Abstract

This paper presents a twofold analysis that, on the one hand, is intended to examine the presence of IT Anglicisms in the contemporary Spanish digital press; on the other hand, it aims to reveal the degree of knowledge and use of these English lexical items by a sample of Spanish speaking university students and to explore what their perceptions and attitudes are towards Anglicisms and their use—not only in specialised contexts such as the IT field, but also when dealing with current and more general topics. The administration of a questionnaire to 232 students at various degrees in two Spanish universities provided reliable data of the high level of knowledge and reported use of a sample of IT terms extracted from an Anglicisms search tool, ‘Observatorio Lázaro’. In addition, the findings have shown open and positive perceptions by Spanish students towards the usage of Anglicisms. Various pragmatic functions (expressive and referential) seem to motivate these uses. Finally, some pedagogical implications of this study are discussed in the sphere of ESP teaching/learning.

Keywords: Anglicisms, Information Technology (IT), borrowings, perceptions by Spanish students, pragmatic functions, pedagogical implications.
Resumen

Este trabajo presenta un doble análisis que, por un lado, pretende examinar la presencia de anglicismos informáticos en la prensa digital española contemporánea, y por otro, propone descubrir el grado de conocimiento y uso de estas unidades léxicas inglesas por parte de una muestra de estudiantes universitarios nativos de español y además explorar cuáles son sus percepciones y actitudes hacia los anglicismos y su uso, no solo en contextos especializados como el campo de las TIC, sino también cuando se trata de temas actuales y más generales. La administración de un cuestionario a 232 estudiantes de diversos Grados de dos universidades españolas proporcionó datos fiables del alto nivel de conocimiento y uso autodeclarado de una muestra de términos informáticos extraídos de una herramienta de búsqueda de anglicismos, el ‘Observatorio Lázaro’. Además, los resultados obtenidos demuestran las percepciones abiertas y positivas de los participantes hacia el uso de anglicismos. Diferentes funciones pragmáticas (expresiva y referencial) parecen motivar estos usos. Finalmente, se discuten algunas implicaciones pedagógicas de este estudio en el ámbito de la enseñanza/aprendizaje del Inglés para Fines Específicos.

Palabras clave: anglicismos, Tecnologías de la Información y la Comunicación (TIC), préstamos, percepciones de estudiantes, funciones pragmáticas, implicaciones pedagógicas.

1. Introduction

The study of the influence that English exerts on other languages has been the focus of scholarly papers for a long period of time (Görlich 2002; Núñez Nogueroles 2017). Since lexical borrowing constitutes the most relevant category from a quantitative point of view, the introduction of English lexical units in different recipient tongues has occupied an outstanding position in loanword studies (García Morales 2009).

On many occasions, Anglicisms belong to specialised thematic fields. In this vein, a long research tradition exists in several donee languages. Indeed, a wide range of publications can be highlighted in the areas of sports (Rodríguez González 2012, 2016; Campos-Pardillos 2015; Ayuso Collantes 2018; Rodríguez González and Castañón Rodríguez 2021; Rodríguez-Medina 2021), cinema (García Morales 2018), tourism (Ciobanu 2015; Lazovic and Vicfic 2015; Giménez Folqués 2015; González-Pastor and Candel-Mora 2018; Errico 2019), economy (Le Poder 2012; Gaudio 2012; Laursen and Mousten 2015; Cece 2016), advertising (Gerritsen et al. 2010; García Morales et al. 2016; Roig Marín and Rodríguez...
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González 2016), fashion and leisure (Balteiro 2011, 2014, 2018; Díez-Arroyo 2016a, 2016b; Rodríguez Arrizabalaga 2017; Luján-García and Pulcini 2018; Xydopoulos and Papadopoulou 2018; Witalisz 2018), among others. The present piece of research focuses on the use of Anglicisms in the sphere of Information Technology (IT from now on), a specialised area which is acquiring growing importance in our daily lives. Unsurprisingly, English being the most relevant language in this domain worldwide (Pano Alaman 2007), the original English terms that denote new technological devices or computing programmes enter other languages at the same time as the inventions they name are imported by the societies that speak these recipient tongues (Reyes and Jubilado 2012). Morin (2006) examined the introduction of IT Anglicisms in the Spanish language press –she gathered data from newspapers from eight Latin American countries– and concluded that “technology-fueled borrowing is undeniably entering the Spanish language press across Latin America” (Morin 2006: 173). Given that this field is continuously being updated, it seems necessary to follow the introduction of Anglicisms in this domain.

2. Theoretical Framework

From an international perspective, some studies on the incorporation of English loanwords in the technological arena should be mentioned. A number of publications (Liermann-Zeljak 2013; Czech-Rogoyska and Krawiec 2018a, 2018b; Luján-García and García-Sánchez 2020) have concentrated on a wide range of recipient languages, such as French, German, Dutch, Croatian, Italian, Portuguese, Russian and Greek.

With respect to the introduction of IT-related Anglicisms in Spanish, a recently edited volume (Luján-García 2021) compiles a collection of chapters which reveal the increasing tendency to use English lexical items in new social media. In addition, de la Cruz Cabanillas and Tejedor Martínez (2012) explored the use of English loans in different thematic areas, one of them being technology.

More recently, Muñoz-Basols and Salazar (2019) analysed two technology-related loanwords, namely ‘tablet’ and ‘selfie’, to explain how these terms have been adopted and adapted by the recipient tongue in terms of gender assignment.

