

Anglicisms in Higher Education and their impact on Spanish Terms¹

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Abstract

The use of written texts in English for oral and written communication in Spanish in higher education settings is not uncommon today. The impact that this has on the lexical level has not yet been evaluated in the specialized communicative context of Colombian university higher education. As we will see, in this context the use of terminological Anglicisms is surpassing the Spanish terms that already exist to refer to the same concepts.

KEYWORDS: terminological Anglicism; English as lingua franca; internationalization; medical terminology; specialized communication

Resum

Els anglicismes a l'educació superior i el seu impacte en la terminologia en castellà

L'ús de textos escrits en anglès per a la comunicació oral i escrita en castellà a les universitats no és estrany actualment. L'impacte que això té a nivell del lèxic encara no ha estat avaluat en el context comunicatiu especialitzat de l'educació superior universitària colombiana. Com veurem en aquest article, els anglicismes terminològics estan desplaçant en l'ús els termes en castellà que ja existeixen per referir-se al mateix concepte.

PARAULES CLAU: anglicisme terminològic; anglès com a lingua franca; internacionalització; terminologia mèdica; comunicació especialitzada

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1 Introduction

Currently —and for some time now— international economic and political dynamics and the phenomenon of English as *lingua franca* have been responsible for the “exporting” of linguistic borrowings from English into most languages in the world, even into widely spoken languages such as Spanish. We can say that this great number of borrowings (Anglicisms), most of which are lexical in nature, are used in other languages because of the international contact between cultures, the increase of bilingual communication in specialized fields and, also due to the scientific and technical development occurring in a few first-world countries. It is precisely this last reason why many concepts with their denominations appear in the English-speaking world —mostly in the United States— or in English-speaking contexts—for example, public and private research centers.

The flow of specialized vocabulary derived from this reality has various linguistic consequences for the recipient language: for example, superfluous neology, semantic proliferation, misalignment of semantic relations, lack of use of native terms («linguistic parasitism» [Navarro and Hernández, 1993, p. 142]), speaker disengagement, and disturbances in scientific and technical terminology (Muñoz Martín and Valdivieso Blanco, 2006, p. 294). These linguistic consequences are evidently disadvantageous for the recipient language, and as such could potentially have an impact on its communicative functionality, primarily in specialized scenarios. The importance of these contexts lies in the fact that here is where specialized knowledge is being communicated, that is, where terminology is produced, transmitted and taught naturally. So, the spontaneous creation of terminology in Spanish—the language of this study—is irregular and tends to decrease, since English has been entering with greater or lesser impetus in the different scientific and technical communication settings.

Spanish in the short term is not at risk of being replaced in its general use by English, but it may be the case of its specialized communicative situations—such as those of higher education institutions—, in which it is essential to control or, at least, be aware of the adoption or “importation” of English terms, in order to reduce the risk for these scenarios to be undermined by English as the *lingua franca* of the moment. This potential risk is increased when the language policies of a higher education institution establish English as the official second language, generally as a response to the extensively accepted idea of the Internationalization of Higher Education (IHE). A socio-communicative situation of this magnitude means that in the context of higher education and scientific publication—which generally go together—English is gradually replacing the native language, sidelining it, or causing it to become unnecessary (Haberland and Mortensen, 2012, p. 5).

As a result, in higher education institutions experts (professors, researchers, etc.) communicate essentially in their own language —Spanish in our case— and adopt English for: a) their academic and scientific activities (congresses, workshops, conferences, etc.); b) communication with their peers, both national and international, in different specialized settings (laboratories, meetings, etc.); c) teaching, to a greater or lesser extent; and for publishing papers, books, and scientific literature in general. In most cases, this responds to a strategy designed to favor the internationalization proposed by their governments and their institutions and, at the same time, to meet specific criteria that will allow them to advance in their academic and professional careers as they are being constantly assessed. Furthermore, most of the current reference literature in many specialties is published mainly in English. And all this literature will in turn be used by the scientific and academic community in each field to document research, prepare classes and make recommendations to students, many of whom will continue this cycle of publishing in English for internationalization in a Spanish-speaking context, in which they communicate in their mother tongue with their colleagues in the professional career or as part of a higher education institution.

