CHAPTER ONE

Introduction

1.1 Introduction

Users of computer language around the world, regardless of what their first language is, often find the need to borrow English words from the computer language field, in order to get their point across. As the world becomes more globalized, the use of computers as communication tools is an inevitable necessity, especially since the Internet became so readily available to computer users worldwide. The Internet has allowed computer users to be interconnected with millions of persons of different cultural backgrounds, and it has also permitted them to access countless amounts of information, nowadays available at their fingertips. Because the field of computers is dominated by the English language for reasons explained further in this chapter, the language utilized to communicate through computers is heavily influenced by it. It is for this reason that this study analyzes instances where English has been borrowed by users of the Spanish language due to the lexical gap found in this language, and their need to communicate with other individuals using computers.

This researcher chose to study this linguistic phenomenon in the Spanish language because this is the researcher's native language, and therefore his familiarity with the problem being analyzed and the terminology found in the data collected. This fact also gives the researcher an advantage for the purpose of understanding and analyzing the corpus of this study, as the researcher is fluent in both English and Spanish languages. The lexical gap in the Spanish computer language field and how it is filled with anglicisms has been of the interest of this researcher for quite some time now,

especially after taking linguistic courses during a postgraduate degree in this field. The lack of comprehensive researches done in this field, as well as the deeper linguistic understanding achieved by this researcher through a postgraduate degree in Linguistics were the main motivators to conduct the present study.

1.2 Background of the Study

It is a well-known fact that English dominates the field of computers and communication so that "when dealing with technology, English stands above all other languages for several reasons: firstly because of its global presence as a universal means of knowledge and communication and, secondly, because of the technological superiority of some of the countries that speak English" (de la Cruz, Tejedor, Díez & Cerdá, 52-53). It is said that the pressure of the English language over Spanish and the rest of the languages in the world in the field of computer language reached its peak in what is referred to as the informatics revolution, similar in magnitude to the industrial revolutions of the XIX and XX centuries. In fact, the invention of computers has been given an importance and social impact equivalent to that of the television set or the automobile (Posteguillo, 118). A similar viewpoint explained by a different study: "…the pervasiveness of English in the information contained in manuals, tutorials, and instructions is clear. Therefore, the impact of English upon Spanish in computer language is undeniable" (de la Cruz, et al, 53). Within the broad field of technology, this research wishes to emphasize the language used in the field of Informatics: "Spanish language is enormously influenced by technical English, and more recently by English Internet terminology" (Posterguillo, 117). This statement corroborates the fact stated in the introduction of this chapter, by which access to the internet by the vast

majority of people nowadays has increased the function of computers as communication tools, and therefore it has increased the demand for new lexical units to be used in this field.

It is important to clarify that by Informatics, this study refers to the noun which describes the field of Information Science. This field is defined by the MSN Encarta Online Dictionary as: "Study of data organization: the study of the collection, categorization, and distribution of data, particularly computer data". Hence, communication through the use of computers (computer language) falls under this field. It is necessary though, for the sake of clarity, to differentiate the concepts of computer language and computer programming language. Computer language is a specialized language or code utilized by computer users in order to communicate with other computer users. Therefore, while computer language refers to these lexical units used within the field of Informatics that allow computer users to communicate among themselves, computer programming language, on the other hand, is defined by the MSN Encarta Online Dictionary as: "A unique vocabulary and set of rules for writing computer programs". Computer language may include terminology that is considered unique to this field, also known as computer jargon, but this is not to be confused with the different sets of codes available to program computers. Computer programming languages are artificial languages created with the specific purpose of making computers perform certain operations, and therefore they are only employed by computer programmers, not by the bulk of computer users. Computer users don't normally write computer programs, but instead, they apply them to their needs. Some examples of computer programming language are: BASIC, C++, Pascal, etc. Because of this distinction, computer language, even with the inclusion of jargon, has become nowadays a functional living language, employed by everyone that have access to a computer and make use of it with purposes such as communicating with other users.

This communication process can take place in many ways; it can occur through the publication of public blogs or forums, the participation in social networking sites, the use of electronic mail (e-mail) or by joining real-time chat rooms. In all these instances, computer language is employed as an active and living language. A major characteristic of computer language is its dynamicity, as computer language is as dynamic as the field of Informatics itself. Computer language is always evolving along with technological developments in order to cope with the lexical demands of this field. As it is explained further in the body of this chapter, the pace of the natural evolution of the language cannot keep up with the pace of technology, and therefore a deliberate language change takes place.