In the 21st century, the remarkable position of English as a donor of Anglicisms in the IT specialised domain is unquestionable. More than twenty years ago, Crystal (1997) already reported on the prominence of English in the IT field and this author aptly pointed to the fact that most technological advances come from English speaking countries –mostly the USA– and China. Mandarin Chinese is
basically spoken by the Chinese population and this language lacks the international role of English as a *lingua franca*. In other words, technological terms are, in most cases, in English, no matter the country they come from. In fact, Álvarez-Mellado (2020a) examined the usage of English loanwords—from September 2012 to January 2020—in newspaper headlines belonging to six areas: economy, music, TV, technology, lifestyle and opinion. Her results showed that the area with the highest percentage of Anglicisms is technology (15.37%), followed by music (9.25%), TV (8.83%), lifestyle (6.48%), economy (3.70%) and, finally, opinion (2.54%).

It is relevant to highlight the concept of “linguistic obsolescence” studied by authors such as Cáceres-Toledo (2020), who stated that, in lexicographic works, some lexical units are considered to be old-fashioned, or inadequate in terms of trends or the most frequent communicative needs, not to mention that they may have started a process of death and subsequent disappearance. Interestingly, many Anglicisms are subject to these processes. They may cover a linguistic need at a certain time, then they may eventually be adopted and possibly adapted by the recipient language. However, on some occasions, these foreign lexical units are used temporarily and, after a period, they cease to be employed and disappear from the recipient language. This is the case of terms such as *disquete* (also called ‘floppy disk’ in English), which is no longer used since the object it describes has been replaced by other devices such as pen drives.

In a context like this, it seems reasonable to do some research on what the attitudes and perceptions of the users of these loanwords are. Jódar Sánchez and Tuomainen (2014), in their analysis of the opinions of 15 Finnish speakers towards the use of Anglicisms, found that most interviewed participants considered English not only a useful but also a necessary language in some situations. Another study carried out in Montenegro (Đurčević 2021) involving 377 university students also demonstrated the tendency and positive attitude towards using Anglicisms in general and specialised contexts. This piece of research covered loanwords in different fields, IT being one of the examined areas, and the findings revealed that participants do not consider the use of English borrowings unnecessary.

Rodríguez González (1996) distinguished three main pragmatic functions performed by Anglicisms when used by Spanish speakers, namely the ideational or referential, the expressive or interpersonal, and the textual. This author (Rodríguez González 1996: 125) wisely states that “the diversity of functions found in anglicisms […] are the best testimony of how deeply rooted the process of borrowing is within the total system of language”. The use of these loanwords responds to various pragmatic needs of speakers, such as economy of language (textual function), snobbery and the wish to sound professional (expressive function), or to fill a lexical gap with a term that does not exist in the recipient
language (referential function). Thus, pragmatics needs to be considered as a driving force when it comes to the use of Anglicisms in any field.

These findings confirm the pertinence of going deeply into the inclusion of English lexical items in the Spanish IT-related sphere and justify the necessity for a sociolinguistic analysis. Indeed, it is essential to cover not only the purely linguistic area, but also the social one considering the real degree of knowledge and usage of English lexical items by a sample of university students of different degrees as well as the attitudes and perception of these students towards the use of Anglicisms. Thus, this piece of research comprises two different stages. Firstly, a documented analysis of the twenty most frequently used Anglicisms in the IT field is carried out. Secondly, the administration of a questionnaire to a sample of students confirms the real degree of knowledge and use of the aforementioned IT English lexical units as well as the participants’ perceptions and attitudes towards these borrowings.

3. Objectives and Research Questions

This study aims to explore the presence of Anglicisms, specifically those related to the specialised field of IT, in present-day Spanish written media and everyday language. A second goal is to examine the knowledge and usage as well as the attitude and perceptions held by university students towards the use of a sample of Anglicisms.

By means of a two-stage process, this paper intends to shed some light on six research questions. For the first phase, the research question was:

— What are the twenty IT-field Anglicisms most frequently used by the Spanish media?

In the second part of this study, the purpose was to know whether there was a correspondence between the use of IT Anglicisms by the media and the real (or, at least, the reported) degree of knowledge and use by university students. Moreover, the attitudes and perceptions held by the students as well as the pragmatic aspect of the use of Anglicisms were also delved into. The research questions posed were:

— What is the degree of knowledge L1 Spanish Tertiary Education students have of the twenty most frequently used Anglicisms in the IT field?

— What is the degree of reported use by L1 Spanish Tertiary Education students of the twenty most frequently used Anglicisms in the IT field?

— What are the attitudes and perceptions of a sample of Spanish university students towards the use of IT Anglicisms in their daily life discourse?

— What are the pragmatic functions of these Anglicisms?
4. Methodological Framework

4.1 First Part of the Study

In order to obtain the twenty most common IT-field Anglicisms in the Spanish written media, the helpful tool ‘Observatorio Lázaro’ was used. It consists of an automatic extractor of emergent Anglicisms in the Spanish press. This computational model, developed by Elena Álvarez-Mellado, has considerably enlarged the horizons in the research area of borrowing, since it allows scholars to move away from time-consuming manual inspection of limited corpora. In her ‘Lázaro’ project, Álvarez-Mellado (2020b) has employed the model to build a pipeline for detecting novel Anglicisms. Seven Spanish newspapers have been included in it – *elDiario.es, El Mundo, El País, ABC, El Confidencial, La Vanguardia,* and *20minutos* – as well as *EFE,* which is a news agency. On a daily basis, the pipeline performs the automatic extraction of unassimilated – also called non-adapted – lexical Anglicisms (i.e. “words from [sic.] English origin that are introduced into Spanish without any morphological or orthographic adaptation”, Álvarez Mellado 2020c: 2). ‘Observatorio Lázaro’, a freely available online resource (https://observatoriolazaro.es/), is updated automatically every day. The identified loanwords are published by the Twitter bot @lazarobot. Since it has been recently launched, ‘Lázaro’ is still being refined. However, the accuracy already shown by the model to date makes it a suitable tool for research purposes.