In accordance with this reality, we believed that it was necessary to study the terminological Anglicisms used for the transmission of knowledge in both written and oral Spanish in higher education, so that we could advance in establishing the current synchronic impact of this language on Spanish terms. To be able to make this diagnosis, we conducted an empirical lexical study in which we contrasted a corpus in English and one in Spanish. Both corpora consisted of texts used by professors of medicine in their classes in the context of a Colombian public university.

Even a cursory glance at the results of an empirical study such as ours is evidence of the need to propose and implement strategies, such as the ones proposed for languages in potentially threatening socio-communicative situations, to favor comprehensive language policies and internationalization strategies in higher education institutions or governments that go beyond carelessly adopting English as a foreign language and forgetting to intervene in the local language.

2 English and specialized communication

It is necessary to briefly discuss our object of study and the sociocommunicative context in which we have analyzed it. In this section we will discuss what we consider to be a terminological Anglicism from a theoretical perspective, and we will describe the context of internationalization in higher education from which we decided to carry out the analysis presented in this paper.

2.1 The terminological Anglicism

It is not surprising that when we speak of lexical borrowings or loanwords in any of the contemporary languages, we refer directly to Anglicisms, since, undoubtedly, the main language that “loans” or “exports” lexical units at the present time is English. This is evident, for example, in the fact that the different definitions of the notion of lexical borrowing in linguistics and even the main classifications of the type of borrowings proposed by different authors (Haugen, 1950; Weinreich, 1953; Pratt, 1980; Gómez Capuz, 1998; Pulcini, Furiassi, and Rodríguez González, 2012) are the result of studies carried out on different languages with regard to the impact that English has on them.

What different authors consider as an Anglicism is determined, to a greater or lesser extent, by the objective of the research they are carrying out or the data they are observing. Pratt in his synchronic study (1980, 115), for example, considers that Anglicisms are the linguistic elements —lexical or syntactic— that are used in peninsular Spanish, and whose “immediate etymon” is a model of English. In other words, they are those units in which the “import” model comes directly from English, regardless of its historical path, which can be traced back to the first or most remote documented language —ultimate etymon—, usually Latin or Greek.

Thus, in our research, which, like that of Pratt, is of a synchronic nature, we do not analyze the *ultimate etyma* because:

- a) We think it is unnecessary to engage in such a task because it mainly concerns etymologists—.
- b) Making a diachronic-historical analysis to establish the language from which the *ultimate etymon* of the units we have identified comes from is not relevant to our specific study.
- c) And the *ultimate etymon* of many of the units identified in this study comes from English, since this research focuses on the specialized lexicon of medicine, which, in its current synchronic state, is indisputably associated with the present direct contact with said language in terms of academic and scientific communication.

It is therefore sufficient for our analysis to consider as Anglicisms all those forms or meanings “imported” directly and immediately from English. And since our main objective was to diagnose the direct impact on Spanish terms derived from the use of English texts for university medical classes, it was key to focus on the synchronic influence —regardless of the degree— of English lexical models at both the formal (structure) and semantic levels on the terminology used in Spanish in this specialized context.

As for the *terminological* part of *terminological* Anglicism, we take into account what is considered as a term

in the Communicative Theory of Terminology (CTT) (Cabr , 1998; 1999). In this theoretical perspective, terms are lexical units described as denominative-conceptual units with referential properties. The condition of *term* is a value that is pragmatically activated in specific contexts and situations. Consequently, the content of these units has specific features in each situation, which are determined by the field, the topic, the perspective from which the topic is approached, the type of text in which they appear, the sender, the receiver, and the situation (Cabr , 1998). In other words, terms do not belong to any single field, but are used with a specific value in a specific field. Moreover, terms can be simple or compound units (complex units of syntactic structure that, when they meet the requirements of semantic specificity and necessity, become terminological) that are prototypically nouns (Cabr , 2009, p. 12). We consider that the most appropriate definition of *term* for our research is the one proposed in the CTT, since we agree that *terms* are lexical units that activate a precise meaning in each socio-communicative context and, thus have the same characteristics as the lexical units that some attribute to the general language; they are likely to undergo the same changes; and be subject to the same analysis. Therefore, in this paper we have focused on the most prototypical terms: the **specialized nominal lexical units**.