In the words of McGregor:

> *"With the increasing globalization of English during recent decades, and its status as the international language of business, science and technology, many languages have borrowed, and continue to borrow, considerable numbers of English specialized terms from these domains"* (McGregor, 90).

This borrowing process occurs deliberately by users of the language performing these transformations as the need for new words arises: "In times of rapid social, cultural and technological change, speakers of a language need to add new words to their vocabulary in order to talk about new things that come into their daily lives" (Crowley, 29). When referring to multilingual societies: "For speakers of many languages the most natural thing to do in this kind of situation is simply to copy the word from some other language, though at the same time adapting the sound of the word to the sound system of their own language" (Crowley, 29). It is important to note that even though English is considered the *lingua franca* (a language chosen in a systematic way to allow speakers who do not share a mother tongue, communicate with

each other) of the Informatics field, and that most of its users have been exposed to some degree to this language, one must not assume that they possess proficiency in this language. A great number of underdeveloped countries have access to the Internet, but yet they remain for the most part monolingual, and therefore they do not have the resource of copying words from a different language, unless they are given to them as such. Their contact with the English language, however, allows them to identify lexical units used for specific applications and adapt them to their native language, usually in the form of word loan-blends.

This notion of deliberate language change contrasts with the traditional view of language change, by which: "If we, as speakers of our language, let things take their natural course, our language will inevitably change in one way or another, given sufficient time" (Crowley, 29). In this case, given the dynamic nature of Informatics, natural change is unable to cope with the demand of words by users in this field, and therefore the need to deliberately change the language in order to obtain the lexical units necessary to fill the gaps found in this area of study. As it can be observed, researchers agree unanimously on how the English language holds the leading position as the language of choice in the world of Informatics. Analyzed from a sociolinguistic point of view, and reinforcing the previous statements, Posterguillo declares that English has become the *lingua franca* in this field (Informatics), leaving a multitude of non-native speakers no other choice but to adopt the new terminology coined in English. It is also noted by him the remarkable speed in which these terms are acquired or adapted by other languages. This, according to him, occurs mainly due to the two main linguistics characteristics of the net: first, the fact that nowadays millions of people are interconnected, and second, because all these people have access to a vast amount of information, never made available to anyone before (Posterguillo, 119).

Languages borrow lexical units from English in the field of computer language in more than one way. These borrowing processes occur sometimes in the form of code-switching: "The technical topics are firmly associated with a particular code and the topic itself can trigger a switch to the appropriate code" (Holmes, 38). Even though code-switching is common in the specialized field of computer language, there are other types of foreign language use that are more common, and which are explained furthermore in this study. One must bear in mind that the examples given (in code-switching) are actually metaphorical terms, which are sometimes translated literally, because these metaphors are also recognized as such by the Spanish language (Posterguillo, 128-129). The following statement illustrates the difference between word borrowing and code-switching clearly: "While borrowing involves the adaptation of material from a donor language in a target language, codeswitching involves the use or two (or more) languages in conversation" (King, 85). Also, King explains that codeswitching is the product of two grammars, while borrowing only involves one (King, 86). Some samples of lexical units borrowed from English and used in other languages in the form of code-switching within the computer language field are: "mouse", "windows", "CD-ROM", etc. The terms borrowed from English used in code-switching are mainly nouns, and they retain their original linguistic features and pronunciation.

Researches indicate that languages borrow lexical units from English and use them as a source for neologisms to fill the lexical gap created by technology (Tosi, 219). Therefore, from all the different causes of language change, the changes studied in this research fall under the functional need for change. Crowley explains this cause for language change as: "…a particular language must change in order to meet new demands that its speakers place upon it" (Crowley, 200). In the field of computer language, users put an enormous pressure over languages in general, because languages

contain lexical gaps for terminology that is not native of that language; Spanish in this case. These English lexical units that start being utilized by other languages are referred to as **anglicisms**. Seco states that most old anglicisms actually derive from the French language in the first place, and therefore are considered gallicisms in nature. Modern anglicisms on the other hand are, in their majority, a direct import from English (Seco, 230).

