commented text literally).

As previously indicated, informants’ responses agree with the abovementioned assumptions made. Firstly, the informants in G.1 did not identify unnatural instances as they are familiar with making their own ad-hoc verbatim translations for understanding the text. Secondly, the informants in G.3 found examples of syntactic calques and similar instances of verbatim renderings in translated specialized texts as hypothesized. And finally, the respondents in G.2 focused on translation problems, e.g., the translation of idiomatic expressions, which are usually reported in the translation literature which further supports the hypothesis. The responses of G.1 indicate that experts or would-be experts are particularly primed for verbatim translation and this leads us to propose two specific tasks to be used in an ESP teaching/learning environment, as shown below.

## 5. The implications of the hypothesis for learning English terms

Corpus-based studies in ESP teaching/learning have usually ignored most of the objections raised against the corpus revolution. Gavioli (2005) enumerates some of these objections. First, a corpus, however large, is still a sample of language production, and in most cases the spoken mode is underrepresented or not represented at all. Second, exposing students to actual instances of language does not mean that they learn ‘real language’, nor does it mean that they grasp its features better. Third, “language reality” is a complex phenomenon and as Widdowson (1978: 79-80) acknowledges, there is a distinction between genuine language and authentic language. By the former “he means instances of actually produced language (e.g. extracts from newspapers/books, recorded conversations, etc.); by the latter he means language produced in a communicative context” (Gavioli, 2005: 19). Widdowson (1978) claims that it is the local, contextual value of language that makes it ‘real’ for its users. Thus, he remembers that students are exposed to authentic examples, to uses rather than ‘usages’ and therefore Widdowson (1998) notes that exposing “students to corpus-based descriptions, or

indeed to “genuine” materials from corpora, does not imply anything about the learners’ possibility of “authenticating” the language they are exposed to”(Gavioli, 2005: 19).

The above objections cannot ignore that the corpus revolution has demonstrated the validity of Sinclair's (1991) idiom principle, i.e., language users have access to a number of semi-preconstructed chunks which constitute single choices and are generally used as such. This implies that words tend to combine, especially in specialised domains where they form multi-word terms. This paper has shown the plausibility of the literal translation hypothesis that agrees with the tenets of the idiom principle. This might help teachers to develop methodologies that are based on two basic principles:

1. Students, e.g. Spanish students enrolled in an ESP program, are primed for verbatim translations of unknown terms. This means that the transferring of meaning that any L2 teaching/learning process demands is not hampered if instructors offer L1 translations of L2 terms.
2. There are many instances of verbatim translations, perhaps because terms are always restricted, i.e., they refer to particular places, methods, procedures, systems, approaches, etc. This explains that most terms are never frequent and are therefore undetected with corpus methodologies. In other words, contrary to Nation and colleagues' conclusions (e.g. Chung and Nation, 2003, 2004), terms that are difficult to process and disambiguate, i.e., the terms that are usually problematic for students, cannot be identified through frequency counts; instead they must be enumerated individually and worked with individually. This means that corpus work does not offer a linguistic means to explore technical concepts and therefore a way to bridge the gap between language knowledge and concept knowledge; instead, this gap can and must be bridged through a combination of explaining facts, i.e., the concepts, and teaching language features. We have followed this idea and have constructed dictionaries, e.g., the *Diccionario Inglés-Español de Contabilidad*, that include many dictionary data for making the meaning of the term and the facts it refers to precise. For example, cost plus method is disambiguated with two definitions (one in English and one in Spanish), a Spanish equivalent, inflections for the English term and Spanish equivalent, contextual data in English and Spanish, and several Spanish synonyms (Figure 1). In other words, the plausibility of the literal translation hypothesis has forced us to work individually with all difficult terms with the intention of offering users, typically students and translators, the best way possible for disambiguating meaning in a precise and easy-to-understand way. Therefore we recommend a teaching/learning environment that, firstly, offers students all the necessary data for making the meaning of the term precise and clear, and secondly, present its language characteristics. In other words, we believe that ESP students need to understand the meaning of the term before working on its syntactic or discursive characteristics. This means that "cloze" and "guess" and "clues" exercises are not much recommended in ESP environments, for two reasons:
  - a. Around 50% of terms contain three or more orthographic-words. To identify them out of real context, e.g. to identify them in a cloze exercise,

is very difficult. Hence, this may hamper motivation and slow the teaching/learning process.

- b. Multi-word terms are very precise, and hence it is very difficult to guess their meaning.