2.2 The Internationalization of Higher Education (IHE)

A definition that describes this phenomenon in a way that it recognizes that the Internationalization of Higher Education has different purposes and outcomes depending on the actor or stakeholder is the one proposed by Knight (2012, p. 29):

Internationalization at the national sector / institutional levels is defined as: “the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of post-secondary education”.

In the Colombian setting we find a similar definition proposed by Anzola-Pardo (2021, p. 263):

Process of a HE [higher education] institution to holistically incorporate international features that add value to its substantive elements (i.e., teaching, research, and extension) employing its capacities, resources, and context adaptation to transform socially based realities.

We can notice, then, that internationalization mainly involves the participation of governments, through their various official bodies, and Higher Education Institutions. Knight (2004) emphasizes the importance of these actors in the internationalization of higher education and comments that precisely the national and the institutional levels are key for the IHE.

Thus, at the national level there is the direct influence of the international dimension on local higher education through policies, funding, programs, and regulations. However, it is the individual higher education institutions that adapt to the entire internationalization process based on national guidelines.

The adoption of any type of educational policy has consequences on the parties involved, so it is inevitable that there will always be favorable and unfavorable positions on the internationalization adopted by governmental authorities and institutions of higher education. Accordingly, internationalization, like any other institutional or governmental proposal, has aspects in favor (benefits) and against (risks). According to the reports of the International Association of Universities (Knight, 2006; Egron-Polak and Hudson, 2014; Marinoni, 2019), benefits and risks exist at both the societal/national and institutional levels. The benefits of internationalization most valued by the involved actors include reasons that drive internationalization: for example, a) international awareness and preparation of students and professors, b) improvement of academic quality and c) strengthening of teaching-learning processes and research capacity.

On the other hand, the main risks reported are the commercialization of education, the increase of brain drain, elitism in access to international education, and the competition between local institutions that is often unequal due to the greater economic capacity of some over others. Additionally, there is concern about the excessive use of English. This specific risk can at times go unnoticed due to the normalization of its use in some contexts and the “prestige” that comes with utilizing it.

English for the internationalization is undeniable, and some authors, such as Rumbley, Altbach, and Reisberg (2012, p. 6), comment that «[t]he increasing prevalence of the English language for teaching and research» is one of the key aspects to understanding the scope and complexity of the phenomenon of internationalization in higher education. These authors state that, in many parts of the world, universities conduct research or teach all or a significant part of their educational programs in English as a strategy to increase openness, attractiveness and international competitiveness.

The use of English for internationalization is evident and, at present, almost inherent to it. If one wants to implement any measure in favor of national or institutional internationalization, it is necessary to introduce English to a greater or lesser degree in different communicative contexts, which leads us to think of English as a *lingua franca*; since we are talking about scenarios of education of specialists and scientific communication, specifically as a *lingua franca* of specialized communication. Thus, the debate on internationalization and the language for communication for such essentially revolves around how—and to what extent—English should be incorporated into higher education.

2.3 Publish in English or perish

Alongside the use of English for teaching in higher education, we also have its use in research and scientific publication. In this regard, Ferguson (2007, p. 7) comments that one of the effects of the use of English—or rather, of English proficiency—in academic research is the communicative inequality that occurs between specialists/academics who are native speakers of English and those who are not, since the latter are at a disadvantage when they want to position their work in highly-ranked international journals. For example, the research of scholars who are not native English speakers and who publish in English has come to be considered as research without scientific rigor, lacking in clarity, etc. (Clyne, 1987; Mauranen, 1993).

The current dominance of English as an international language for academic publishing is well documented (see, for example, Graddol [1997] or Crystal [2003]). The preferential use of English in this context of specialized communication has consequences of various kinds on the non-English-speaking expert community. For example, Gunnarson (2001, p. 311–312) suggests that if the increase in research publication in English continues, it will lead to a detriment of the specialized register in one’s own language and there will be a slow impoverishment of the lexical and stylistic resources of the language in specialized contexts due to lack of use, just as a muscle that atrophies when it is not used.