To the best of our knowledge, excepting its developer’s publications (Álvarez-Mellado 2020a and 2020c), the present piece of research is one of the first in using this innovative instrument. The file corresponding to all the Anglicisms detected by the pipeline in September 2020 was downloaded. Focusing on the thematic classification of loanwords, the field of technology was selected, and the number of occurrences of each term was counted. We are aware of the limitations of the sample compiled, since a wider range of months could have shown a different set of Anglicisms as the twenty most common IT-field Anglicisms in the Spanish written media. However, in this piece of research, the focus centered on the compilation of Anglicisms in one month, given the extensive number of English borrowings in this field.

Considering the frequency of use of IT terms in ‘Observatorio Lázaro’, the 20 IT-related Anglicisms that proved to be the most widely used by the Spanish press in the month in question were selected. In addition, this piece of research explores whether they are actually known and employed by university students in Spain, as will be explained below.
4.2 Second Part of the Study

By using the app Microsoft Forms, a questionnaire was designed following some fundamental principles in the survey research methodology proposed by Glasow (2005). The sampling plan was intended to cover four main areas of knowledge: Technology, Health and Medicine, Social Studies, and Arts and Humanities. It also conformed to some standards to provide appropriate survey questions, being consistent with the educational level of the respondents and both questions and response options being clear both to the respondent and to the researcher (Glasow 2005: 2-5). To avoid a biased context, participants were informed that the survey was not a test or part of an evaluation, and they were requested to be honest in their responses.

The questionnaire, which was completely anonymous, was administered to students at different degrees (see Table 2) in two Spanish universities (Universidad de Extremadura and Universidad de Las Palmas de Gran Canaria) during the months of November and December 2020. For the administration of the survey, the application Microsoft Forms was used by both authors, so the process was online to allow students to respond at any time. The main goal of asking participants enrolled in different academic degrees was to have a wider picture of the degree of knowledge and use of the examined terms by university learners.

This research instrument can be divided into three different sections: the first enquired about personal details of the participants (degree, gender, age, if any participant was an Erasmus student); in the second part, students were asked whether they knew and/or used the sample of twenty IT Anglicisms; the third section included 12 questions intended to find out what the attitudes and perceptions of the respondents were, regarding the use of Anglicisms in their daily life speech. To design the last part of our survey, the study by Matić (2017) was used as a model. However, since the present study covers different degrees of two different Spanish universities, a wider variety and a bigger sample of students than in Matić’s study, the findings could probably be considered more accurate and provide a more extensive overview of the spread of the sample of Anglicisms. A total number of 232 informants filled in the questionnaire.

5. Results

First, after having examined the IT-field Anglicisms identified by ‘Observatorio Lázaro’ in September 2020, and taking into account the frequency of the loanwords, including not only their singular but also their plural form, the following twenty words turned out to be the most commonly employed in the above-mentioned eight media:
Anglicism | N. of occurrences | Anglicism | N. of occurrences
---|---|---|---
1. app(s) | 312 | 11. malware | 19
2. software | 79 | 12. hardware | 18
3. online | 77 | 13. hacker(s) | 16
4. smartphone(s) | 67 | 14. gaming | 15
5. streaming | 35 | 15. remake(s) | 15
6. tablet(s) | 29 | 16. router(s) | 15
7. Bluetooth | 28 | 17. influencer(s) | 13
8. gadget(s) | 24 | 18. smartwatch(es) | 12
9. bot(s) | 23 | 19. start(-) up(s) | 11
10. gameplay(s) | 20 | 20. stock | 11

Table 1. Most frequent Anglicisms extracted by ‘Observatorio Lázaro’ in September 2020 (section: Technology)

Second, the survey included in the appendix –completed by 232 students from different degrees and also from different years in Spain– produced the outcomes analysed below.

As mentioned above, the first part of the questionnaire referred to personal data. Students were asked the following questions: Which degree are you studying?; Are you an Erasmus student?; Specify you gender; Specify your age range (for age ranges, see the survey in the appendix).

<table>
<thead>
<tr>
<th>Academic Degree</th>
<th>N. of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree in Nursing Studies (1st year)</td>
<td>96</td>
</tr>
<tr>
<td>Degree in English Studies (1st, 2nd, 4th years)</td>
<td>73</td>
</tr>
<tr>
<td>Degree in Social Work (3rd year)</td>
<td>29</td>
</tr>
<tr>
<td>Degree in Industrial Design Engineering and Product Development (3rd year)</td>
<td>20</td>
</tr>
<tr>
<td>Master’s Degree in Law Studies (post-graduates)</td>
<td>11</td>
</tr>
<tr>
<td>Degree in Physiotherapy Studies (1st year)</td>
<td>1</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>232</strong></td>
</tr>
</tbody>
</table>

Table 2. Answers to the question “Which degree are you studying?”

As Table 2 shows, the sample of participants was characterised by the variety of academic areas to which the students belonged. In the sample, there were only four Erasmus students –all of them registered in the Degree in English Studies.
Therefore, since it is a very small percentage (2%) of the total number of informants, it can be assumed that their answers will not greatly distort the results, which can still be considered a reflection of the perceptions and usage of Anglicisms by Spanish university students. A larger number of Erasmus learners could have altered the results, since these students are not native speakers of Spanish and their level of English is frequently quite high.