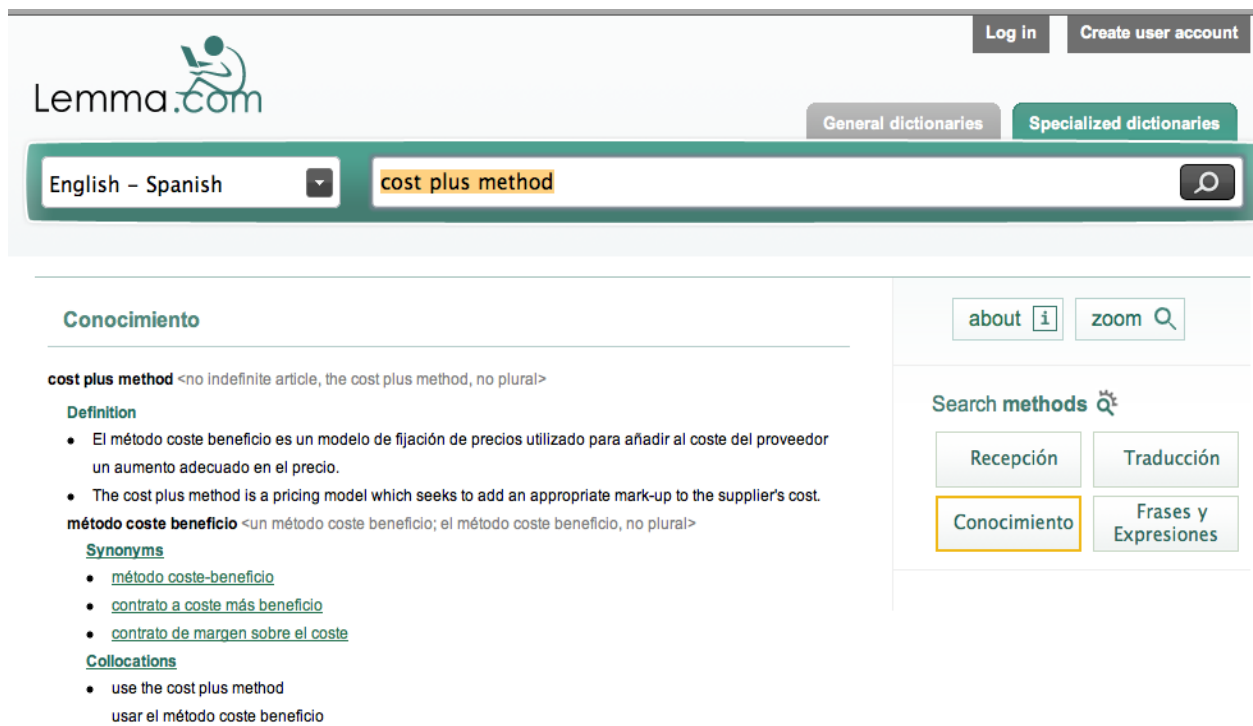


Figure 1. Screenshot from the *Diccionario Inglés-Español de Contabilidad* (Fuertes-Olivera et al., 2012)

Instead, we propose exercises in which students have to use real language, especially multi-word terms as these make most of the vocabulary stock in ESP contexts. For instance, in a Business English program, students should spend most of their teaching/learning time making presentations, participating in meetings, making appointments by phone, presenting information, e.g. describing graphs, negotiating, clarifying information, etc. These exercises will force them to use multi-word terms, which comprise most language stock, e.g. 70% in accounting.

To sum up, the existence of a literal translation hypothesis reinforces our view that ESP teaching/learning environments must reproduce what students practice when they are in their L1 teaching/learning environments. Or to put it in another way, assuming that ESP students are primed for literal translations, ESP instructors can upgrade their activities with tasks that are similar to the activities students have already performed in their L1. A Spanish student of Business is never asked to "make guesses", but to understand the real meaning of a text. This is what we wish to achieve in an ESP teaching/learning environment.

## 6. Conclusion

This paper has presented the plausibility of the literal translation hypothesis that assumes that other factors being equal, students are primed for verbatim renderings of L2 terms, especially multi-word terms that form around 70% of the vocabulary stock of specialised domains, at least domains such as accounting and similar culture-bound subject fields (Fuertes-Olivera and Tarp, forthcoming).

If proved correct, the tenets of the above hypothesis will demand more than corpus data for teaching and learning ESP. For instance, recently conceived dictionaries such as the *Diccionario Inglés-Español de Contabilidad* include a large number of dictionary data with the basic aim of disambiguating terms in a precise way, which is an appropriate way for students to learn terms and know how they must be used. In other words, ESP students will benefit from teaching and learning methodologies that offer precise ways of disambiguating the meaning of the term before working on its linguistic characteristics. We propose to use these methodologies instead of “cloze” and “guess” exercises that are limited to one or two-word terms, i.e., to a very limited stock of the real vocabulary of a specialized domain. To sum up, we propose working with teaching/learning exercises that reproduce real skills, and always demand the use of real language that typically include multi-word terms.

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