In a recent study carried out by the Organization of American States (Organización de Estados Iberoamericanos, 2021) based on consultations and institutional interviews with representatives, experts, researchers and specialists linked to scientific production and dissemination, as well as to the development of scientific repositories and Ibero-American publishing houses, it was reported that in 2020 95.7% of the papers that were incorporated in the Web of Science (one of the most used scientific/academic platforms in the world) were published in English, out of the 50 languages in which they were published during that same year. The average of the last two decades exceeds 85% of the total number of publications. As for Spanish, the report showed that in 2020 only 1.7% of the papers were published in this language.

This linguistic domination of English in publications has two main consequences on the languages of non-native English speakers who are the main recipients of scientific articles, who essentially are researchers, university professors and specialists in training: a) the evident reduction of scientific production in their own language, which is of vital importance for the dissemination of new knowledge; and (b) the fact that they have to read publications in English and then communicate with their colleagues or students in their own language to discuss the subject matter of the articles, make comments on them, use them in their class-

es, etc. And this situation, as we will later discuss, has linguistic consequences at the lexical level.

3 Corpus compilation

For the analysis we had in mind for this study we had to compile an *ad hoc* text corpus, since there were no comparable corpora that would allow us to carry out a contrast between oral and written medical texts in English and Colombian Spanish to determine the impact of English on the Spanish terms derived from the use of papers and book chapters published in English in this specific higher education setting. The compilation of these corpora was quite laborious —mainly that of the oral corpus—, but with the collaboration of different university professors we were able to download the recorded classes from an online educational platform, and their corresponding written materials (journal articles, books, Powerpoint® presentations, etc.). Thus, we were able to have comparable corpora the main difference between which was precisely the language in which they were produced.

In the following sections we will describe the methodology we followed for the creation of the text corpora and for the extraction and validation of the list of terms from which we did the analysis.

3.1 Text corpora

Before starting with the selection of the texts that constituted the corpus, we established a general criterion and other specific ones. To define these criteria, we followed and adapted to our study the approach of Cabré (2007, p. 90–93) on how to build a corpus of specialized texts. In addition, for the processing of the texts, we considered the methodological approach used for the treatment of oral texts of Castellà (2002), and the methodology for the setting-up of comparable oral and written text corpora of Seghezzi (2011).

The general criterion allowed us to delimit the professional communication scenario in which the analysis would be carried out. We established a general field in which to search for texts for the empirical study, namely medicine. This field was chosen because it is one that, despite having existed for thousands of years, continues to be of great importance to society today, for obvious reasons; scientific and economic interests in this field are ongoing. This means that it has a greater economic and human investment than many other areas of knowledge, not only for research, but also for the education of new experts in all medical-health specialties. As a result, much information is readily available online.

After the selection of the field, it was necessary to establish the specific criteria to select the texts for the corpus of analysis as follows:

- (a) The degree of specialization: the corpus is made up of texts with a high and medium degree of

specialization, that is, texts produced by experts and addressed to other experts and to experts in training (Cabré, 2002, p. 30).

- (b) Language: the languages of the corpus are English and Spanish. Thus, it was necessary to collect written texts in English (essentially, journal papers and book chapters) and oral and written texts in Spanish produced by specialists.
- (c) Mode: since we also wanted to analyze the difference in the use of Anglicisms in each mode, it was necessary to have both oral and written texts in Spanish.
- (d) Link to the field of study: all the selected texts were texts produced or used by university professors, from the Faculty of Medicine of the University of Antioquia, to address a specific topic in their subjects.
- (e) Oral texts not read: for the oral texts it was necessary to verify that they were not read aloud versions from a written document, since oral discourse has different linguistic characteristics from that of written texts.

According to the availability of the professors of the Faculty of Medicine of the University of Antioquia, three subareas were selected within the field of Medicine, namely: Vascular Medicine, Electrocardiography, and Orthopedics and Traumatology. The size and descriptions of the final corpora is presented in Table 1.