Table 3. Answers to the instruction “Specify your gender”

<table>
<thead>
<tr>
<th>Gender</th>
<th>N. of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>178</td>
</tr>
<tr>
<td>Male</td>
<td>54</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>232</strong></td>
</tr>
</tbody>
</table>

The data recorded in Table 3 evidence that an overwhelming majority of female informants (178) answered the questionnaire. They constituted 77% of the overall number of participants, whereas the 54 male students represented the remaining 23%.

Table 4. Answers to the instruction “Specify your age range”

<table>
<thead>
<tr>
<th>Age range</th>
<th>N. of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-23 years old</td>
<td>207</td>
</tr>
<tr>
<td>24-28 years old</td>
<td>10</td>
</tr>
<tr>
<td>29-33 years old</td>
<td>4</td>
</tr>
<tr>
<td>Over 33 years old</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>232</strong></td>
</tr>
</tbody>
</table>

Table 4 displays that, as can be expected, most of the learners (207) were between 18 and 23 years old (89%). The following group in terms of size, 11 students (5%), was over 33. After that, 10 students belonged to the age range 24 – 28 (4%) and 4 (2%) informants selected the option 29 – 33 years old.

The subsequent section of the survey comprised 20 questions which focused on the most frequently used Anglicisms in the IT field by the Spanish press nowadays (see Table 1). The general instruction for this part was “Specify if you know and/or use the following terms”. For each of them, three possible answers were offered:

a) I know it and I use it
b) I know it, but I don’t use it
c) I neither know it nor use it
Table 5 shows the results obtained in this part of the questionnaire:

<table>
<thead>
<tr>
<th>IT Anglicism</th>
<th>I know it and I use it</th>
<th>I know it, but I don’t use it</th>
<th>I neither know it nor use it</th>
</tr>
</thead>
<tbody>
<tr>
<td>app</td>
<td>217 (93.5%)</td>
<td>13 (5.6%)</td>
<td>2 (0.8%)</td>
</tr>
<tr>
<td>software</td>
<td>191 (82.3%)</td>
<td>38 (16.3%)</td>
<td>3 (1.2%)</td>
</tr>
<tr>
<td>online</td>
<td>191 (82.3%)</td>
<td>28 (12%)</td>
<td>13 (5.6%)</td>
</tr>
<tr>
<td>smartphone</td>
<td>157 (67.6%)</td>
<td>75 (32.3%)</td>
<td>0</td>
</tr>
<tr>
<td>streaming</td>
<td>154 (66.3%)</td>
<td>69 (29.7%)</td>
<td>9 (3.8%)</td>
</tr>
<tr>
<td>tablet</td>
<td>203 (87.5%)</td>
<td>29 (11.6%)</td>
<td>0</td>
</tr>
<tr>
<td>bluetooth</td>
<td>224 (96.5%)</td>
<td>8 (3.4%)</td>
<td>0</td>
</tr>
<tr>
<td>gameplay</td>
<td>101 (43.5%)</td>
<td>110 (47.4%)</td>
<td>21 (9%)</td>
</tr>
<tr>
<td>malware</td>
<td>43 (18.6%)</td>
<td>101 (43.7%)</td>
<td>87 (37.6%)</td>
</tr>
<tr>
<td>bot/bots</td>
<td>85 (36.6%)</td>
<td>80 (34.4%)</td>
<td>67 (28.8%)</td>
</tr>
<tr>
<td>gadget</td>
<td>68 (29.3%)</td>
<td>114 (49.1%)</td>
<td>50 (21.5%)</td>
</tr>
<tr>
<td>hardware</td>
<td>142 (61.2%)</td>
<td>77 (33.1%)</td>
<td>13 (5.6%)</td>
</tr>
<tr>
<td>hacker</td>
<td>170 (73.2%)</td>
<td>57 (24.5%)</td>
<td>5 (2.1%)</td>
</tr>
<tr>
<td>gaming</td>
<td>128 (55.1%)</td>
<td>90 (38.7%)</td>
<td>14 (6%)</td>
</tr>
<tr>
<td>router</td>
<td>225 (96.9%)</td>
<td>4 (1.7%)</td>
<td>3 (1.2%)</td>
</tr>
<tr>
<td>remake</td>
<td>101 (43.7%)</td>
<td>90 (38.9%)</td>
<td>40 (17.3%)</td>
</tr>
<tr>
<td>smartwatch</td>
<td>145 (62.5%)</td>
<td>84 (36.2%)</td>
<td>3 (1.2%)</td>
</tr>
<tr>
<td>influencer</td>
<td>185 (79.7%)</td>
<td>47 (20.2%)</td>
<td>0</td>
</tr>
<tr>
<td>start-up / startup</td>
<td>32 (13.7%)</td>
<td>92 (39.6%)</td>
<td>108 (46.5%)</td>
</tr>
<tr>
<td>stock</td>
<td>148 (63.7%)</td>
<td>56 (24.1%)</td>
<td>28 (12%)</td>
</tr>
</tbody>
</table>

Table 5. IT Anglicisms: Degree of knowledge and usage by university students in Spain

In all cases, the number of students who know the term (columns 1 and 2) exceeds that of those who do not. Considering the answer “I know it and I use it”, the most frequently selected Anglicism is router (225), followed by Bluetooth (224) and app (217). These words, related to the Internet and mobile phones, are widely employed at present by Spanish speakers. In addition to these, the term tablet (203), naming an extensively used device, is also used by more than 200 university students.

The second option (“I know it, but I don’t use it”) is predominant for the terms gadget (114), gameplay (110) and malware (101). Although these words refer to elements that are present in the informants’ daily life, they are not as crucial as the
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ones mentioned in the previous paragraph, so probably the participants do not refer to them so frequently. This may explain the results obtained when it comes to this answer.