According to Tosi, anglicisms can be transferred to a different language in three ways. The first way is by borrowing the English word and maintaining its original morphology, usually with a limited amount of transformations in the phonetic level. This type of transfer occurs mainly with nouns and acronyms. Anglicisms can also be transferred to another language as a loan blend, in which case the word goes through a morphological transformation process to fit the grammar requirements of the recipient language (Tosi, 220). These loan blends can eventually become neologisms for the recipient language lexicon. In chapter 2 of this study, the inclusion of the new terminology created after these transformations to the borrowing language's dictionary is explained in more detail. According to Finegan: "Borrowed words sooner or later conform to the pronunciation patterns and grammatical rules of the borrowing language" (Finegan, 57).   Another study used in this research also agrees with this process of language adaptation: "We see, then, that like native lexical items, borrowings may undergo various types of change upon becoming part of the lexicon of the recipient language" (King, 108).

The second type of transfer offered by Tosi becomes evident in the case some nouns and especially in the case of verbs. It is said that loan blends occur when "…one of the morphemes, the main lexical morpheme, is borrowed, and the other one is native…" (McGregor, 89). This second type of transformation is the focus of this study. A third type of language borrowing occurs in the case of calques, where foreign words are

translated literally to create a new term in the native language. Since this third type of language adaptation does not involve any phonological or morphological change in the native language, but a mere literal translation from a foreign language, this study does not analyze this phenomenon in much detail. Regarding calques, it is said that: "Also called 'loan translation'; a type of **loanword** that involves translating a term from the language from which it is borrowed into the language into which it is being borrowed" (Jackson, 25). Calques, on the other side, are conducive to the interaction of two languages in a semantic and syntactic level. However, it is important to note that, due to this language interaction, calquing can be conducive to semantic interference. For this reason, chapter 4 of this study explains more in detail the relationship between calquing and morphological productivity, as this relationship is more relevant to the objectives of this study. According to Crowley, this could take place even in societies that are considered fully bilingual, where features of one language are carried over to the other language, creating interference: "The influence of one of the linguistic systems of an individual on the other linguistic system of that individual is referred to in general as *interference*" (Crowley, 256).

As a way of summarizing the different possible processes when explaining the aspects of language borrowing as a lexical source, the literature concur that whenever two languages become in contact, three are the possible outcomes:

> *"These manifestations of language contact phenomena include: codeswitching, where the two languages in contact are kept separate; borrowing, which, even if it may often involve some phonological and morphological adaptations, does not require much cognitive effort; and syntactic and semantic calque, which often involve a mixing of the grammars of the languages in contact"* (Turell, 383).

This study deals with the second outcome described here, where some phonological and morphological changes take place, even if they involve little cognitive effort. It is said that these transformations have little cognitive effort because they occur in a spontaneous and almost mechanical way, as it is explained in the following quote:

> *"For the most part words are formed following general rules and principles internalized by speakers in the process of language acquisition ... However, speakers have the ability to extend the stock of words idiomatically by producing words without meticulously following the standard rules of word-formation"* (Katamba & Stonham, 74).

Because most of these words are not officially recognized by the RAE (Real Academia Española de la Lengua), Spanish entity in charge of regulating the use of the Spanish language, the vast majority of the terms this study deals with are considered as idiomatic uses of it. Nevertheless, some of these anglicisms do eventually become neologisms in the Spanish language, and therefore are accepted by the RAE and included in their official Spanish dictionary, usually in cursive. It is important to highlight that the RAE has preferred to use American English as opposed to British English for its etymological convenience. For example, American English verbs ending in '-ize" have been chosen over British English verbs ending in "-ise", where the verbal ending "ize" has a higher degree of similarity with the adapted Spanish verbs: E.g. digitalize becomes digitalizar. Even though the RAE already lists many of these adapted words, mostly in the form of nouns, such as: chip, interfaz, pixel, web, *hardware* (in cursive), etc, more than a third of anglicisms included in the 22nd edition of the RAE dictionary are written in cursive (Dominguez, 2001).