	Word count	Text count
Vascular Medicine		
EN		
written	23480	6
SP		
written	10147	10
oral	33015	6
Basic Course of Electrocardiography		
EN		
written	17804	5
SP		
written	3919	5
oral	20995	5
Orthopedics and Traumatology		
EN		
written	17388	6
SP		
written	5831	7
oral	25157	6
Total	157736	56

TABLE 1. Word and text count of the corpora

Table 1 shows that in all subjects the oral corpus in Spanish is longer than the written one, which is not surprising, since in oral communication the speaker has the option, and, sometimes, even the obligation, to move away from the “script” established before the lecture, in order to develop secondary aspects, give examples, make the lecture more interactive, etc. We tried to ensure that the total length of the texts for each subject was similar. As for the final size of the textual corpus (almost 160 thousand words), we consider that a corpus of this length is adequate for the needs of this study, the time to implement the chosen methodology and the initially proposed objectives, since it allowed us to successfully carry out research. In addition, in a previous similar study (Seghezzi, 2011), where written and oral corpora were compared, the author used a 100-thousand-word corpus for the analysis.

3.2 Terms for the analysis

As was done for the text corpora, we established general and specific criteria for term selection. The general criterion for the selection of the terms was thematic relevance, in other words, that the terminological value of a give unit was activated within the scientific field selected for the analysis. Based on this criterion, we analyzed the text corpus and then extracted all the units that conveyed specialized concepts related to the topics dealing with each of the subjects of the medical specialty selected for the study.

Since we are not experts in any of these fields, we decided to do a preliminary extraction of a list of term candidates and then a validation by means of different encyclopedic, terminological and bibliographic resources: the *Diccionario de Términos Médicos* of the Real Academia Nacional de Medicina de España, various terminological and encyclopedic databases, WikiYate (a terminology extraction system that combines the extraction of term candidates from the YATE system and Wikipedia as a source of semantic information for the validation of term candidates) and, by extension, Wikipedia and several specialized journal databases.

We then established three specific criteria for the detection and extraction of the terms. Firstly, we considered the morphosyntactic structure criterion and secondly, a language and an appearance criterion, which are closely linked to each other. The morphosyntactic criterion allowed us to reduce the selection of specialized lexical units to terms of the same linguistic nature: nouns, both single-word and multi-word units. We made this decision because in scientific and technical fields nouns are the lexical units that prototypically convey specialized knowledge and therefore are normally found in specialized dictionaries and glossaries. Moreover, «... nouns are the most prototypical units both for the way of expressing knowledge and for the psychological evidence that specialists have

of them, as well as for their number and frequency in specialized discourses» (Cabré and Estopà, 2005, p. 90).

As for the criteria of language and of appearance in the corpus, we selected in an initial phase all the referents (and all their denominative variants) that appeared at least once in a Spanish text (whether written or oral); then, we collected all the equivalents of these referents from the English corpus (again in all their variants). Grouping by referents allowed us to detect all the forms or variants that referred to the same concept. In addition, it enabled us to contrast first between languages and then between the corpora in (oral and written) Spanish.

Language:	Spanish		English	
	written	oral	written	
Mode:	units			
groups	units			
	322	2,197	3,130	2,502
	150	330	0	451
	101	0	258	274
	186	452	589	0
	242	384	0	0
	174	0	292	0
Total	1,175	3,363 (1,469)	4,296 (1,200)	3,227 (964)

TABLE 2. Groups of referents and terms for the analysis

After thematically validating the terms and grouping them by referents, we obtained a total of 1,175 groups, of which 573 (approximately 50 %) are used only in Spanish texts and 580 (the remaining 50 %) in Spanish and English texts. This information was relevant because we needed to know quantitatively how many terms there were in Spanish and whether they had an equivalent in the English corpus or not, in order to determine the impact of English on the Spanish lexicon in general. In addition, the validated units correspond to 10,859 repetitions and 3,032 unique forms (number in parentheses).

When we had the list of validated terms for the analysis, we continued verifying if any of the medical terms used in Spanish was a terminological Anglicism. This is why, based on the validated groups, we analyzed each one of the units and tagged them according to the lexical borrowing classification proposed by Pulcini, Furiassi, and Rodríguez González (2012):

We adapted said classification according to the observations of our study. So, we grouped the direct Anglicisms into a) non-adapted and adapted loanwords, and b) hybrids (we did not include the false borrowings since we did not detect any); and the indirect ones into a) calques (structural), b) semantic loans, and c) we added the category of frequency borrowings (Anglicisms)