The third possibility ("I neither know it nor use it") is, generally speaking, the least common of the three, which also shows the effect that the press and the media have on our use of the language. There are even four cases for which none of the informants selected this option (smartphone, tablet, Bluetooth, influencer). The only occasions on which it outweighs at least one of the two other options are with the terms start-up / startup (108) and malware (87). In the first case, the fact that the word refers to a reality that does not belong to the students’ everyday life may explain the unawareness of the Anglicism by a high number of participants. As for malware, the semantic similarity it has with the widespread term virus presumably lies behind the large quantity of informants who do not know it and therefore its low usage. Finally, it is relevant to highlight that two Anglicisms –malware and remake– received 231 rather than 232 answers, as shown in Table 5. These two terms are probably not so common as the others, since malware has, as commented upon above, an equivalent in Spanish –the semantic anglicism virus– which is quite widespread. In the case of remake there is an equivalent expression nueva versión de una película, and despite the fact that it is longer, it is frequent among Spanish speakers. Additionally, remake could be considered a more specific and specialised term, which is associated particularly with the film industry.

In the third section of the survey, several questions were intended to find out about the perceptions and attitudes of the participants towards the use of English vocabulary in the IT field (questions 25 to 30). Furthermore, some findings on a more general use of English lexical items were obtained by means of questions 31 to 36.

Question number 25 was: “Would you add any other technological term to the previous list?” Most students, 179 (77.4%) answered ‘no,’ while 52 (22.5%) participants said ‘yes.’ This implies that many respondents are quite familiar with IT terminology. The following question, number 26, was: “If your answer was ‘yes’ in question 25, please specify which one/ones”. Various terms were included. Some examples are: computer, laptop, streaming, link, set-up, broadcast, podcast, reboot, wi-fi, social network, post/s, hashtag, troll.

The next question, 27, was in fact a statement: “Most Spanish speakers understand the terminology and vocabulary related to technology in English”. The participants had to confirm or deny that statement. As shown in Figure 1, the outcomes reveal that 197 (85.2%) students confirmed the assertion, as opposed to 34 (14.7%) respondents who denied it. It is obvious that most participants consider that Spanish speakers are familiar with English IT vocabulary.
Question 28 provided participants with another statement: “Spanish terms do not describe with enough accuracy and clarity the concepts in the field of technology”. The findings show that 145 (63%) (see Figure 2) informants expressed their agreement with this assertion. By contrast, 85 (36.9%) respondents showed their disagreement. These students consider Spanish as accurate as English when it comes to technological terms.

In order to dig into the perceived necessity of coining or not Spanish terms in the field of technology, question number 29 stated: “There is no need to create a technological terminology in Spanish if we already have English terms that fulfil that need”. The results, displayed in Figure 3, show that 135 (58.1%) students expressed their agreement with the assertion, so for them there is no need to create Spanish terms to refer to technological terms, since they already exist in English. By contrast, 97 (41.8%) respondents believe that the Spanish language should have its own technological terminology. There is a difference between participants’ points of view; in fact, more than half of the informants consider English terms to be adequate and enough to express technological issues.

The following questions, 30 to 36, were a bit more general, and were intended to reveal whether the participants tend to use Anglicisms in their daily lives. The statement provided in question 30, “I use terms in English when I speak Spanish”,

![Figure 1. Students’ agreement with the statement “Most Spanish speakers understand the terminology and vocabulary related to technology in English”](image)

![Figure 2. Students’ agreement with the statement “Spanish terms do not describe with enough accuracy and clarity the concepts in the field of technology”](image)
received the following responses: 116 (50.4%) students answered “frequently”; 112 (48.6%) informants replied “sometimes”; and only 2 (0.8%) respondents said “never”. These findings reveal the remarkably high frequency with which Spanish youth use Anglicisms in their daily interactions (see Figure 4). This may be because of the strong influence of English among young people produced by mass and social media.

Question number 31 was intended to find out how rich Spanish speakers consider their native language. The statement used in this case was: “It is difficult to translate words from English into Spanish, because English is richer in vocabulary than Spanish”. As many as 157 (67.9%) participants rejected this assertion, suggesting that they consider Spanish, generally speaking, to be as rich as English in terms of vocabulary, which implies a certain loyalty towards their native language. By contrast, 74 (32%) students agreed that English has a wider lexical variety than Spanish.

Question 32 enquired: “Which reasons do you have to use English terms?” As Table 6 shows, 227 participants answered this question. The findings reveal that 94 (41.4%) informants stated that they use English terms because they sound better than Spanish terms, whereas 92 (40.5%) respondents chose the option ‘Other reasons’. Some of these motivations are: habit, economy of language, lack of Spanish equivalent, influence of social media, and accuracy. Some of their literal responses were: “Because the contents they consume on the Internet are mostly in
English, so you get used to using those words in English rather than Spanish”; “Because it is easier to say hacker than *pirata informático o computomaniaco*”; “Because there is no equivalent. For example, *router*, what is the Spanish word to refer to this device?”; “Because they are used so frequently in social networks, that you use them unconsciously”; “Because of the influence of TV broadcasts and serials. Social networks are full of terms in English, and that is why young people end up incorporating them to our lexicon”; “Because there are certain fields, such as business and technology, in which using certain terms in English is more accurate than Spanish”. A sample of 30 (13.2%) students chose the option of “Because it sounds more professional”. Finally, 11 (4.8%) Spanish higher education students claimed that prestige is the reason for them to use Anglicisms.