In the particular case of the Spanish language: "Contact with the English language, especially from the 20th century onwards, has had as a consequence an increase in the

number of words that are borrowed from English to Spanish" (de la Cruz, et al, 52). The reason for this increase is, as it was mentioned before, due to the fact that the field of computer technology was designed and created in the Unites States by scientists who speak, think and communicate in English (Posteguillo, 118). Even from a historical view point, the Internet was designed to be used in English only, as the original seven-bit ASCII code used in the beginning, only allowed to write correctly in one language: English. Not until very recently, with the creation of the universal Unicode, it was possible for other languages to be written properly in the Internet. This historical incompatibility though, has caused Spanish-speaking Internet users to omit frequently the proper orthography that could not be displayed properly in the past, such as accent markings and the correct representation of the Spanish consonant "ñ" (Posterguillo, 122-124). Furthermore, other studies indicate that communication happens so fast nowadays, that it does not leave any time for translations. Scientific and technical novelties are spread rapidly with its original name before a translation can be coined (Montseny, 68). Hence, it can be concluded that the speed of technological developments related to communication in the field of Informatics does not leave enough time for either translations or the coinage of new words to take place, and therefore loan blends become the preferred type of word creation process. Along the same lines, but seen through the eyes of sociolinguistics, it is said that "The rapid turnover in vocabulary and the continual changes in the meaning of words often directly reflect social changes" (Aitchison, 17). Indeed, language mirrors social changes in a population, such as the adoption of foreign lexicon from more dominant languages as a sign of becoming part of a more globalized world. This concept of globalization causes researchers to make safe assumptions such as the following: "…the kind of person who is interested in new technologies probably has some command of English, at least in a passive way as a reader, or has some knowledge of the basic vocabulary of the

language" (de la Cruz, et al, 58). In regards to this type of assumptions, more than one school of thought can be observed. For instance:

> *"Loanwords are normally adapted to the phonological (and phonetic) patterns of the language they are borrowed into, although if the source (or loaning) language is well known to most speakers of the borrowing language, this adaptation does not always occur"* (McGregor, 88).

However, other researchers offer a different sociolinguistic perspective by indicating that users of computer language choose English to express technical terms so that they can display what they consider a high knowledge level in this matter. This can be inferred by the fact that Spanish terms are also available for these users in most cases. Regardless, users opt to choose the English terms instead (Posterguillo, 133).

Extensive research has been conducted on the use of anglicisms in computer language. However, this researcher was able to find only the study conducted by Solis as a research that identifies, and also analyzes the morphological transformations that these borrowed words undergo in order to fit the grammatical requirements of the Spanish language, specifically in the case of verbal formations.

Even though anglicisms are only used in informal discourse, either oral or written, it is important to understand these morphological adjustments, as anglicisms are potential neologisms, and therefore an infinite source of lexicon to any language by effects of word borrowing (Katamba & Stonham, 68). In a semantic level though, loanwords can be quite flexible: "…their meaning need not be identical with the meaning of the word in the source language" (McGregor, 89). Because not many anglicisms have been officially accepted by the RAE, a set of rules for the introduction of these terms does not exist, and this creates anarchy in the process or incorporating new terminology into the Spanish language (Posterguillo, 132). For this reason, Posterguillo suggests that

linguists have roles to fulfill in view of this pressure of the English language from the Informatics field: first he states that linguists should provide a description of these processes so they can be understood better, and secondly, linguists should monitor the diverse linguistic formulas by which new technical terms originated in the English language are being incorporated in other languages (Posterguillo, 134). For this reason, this same author proposes the creation of specialized dictionaries, such as the one he published in 2004: *Peter Collin Bilingual Spanish Dictionary of Computing*. Dictionaries of this nature would contribute to standardize the terminology in the field of computer language by serving as a bridge between the rapid and disorganized growth of anglicisms and the slower process of normative language performed by the RAE (Posterguillo 135). For that reason, this study has the objectives listed below; hoping that by fulfilling them, the phenomenon of word borrowing and, specifically of loan blends, should become clearer to users of the language. By identifying the linguistic patterns and morphological processes found in the terms found in the corpus of this study, this researcher aims at establishing basic guidelines that would allow for their standardization and function in the language.

1.3 Objectives

The objectives of this study are as follows:

a) To identify the morphological patterns of verbal anglicisms used in Spanish computer language.

b) To analyze the morphological adaptation of English loan words into the Spanish grammar system in terms of verbal derivations.

c) To determine the morphological productivity of these anglicisms in contributing to Spanish neologisms in the field of computer language.