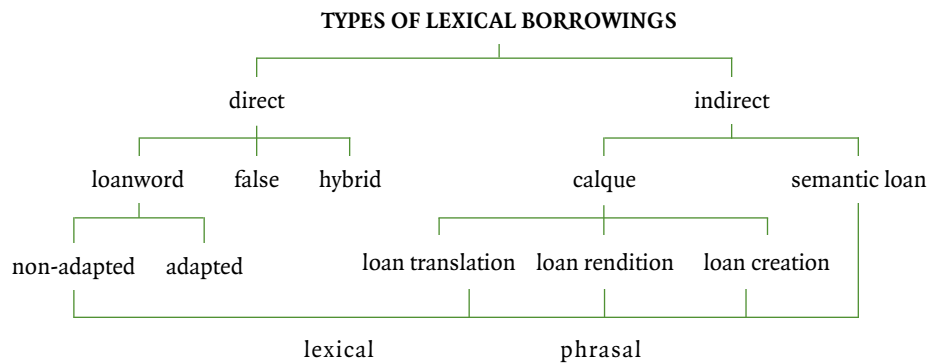


CHART. 1 Types of lexical borrowings Pulcini, Furiassi, and Rodríguez González (2012)

(Zindler, 1959; Cartensen, 1965; Darbelnet, 1976), to refer to those words that exist in Spanish, which are used instead of more traditionally used variants, simply because they are paronyms of English words (for example, the term *fibula* and its derivative *fibular* are frequently used due to English influence, but in Spanish they already have a traditionally used word, *peroné* and *peroneo*, -a, respectively).

After tagging the terms accordingly we were left with a total of 3,514 terminological Anglicisms in use in Spanish, which correspond to 798 unique forms.

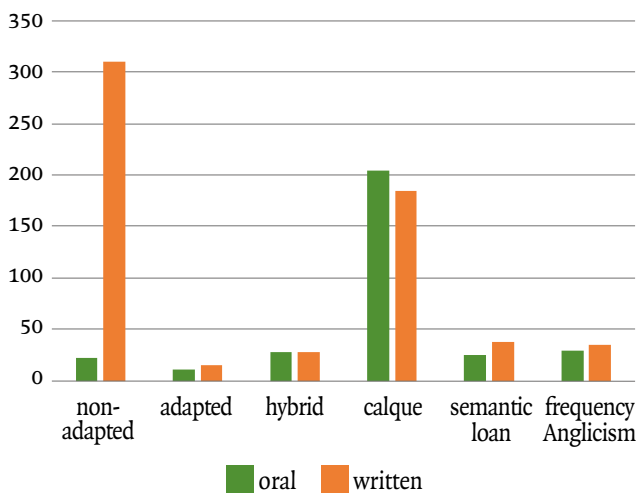


CHART 2. Types of Anglicisms in Spanish

The chart presented above shows that, although the non-adapted Anglicism is the most frequently employed strategy in written texts, it is much less frequent in oral ones. This is largely due to the characteristics of written texts. For example, in these texts the sender has the possibility of using fragments, phrases or vocabulary directly copied from other texts in English. On the other hand, in the oral corpus we can see that the (structural) calque has a greater prominence, which, in part, can also be explained by the inherent characteristics of oral discourse (e.g., spontaneity and immediacy).

4 English impact on Spanish terms

In this section we will focus on the observed Anglicisms and their interaction with the Spanish variants used. That is to say, we will discuss the types of Anglicisms and specify whether they are used in Spanish and coexist with a native variant already in use, or whether, on the contrary, they are used as an option that, at some point, experts or linguistic mediators considered the most appropriate to fill a specific gap in designation.

It is necessary to point out that we first looked for the native variants in Spanish that coexisted with the Anglicisms of our corpus of analysis; and, we subsequently conducted an external search in various terminological databases and specialized journals (essentially the same validation resources we used for the extracted terms) for the Anglicisms that did not have Spanish variants in the corpus, which allowed us to verify whether these Anglicisms currently coexist with other designations in Spanish in general.