<table>
<thead>
<tr>
<th>Reasons to use English terms</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prestige</td>
<td>11</td>
<td>4.8</td>
</tr>
<tr>
<td>Sounds better</td>
<td>94</td>
<td>41.4</td>
</tr>
<tr>
<td>Sounds more professional</td>
<td>30</td>
<td>13.2</td>
</tr>
<tr>
<td>Others</td>
<td>92</td>
<td>40.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>227</strong></td>
<td><strong>99.9</strong></td>
</tr>
</tbody>
</table>

Table 6. Reasons to use English terms
The following question, 33 (see Figure 6), asked: “If you had the option of choosing between an English and a Spanish term to refer to a concept, which one would you choose?”, and the responses show that 134 (58%) participants prefer the use of Spanish terms, whereas 97 (41.9%) students choose English words. In Figure 6, it may be observed that there is an inclination to employ Spanish vocabulary; nevertheless, the number of respondents who have shown their preference for English is striking.

Question 34 consisted of the statement: “The acceptance and use of English terms will lead to a better level of knowledge of English among Spanish speakers”. Figure 7 shows that a majority of respondents, 190 (82.6%), agreed with this assertion, whereas only 40 (17.3%) expressed their disagreement. Most participants consider that using and accepting English terms will result in an improvement in the level of English of these speakers. This is clear evidence of the positive attitudes and perceptions Spanish University students have towards the use of technology-related Anglicisms.

Question 35 was a more general question: “In your daily speech, is there any English word/s that you use frequently?” The findings (see Figure 8) are mostly affirmative with 150 (64.6%) respondents who answered ‘Yes,’ as opposed to 82 (35.3%) participants who answered ‘No.’
The last question, 36, asked for the specific English words they use, and there is a large number of terms they highlighted. Some of the most common ones are: app, awesome, baby, back up, brother, bullying, chat, cupcake, email, fashion, fake, gaming, hacker, hardware, hater, influencer, love, model, online, outfit, post, party, playlist, perfect, router, remake, running, spoiler, smartphone, software, stories, streaming, selfie, spam, tablet, tweet, even expressions such as “in English please”, OK, OMG (for Oh My God!); WTF (for What the Fuck!), for your information, fifty-fifty, by the way, my friend, of course.

6. Discussion

This two-stage study was guided by five research questions concerning a) the presence of English loanwords –specifically those related to the specialised field of IT– in the present-day Spanish press, and b) the degree of knowledge and reported use of these loanwords as well as the attitude and perceptions held by Spanish university students towards their use. In this second part, attention is also paid to the pragmatic functions fulfilled by the English lexical items in Spanish. Lastly, the pedagogical implications extracted from the present study are also considered.

The findings of the first phase of this study, which focused on the IT-field Anglicisms most frequently used by the Spanish media, reveal that the twenty most common IT-field Anglicisms were: app, software, online, smartphone, streaming, tablet, Bluetooth, gameplay, malware, bot, gadget, hardware, hacker, gaming, router, remake, smartwatch, influencer, start-up / startup and stock. A number of reasons may account for the use of these terms; people’s current life is so influenced by technology that it is hard to imagine a regular citizen who does not have a smartphone, smartwatch or tablet; who does not use any app, software, hardware, router or gadget; who has never been affected by some malware or hackers; who does not know what an influencer is; who has never played video games or knows someone who does, and who does not know what a start-up and stock are. The Spanish population is not only familiar with these devices and Internet-related services, as they have become part of our lives, but we are also regularly exposed to the use of these terms in the media.

The second research question delved into the degree of knowledge of the previous list of the twenty most frequently used Anglicisms in the IT field in the media by Spanish university students, whereas the third research question dug into their degree of reported use of these terms. All the English loanwords analysed show a common pattern: the number of participants who knew the term (that is, those who answered “I know it and I use it” or “I know it, but I don’t use it”) was higher than the quantity of informants who did not. Although some terms were
unknown to a considerable portion of the respondents (start-up / startup: 108; malware: 87; bot: 67; gadget: 50; remake: 40), the number of students who selected the option “I neither know it nor use it” was below 25 on most occasions. In some cases, indeed, no one chose this answer (smartphone, tablet, Bluetooth, influencer). Therefore, it can be stated that, among university students, there is widespread knowledge of the most common IT Anglicisms used by the Spanish press. Quite surprisingly, though, the loanword online was marked as unknown by 13 participants. Despite being a very common Anglicism, particularly in some areas such as education after the COVID-19 outbreak in the spring of 2020, a few students have reported not knowing it. Three plausible reasons could be suggested to explain this outcome. First, since this loanword is variably spelled in three possible forms (online, on-line, on line) indistinctively in Spanish, perhaps the informants are familiar with the other options but not with the one shown in the questionnaire. Second, there may be participants who have acquired the borrowing aurally and have never met the term in its written form. In this case, they might expect the spelling of this loan to be *onlain, as this is the way in which it is pronounced (notice that, in Spanish, the oral and the written forms of a word coincide to a greater extent than they do in English). Third, maybe the informants who have answered “I neither know it nor use it” employ, for example, the expression “por/en Internet” rather than online. A complementary short interview with each of these participants could clarify whether any of these reasons is correct. However, the fact that the questionnaire is anonymous makes it extremely difficult to carry out such interviews.

In most cases, those who answered “I know it and I use it” outnumbered those who selected “I know it, but I don’t use it”. Exceptions were gameplay, malware, gadget and start-up / startup. Therefore, even though many participants knew these terms, they reported that they did not use them. In any case, there was still a very relevant proportion of the informants who declared that the Anglicisms under consideration belonged to their active vocabulary –especially in cases such as app, tablet, Bluetooth and router, where the difference between the first and the other two columns was marked.