1.4 Research Questions

In order to address the objectives mentioned in the previous section, the following research questions are proposed:

a) What are the morphological features of verbal anglicisms in Spanish computer language?

b) What morphological transformations these anglicisms undergo in order to fit the grammar of the Spanish language?

c) How do these anglicisms contribute to Spanish verbal neologisms in the field of computer language?

1.5 Significance of the Study

The aim of this study is to contribute to the field of Linguistics by providing explanations and answers to the research questions proposed in this chapter. These answers would allow linguists and users of computer language to have a better understanding of the grammatical processes involved in the application of anglicisms to the Spanish language in this field. By understanding these processes, new lexicon units borrowed from English can reach some degree of standardization when they are adjusted to fit the phonetic and morphological requirements of the Spanish language. This understanding of the processes involved in the linguistic adjustments of the two languages can be conducive to have official entities such as the REA recognize new terms to be included in the Spanish dictionary. Even in an unofficial level, computer users would be able to understand the reason why anglicisms are incorporated to the Spanish language in certain ways and following certain patterns. Furthermore, the aspect of morphological productivity also provides with a different viewpoint on the

topic that can be useful for the users of the language, as well as for other researchers interested in exploring this area of study. This study aims at filling the information gap of the nature of verbal anglicisms in the Spanish language and the linguistic features of them when they are produced by effects of the loan blend process.

1.6 Theoretical Framework

This study makes use of generative morphology as its theoretical framework in order to explain the phonetic and morphological transformations found in English-Spanish verbal loan blends in computer language. The analysis of the morphological transformations in anglicisms is conducted utilizing Formal Linguistics as the theoretical framework. The work of Andrew Spencer (1991) is used to support this grammatical approach. Specifically, it employs the analytical implements of Generative Morphology (Spencer, 1991). Morphological analysis is, therefore, the most important tool used in this study: "So, morphology has to throw light not only on the structure of established words … but also on that of freshly coined **neologisms**…" (Katamba & Stonham, 67). Although anglicisms are potential neologisms, they must be treated as such when analyzing their morphological structure. For this reason, morphological theory is the backbone and main analysis tool for this study. The works of Spencer and Crowley play an important role in the analysis process of this study.

The aspect of morphological productivity and how anglicisms contribute to Spanish verbal neologisms in the field of computer language is analyzed using the theoretical framework of Bauer. Using this theoretical framework, this study is able to establish the relationship between morphological productivity and the loan blending process. Some examples of these types of loan blends are the verbal blends that use an English root word and blends it with a Spanish suffix to create a new verb in the Spanish

language to fill a lexicon gap. These findings are useful when addressing the third research question of this study. Furthermore, the following statement summarizes the concept of morphological productivity broadly: "The term productivity has sometimes been used to refer to **creativity**, that is, the capacity of all human languages to use finite means to produce an infinite number of words and utterances" (Katamba & Stonham, 74). Also regarding the concept of productivity and how it applies to this study, it is said that "Productivity is the extent to which a pattern is likely to apply to new forms (e.g., borrowed items or novel formations)" (Bybee, 12-13).

The corpus of this study is analyzed taking these two linguistic frameworks in consideration, with the intension of interlinking them for the better understanding of the matter being studied in this research.

1.7 Organization of the Research Report

This research report is presented in 5 chapters: The first chapter introduces the linguistic issue to be studied, as well as the necessary background information to understand it fully. Chapter 1 also provides with the significance of the study and also the objectives and research questions that this researcher has chosen to find answers for.

In the second chapter, this study documents the literary sources reviewed for the understanding and analysis of the data collected. The literature found to be relevant to this study is summarized and its main points highlighted and contrasted with each other with the purpose of finding common grounds among different researchers.

Chapter 3 provides with the corpus of this study, both the primary and secondary data collected. It also explains the application of a survey to verify the use of the data collected in real life. Lastly, this chapter describes the theoretical framework used in

the analysis of the corpus. The two theoretical frameworks used by this study are generative linguistics and morphological productivity.

In Chapter 4, this study analyzes the data collected. This chapter does so by targeting the research questions proposed previously. First, this chapter introduces the main phonetic and morphologic features identified in the corpus. Secondly, it explains the transformation processes found in English words that have been borrowed by Spanish computer language, focusing on the process with the highest productivity level: loan-blends.

The last chapter includes the conclusion for this study, the linkage between the research questions and the findings, as well as recommendations for possible future studies, the limitations of the study and parting words that wrap up the contents of this research.