4.1 Anglicism and/or native Spanish variant?

Out of the 798 Anglicisms detected, 304 cases (38% of the total) were cases of units that do not coexist with a variant. We could say that these are Anglicisms in Spanish were treated as designative necessities at a given moment and had no Spanish equivalent beforehand. Most of these correspond to calques in widespread use in Spanish. We also have the adapted Anglicisms, which correspond mainly to designations of medications or enzymes. The use of calques and adaptations is not surprising, since these are mechanisms of word formation that speakers—specialists and linguistic mediators—use recurrently. Thus, these would be the types of Anglicisms that we would most recommend using, provided that the grammatical and orthographic rules of Spanish are taken into account when proposing them.

type of Anglicism	number	percentage
adapted	17	5,6
non-adapted	10	3,3
calque	262	86,2
hybrid	15	4,9
Total	304	100,0

TABLE 3. Anglicism without variants

In Table 3 we can observe there are some non-adapted Anglicisms and some hybrids that essentially correspond to acronyms or names of pharmacological substances (e.g., aVF, aVL, aVR, CEAP, fondaparinux or rt-PA). Furthermore, there some hybrids that are formed from an English acronym or with a formant imported from English (e.g., *escala Has-bled*, *pletismografía* or *xantina oxidasa*). The remaining 494 Anglicisms for which we did detected variants, either in the corpus or in an external resource, are distributed as follows:

Type of variant	Anglicism (calque, hybrid, adapted or ill-formed)	Spanish native term	Total
outside the corpus	70	145	215
in the corpus	82	197	279
Total	152	342	494

TABLE 4. Distribution of variants in the Spanish corpus

Of the total number of Anglicisms with variants, we can see that 279 (almost 35%) coexist with at least one variant within the corpus and 215 (almost 27%) have, at least, one variant outside the corpus, i.e., in terminological resources, specialized texts, encyclopedias, etc. And we can also observe that 342 Anglicisms (almost 43% of the total) have at least one Spanish variant in use. Of these 342, 197 coexist within the corpus of analysis with a Spanish variant. We found variants in use for all types of Anglicisms analyzed in our study. The relative frequencies of the variants detected for these 279 Anglicisms are as follows:

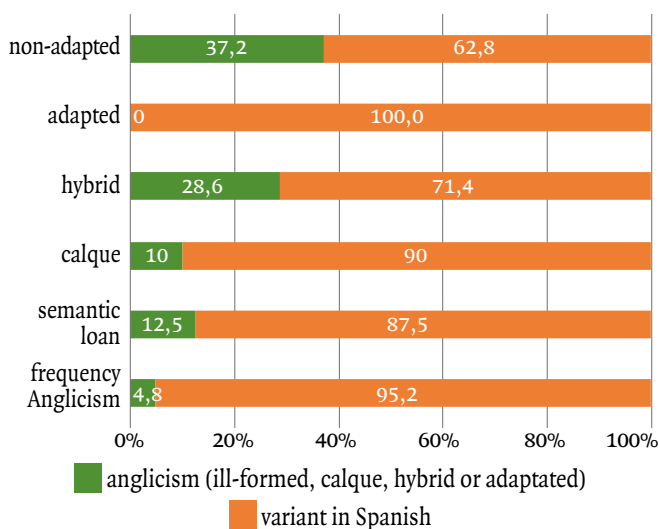


CHART 3. Distribution percentage of the variants in the corpus.

According to the previous chart, over 62% of the non-adapted Anglicisms have a Spanish variant already in use in the corpus, while the remaining variants correspond to other Anglicisms that are essentially adapted or calques, and some ill-formed Anglicisms. These ill-formed terms cases are mostly units created without taking into account Spanish word formation strategies or which included some English-influenced formants or affixes (e.g., *endarterectomy* and its incorrectly formed variant in Spanish *endarterectomía*, instead of *endarteriectomía*; or the non-adapted Anglicism *subtalar dislocation* and its variant *luxación subtalar*, instead of the variant *luxación subastragalina*). Other cases to highlight from Chart 2 are the calques, since the vast majority of them also have a variant already in use in Spanish. This is interesting since it is a very productive mechanism of lexical innovation, although it must be taken into account that there are only 30 cases, which are essentially affixes or formants that have been copied from English (for example, *fractura bicondilar* instead of *fractura bicondílea*). There are also some calques of apposition in English (e.g., *mala unión* instead of *callo vicioso*). The semantic loans and the frequency Anglicisms, as expected, also generally have a variant formed with Spanish lexical resources.