The findings relating to the fourth research question reveal that there seems to be a generally positive attitude and perception towards the use of English terms in the IT field, and also towards the general use of the English language, among the young Spanish speaking participants. These new generations of students have been raised with considerable exposure to the English language, not only at school and/or private lessons, which have increased the levels of mastery in this language, but also in many areas of our daily life such as social media, sports, beauty, fashion, TV, marketing, and music, which are currently teeming with English terms. In addition,
the use of many of these English borrowings confer on young people an air of sounding “fashionable”, “cool” or even “more professional”, as some participants admitted. The field of IT uses a technical and semi-technical vocabulary, and the precision provided by English does not seem to be present in any other language, including Spanish. The reason could be partially explained by the fact that many of these terms emerge in English, since a great number of technological advances take place in the USA and the UK.

In relation to the last research question, the answers to question 32 of the survey (see Table 6) demonstrate the importance of the interpersonal or expressive pragmatic function of the Anglicisms. It must be acknowledged that, among the ‘Other reasons’ stated by several participants, some ideas connected to the referential or ideational function can be found (such as “lack of Spanish equivalent” and “accuracy”). However, the weight attached to the fact that English words sound better or more professional (along with the prestige of this foreign language) points to the relevance borne by the expressive or interpersonal function. Furthermore, some of the examples provided by the respondents when answering question 36, which enquires into the English words they usually employ in their daily speech, confirm the preponderance of this pragmatic function (in English please, OK, OMG, WTF, for your information, fifty-fifty, by the way, my friend, of course).

Finally, this study generates some possible pedagogical implications which, in our view, may provide teachers with a better panorama of the IT vocabulary in English that Spanish speaking university students already know, and the terms that they still need to learn. In the particular case of learners who attend English for Specific Purposes (ESP) courses, the sphere of vocabulary is essential. As various studies (Xhaferi 2010; Le Huong and Huy 2021; Al Zahrani and Chaudhary 2022) have explained, teaching specialized vocabulary involves several difficulties, but it is crucial for ESP learners:

Vocabulary is an inseparable part of any teaching syllabus and vocabulary should be taught in a well-planned and regular basis. Teaching vocabulary especially in ESP courses is becoming a challenge for English Language Teachers. It is essential to carefully decide what vocabulary will be selected for teaching, and what approach or activities will be used to teach it to the students. (Xhaferi, 2010: 230)

The vocabulary taught in the particular area of IT, the focus of this study, is imperative for any student of any branch of Engineering for their professional expertise. Therefore, these findings are intended to shed some light that may be helpful for Spanish ESP practitioners who teach in this field. In addition, this paper also shows that, according to the participants’ answers to the questionnaire, IT vocabulary also has a significant presence in the daily speech of learners belonging
to other different areas of expertise. Obviously, some reasons for students to choose terminology in one language rather than another may be closely related to values such as modernity, fashion, and the wish to sound more professional. However, it is true that most of these English terms originate in English speaking countries and are then exported to other languages. Consequently, Spanish equivalents may take too long to emerge or probably do not express the full meaning implied by the English loanword.

7. Conclusions

This study was developed by means of a two-stage process in which each phase had a specific goal. The first part aimed to examine the usage of IT Anglicisms in the present-day Spanish press, identifying those which proved to be the most frequently employed. The second section had the purpose of analysing, with the aid of a questionnaire, the degree of knowledge and reported use of these most common IT loanwords by Spanish university students, and also the attitude and perceptions held by these respondents.

In relation to the degree of knowledge of the twenty English borrowings by Spanish tertiary students, the results point to a widespread familiarity with the terms. The importance that technology enjoys nowadays in society –especially among the youth– makes it easy for the informants to come across these words regularly. Although many respondents declared that they did not use the loanwords, there was still a very relevant number of participants who claimed that these Anglicisms belonged to their active vocabulary. The fact that the technological domain constitutes a key element in the informants’ daily lives probably lies behind these results.

The findings commented upon in the previous paragraphs evince a widespread or, at least, quite generalised use of IT English lexical items in several layers of Spanish society. Indeed, it has been proven that they are employed by speakers of different profiles (journalists working in the digital media analysed by ‘Observatorio Lázaro’ on the one hand, and tertiary students –many of whom probably do not read these online newspapers– on the other).

When it comes to the attitudes and perceptions of Spanish-speaking university students, the findings reveal that respondents take quite a positive view of the entrance and use of IT English terminology in Spanish. This is in line with other studies based on different geographical contexts (Matić 2017, 2018; Bolaños-Medina and Luján-García 2010). There seems to be an open mind towards the English language. The use of more general Anglicisms is also quite widespread.
among the participants. Thus, despite being aware of the richness and scope of Spanish across the globe, Spanish youth is also conscious of the need to rely on Anglicisms not only when using IT specialised vocabulary, but also when they write or speak about more general issues.

Regarding the pragmatic functions carried out by English lexical items in Spanish, and following Rodríguez González’s (1996) typology, the analysis of the respondents’ contributions to the survey shows that the interpersonal or expressive function can be underlined (the wish to sound modern or more professional, for example), although the ideational or referential function (the lack of a Spanish equivalent or economy of language, among others) also turns out to be relevant.

This piece of research has some pedagogical implications that may contribute to improving the vocabulary syllabus design of ESP courses within the IT field. Spanish ESP practitioners working on any of the Engineering branches may find these results useful for selecting specific terminology to teach their learners.