4.2 Consequences for the Spanish lexicon

In order to have an idea of the impact that English as the *lingua franca* of specialized communication has on Spanish terms, it is necessary to look at the Anglicisms we detected in the corpus and contrast them with the Spanish variants with which they coexist. This allows us to know which of the terms of the corpus are used more frequently: the imported terms or the native ones. In the table below we can observe the absolute frequencies of use of the native variants and the Anglicisms:

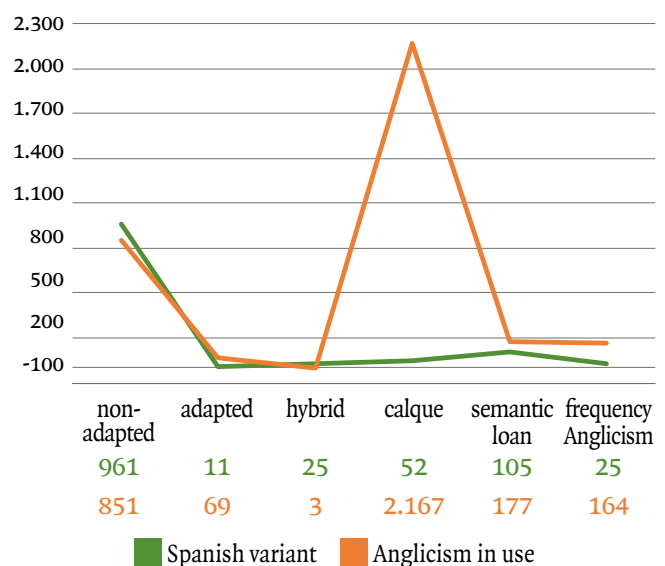


CHART 4. Absolute frequency of the Anglicisms and their variants in the corpus

Chart 4 shows that the frequency of use of non-adapted Anglicisms is close to that of their existing Spanish variants, though the native terms are more frequently used than the Anglicisms as such. On the other hand, adapted Anglicisms, semantic loans and frequency Anglicisms are more frequently used than their Spanish counterparts, and as a result are displacing Spanish well-formed terms in this specialized medical context. There is a great difference in use of calques, although calques are a special case, because they are the most productive type of Anglicism when adapting new realities to any given language, as previously mentioned. This is a great example of how English as a *lingua franca* dominates the generation of specialized knowledge, since it is from here that other languages adapt the term referring to those new realities.

5 Final remarks

According to the data presented in this analysis, we were able to identify that 494 Anglicisms (almost 62%) coexist with at least one variant either in the corpus of analysis or outside of it. Of these 494, approximately 70% (342 terms) have one or more variants in Spanish. Thus, we can say that terminological Anglicisms that already have a well-formed Spanish equivalent with their own lexical resources displace the use of the latter.

For the remaining 304 (38%) Anglicisms, we did not detect, either in the corpus or elsewhere, variants tra-

ditionally used in Spanish. That is to say, most of these cases correspond to calques of extended use in Spanish and a few hybrid Anglicisms and adapted Anglicisms. These calques and adapted Anglicisms are the reflection of an international sociolinguistic reality that will not change in the short term, but for which we can propose mechanisms of integration, such as linguistic policies that holistically integrate terminology management in order to guarantee users a specialized lexicon constructed and thought out in their own language.

The contemporary reality of English as the *lingua franca* is not going to change in the coming decades, so we will continue to witness the adoption of many more Anglicisms in Spanish. This is not entirely negative, because historically languages have been in contact with other languages and have been enriched by them, but it is also true that the current relation between English and any other language is asymmetrical, to say the least. And in the future, it may even be another language that becomes the *lingua franca* of the world economy and, by extension, of communication in specialized scenarios.

Nevertheless, as users who care about the language, we have a duty to look for new ways or implement new strategies to guarantee, or at least make available to specialized users, the terminological resources necessary for them to communicate in all imaginable contexts, if they themselves decide to do so, of course. The important thing is that specialists should have the option of deciding in which language they wish to communicate.✿

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Note

1. In this paper we present part of the results obtained in the research carried out by the author for his PhD thesis *El anglicismo terminológico. Consecuencias léxicas del uso de textos escritos en inglés en las clases de medicina en español*.