To conclude, the study at hand supports the findings of previous pieces of research involving Spanish and other international languages. English is widespread in the discourse of Spanish university students, and not just to refer to specialised IT vocabulary, but also to talk about current and more general topics. As a lingua franca, English is so ubiquitous in Spanish culture and society that it is impossible to deny its presence in the Spanish-speaking world, especially among Spanish-speaking youth.

Acknowledgements

We would like to thank Dr. Nancy Avila Ledesma, Dr. Bernardo Santano Moreno, and Dr. Diana Villanueva Romero (University of Extremadura) as well as Dr. Soraya García Sánchez, Dr. Pilar González de la Rosa, and Dr. Sandra Marrero Morales (University of Las Palmas de Gran Canaria) for having administered the questionnaire to the learners in their courses. We are also grateful to all the students who have participated in the study.

Specific contribution of each author

Luján-García has written the introduction and the second part of the study. Núñez Nogueroles has been in charge of the theoretical framework as well as the first part of the study. Both authors have carried out the analysis and have written the sections concerning the results, discussion, conclusions and the bibliography.
Works Cited


Perceptions and Reported Use of IT Anglicisms


Received: 24/06/2022
Accepted: 14/09/2022

Appendix

Survey used in this piece of research. It is in Spanish and English to facilitate participants’ understanding of all the questions.

Anglicismos en el campo de la tecnología/Anglicisms in the field of technology. Este es un cuestionario anónimo y no forma parte de la evaluación de ninguna asignatura. Así que, por favor, contesta con sinceridad. This is an Anonymous survey, and it is not any evaluation of any subject. So, please, answer with honesty. Gracias de antemano por tu colaboración. Thank you, in advance, for your collaboration.

1. ¿Qué estudios estás cursando? Which degree are you studying?
   - Degree in English Studies
   - Degree in Industrial Design Engineering and Product Development
   - Degree in Social Work
   - Master in Lawyer Studies
   - Degree in Nursing Studies
   - Physiotherapy Studies

2. ¿Eres un estudiante Erasmus? Are you an Erasmus student?
   - Sí / yes
   - No / no
3. Especifica tu género. / Specify you gender.
   ○ Hombre / Male
   ○ Mujer / Female

4. Especifica tu franja de edad. / Specify your age range.
   ○ 18-23 años / years
   ○ 24-28 años / years
   ○ 29-33 años / years
   ○ Más de 33 años /years

5. Especifica si conoces y/o usas los siguientes términos. Tick if you know and/or use the following terms:

<table>
<thead>
<tr>
<th>Anglicismo / Anglicism</th>
<th>Lo conozco y lo uso. / I know it and use it.</th>
<th>Lo conozco, pero no lo uso. / I know it, but I don’t use it.</th>
<th>Ni lo conozco, ni lo uso. / Neither I know it, nor I use it.</th>
</tr>
</thead>
<tbody>
<tr>
<td>app</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>software</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>online</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>smartphone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>streaming</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tablet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bluetooth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gameplay</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>malware</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bot/bots</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gadget</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hardware</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hacker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gaming</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>router</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>remake</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>smartwatch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>influencer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>start-up / startup</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>stock</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. ¿Añadirías al listado de términos anterior, alguna otra palabra que uses en el terreno de la tecnología? Would you add any other technological term to the previous list?
- Sí / yes
- No / no

7. Si has respondido que sí en la pregunta anterior. Especifica qué palabras añadirías. / If your answer was “yes” in question 6, please specify which one/ones.

8. La mayoría de los hablantes del español entienden la terminología y el vocabulario en inglés relacionado con la tecnología. / Most Spanish speakers understand the terminology and vocabulary in English related to technology.
- Sí / yes
- No / no

9. Los términos del español no describen con suficiente precisión y claridad los conceptos del ámbito de la tecnología. / Spanish terms do not describe with enough accuracy and clarity the concepts in the field of technology.
- De acuerdo / Agree
- En desacuerdo / Disagree

10. No hay necesidad de crear una terminología tecnológica en español si ya tenemos los términos en inglés que cubren esta necesidad. / There is no need to create a technological terminology in Spanish if we already have English terms that fulfil that need.
- De acuerdo / Agree
- En desacuerdo / Disagree

11. Uso términos en inglés cuando hablo español. / I use terms in English when I speak Spanish.
- Nunca / Never
- A veces / Sometimes
- Con frecuencia / Frequently

12. Resulta difícil traducir palabras del inglés al español porque el inglés es más rico que el español en vocabulario. / It is difficult to translate words
from English into Spanish, because English is richer in vocabulary than Spanish
❍ De acuerdo / Agree
❍ En desacuerdo / Disagree

13. ¿Qué razones tienes para usar términos en inglés? Which reasons do you have to use English terms?
❍ Por prestigio / For prestige
❍ Porque suena mejor / Because it sounds better
❍ Porque suena más profesional / Because it sounds more professional

14. Si tuvieras la opción de elegir entre un término inglés y otro español para referirte a un concepto, ¿qué término elegirías? / If you had the option of choosing between an English and a Spanish term to refer to a concept, which one would you choose?
❍ Español / Spanish
❍ Inglés / English

15. La aceptación y uso de términos del inglés hará que aumente el nivel de conocimiento de inglés entre los hablantes del español. / The acceptance and use of English terms will lead to a better level of knowledge of English among Spanish speakers.
❍ Sí / yes
❍ No / no

16. En tu habla cotidiana, ¿hay alguna/s palabra/s del inglés que uses con frecuencia? / In your daily speech, is there any English word/s that you use frequently?
❍ Sí / yes
❍ No / no

17. Si respondiste en la pregunta anterior que “sí”, especifica qué palabra/s del inglés usas con frecuencia. / If you answered “yes” in question 35, please specify which English word/s you use frequently.