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NEW CHALLENGES IN THE TRANSLATION OF TERMINOLOGY FOR SOFTWARE APPLICATIONS

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ABSTRACT

English has played a dominant role in the terminology of computers and the New Technologies in the last decades. The growing expansion worldwide of different electronic devices and multitasking smart phones has brought about an increasing number of software applications or apps in the market. Creating multilingual applications is a major challenge for developers and companies as sale revenues are on the rise in this sector. The translation and localisation into Spanish and other languages entails some lexical problems that are analysed in this paper with several examples taken from different apps. The results clearly show a marked tendency towards abbreviated and contracted forms based on length restriction and the unceasing penetration of English terms or Anglicisms into Spanish. Different examples are provided to illustrate the major challenges translators face when localising these terms into Spanish by using different lexical resources. Freedom, creativity, accuracy and precision will be determinant factors in the terminology of software applications for electronic devices in the near future.

Keywords: Software applications, mobiles, terminology, translation, localisation, Spanish.

1. COMPUTERS AND SOFTWARE TERMINOLOGY

Unlike other specialized languages such as business, legal or health, the terminology of computers and the New Technologies (NT) has basically its origins in the last century. During the second half of

twentieth century computers became widely spread and, as a result, other closely related electronic devices experienced a steady growth in both design and applications. The emergence of new computer and technological terms in English has been constantly increasing to such an extent that it has probably become today the most influential jargon on the English language. Some terms have been translated and adapted with more or less success into Spanish and other world languages. But others have been incorporated in its original shape and the adoption of such *Anglicisms* has been very controversial among lexicologists and academics in the last years (Alson 2001, Aguado de Cea 2006, Marquez 2006, de la Cruz 2007)

The Spanish language has been greatly influenced by the computer and NT terminology in English. Several attempts were made to translate such basic terms as *hardware* and *software*, *bit* and *byte*, *e-mail* and *chat* into Spanish. Some Spanish translators failed to foresee the flexibility and long-term consequences of some English lexical resources when coining new technological terms, particularly in the case of compounding and abbreviation (Belda 2002). Thus, although some lexicologists fruitlessly proposed to translate or naturalize concepts such as *hardware* and *software* into *soporte físico* and *soporte lógico* respectively, the continuous growth of new *-ware* related forms such as *shareware*, *bloatware*, *freeware*, *hookware*, *bogusware*, *demoware*, *firmware* or *groupware* proved in the end the inconvenience of considering those terms as isolated units without taking into account other relevant factors such as lexical conversion and coherence (Aguado de Cea 1986, Belda 2001).

The expansion of personal computers and the upsurge of the Internet, video games and mobile phones in the last decades set the path for a new and more specialized type of translation. Localisation as first defined by Esselink (2000) and later described by O'Hagan and Ashworth (2002) has contributed to the creation of new terminology related with this industry, particularly in the fields of video games. This type of specialised translation or localisation is currently facing three massive challenges: volume, access and personalisation (Genabith 2009).

In fact, computer software and video games localisation share several similarities (Mangiron 2006) such as length restriction and the use of the sim-ship model but creativity, originality and freedom play a bigger role in gaming localisation. Games as well as different communication tools are now major components in mobile phones. So, digitally mediated communication such as software, web, video games and smart phones apps has become the object of the localisation industry (Jiménez Crespo 2013).

This paper will focus on the major challenges of translating and localising software applications or *apps* terminology into Spanish. Although some applications were not originally designed for mobile phones, most of them have been recently adapted and are now fully incorporated and widely spread among mobile users. Special attention will be paid to the most important lexical resources used in coining new terms in English and their problems in the Spanish translation.

2. SOFTWARE APPLICATIONS OR APPS AND MOBILE PHONES

Today conventional face-to-face communication has been partly displaced by on-line or digital communication, which is predominantly based on time efficiency and space constraints. Thus, contracting and abbreviating are key factors when coining new terms in modern times. Hence they have become two major challenges that modern languages other than English need to face while adopting and translating new terminology into their own vocabulary.

Computers in a broad sense (PC, laptops, tablets, phones, etc) are now designed and implemented into several electronic devices. Modern mobile phones, also known as *smart phones*, have become the most rapidly growing market and area of expansion in the industry. In fact, some experts estimate an increase of nearly eight per cent of total mobile subscribers *per annum* worldwide (GSMA 2013), overtaking the number of computers sales around the world. So, sales revenues

from the mobile industry are a big target for software developers and companies.

Current multifunctional *smart phones* have incorporated a good number of software applications or *apps*, including programs for instant messaging, on-line chatting, web browsing, music listening and downloading, photo and video editing and publishing, social networking and gaming. The mobile phone industry is on the increase and strongly competing in terms of design, pricing, features and functionalities.

In this paper an *app* will be defined following the *Oxford English Dictionary* as “a self-contained program or piece of software designed to fulfil a particular purpose; an application, especially as downloaded by a user to a mobile device”. Some software developers will consider translating an app to a *locale* necessary to increase their revenues but it may also depend on legal, social and cultural restrictions depending on each market.¹ Mark Wilcox (2012) highlighted the importance of localizing apps thanks to the penetration of smart phones in several world regions, particularly in Asia, and concluded that local app demand is currently undersupplied. In fact, developing multilingual applications will be essential in some countries like India or South Africa.

There is no clear-cut and exhaustive classification of apps due to the development of software applications in the market that challenge any categorization, although *Microsoft TechNet* and *Asset Inventory Services (AIS)* have provided seven major categories and the *GNU Project* has its own list based on the Linux OS. Most classifications are based on usage such as apps related with Communication and Networking (*Skype, Facebook, WhatsApp, Line*), Entertainment (*mp3 downloader, iTunes, YouTube, Free Movies*), Books (*iBooks, Nook, Kindle*), Graphics (*Paint, Photoshop, Image Gallery*), Travel

¹ Following Bert Esselink (2000: 471) the term “locale” here is used as referred to “a collection of standards and settings, rules and data specific to a language and geographical region”.

(*Skyscanner, Tripadvisor, Trivago*), Games (*Angrybirds, Candy Crush, Subway Surfers*), Business (*Business Plan, Stocks*), Science (*Chemistry Lab, Pocket Mathematics*), Food (*Food Planner, Cook's Illustrated*), Education (*Duolingo, Rosetta Course*), News (*BBC News, NY Times*) or Sports (*FIFA 14, Soccer Stars*). Software applications from all those categories have been analysed for our purpose in this paper and references to some of them will be made in the following section.

The number of apps has been constantly growing, there are today over two million apps available in both *Google Play* for Androids and in *App Store* for Apple. A study carried out by *Adjust* (2014) describes life expectancy of an app and predicts that nearly 600,000 new apps alone will enter the *App Store* by July 2015.² According to *Google's Our Mobile Planet Data* the average global smart phone user downloaded twenty six apps in 2013, although countries like South Korea with 40.1, Switzerland with 39.8 and Sweden 39.3 stand out and on top of the list.³

Some high-profile apps like *Facebook, YouTube* or *WhatsApp* are widely known by users of all electronic devices. These applications usually pay more attention to their localized version but others are not even translated, probably because they are very restricted to a specific market and the cost of its localisation. The importance of this business is clearly shown by the number of multilingual localisation services for software applications which are available around the world such as *Applingua, LocTeam, Babble-on, IcanLocalize, OneSky, Translated.net, Apple Developer* or *Smoothlocalize*. Several machine

² *Adjust* is self-described as a company which “delivers app analytics to the world’s largest advertising and media agencies”. The 2014 Report is available at https://www.adjust.com/assets/downloads/AppleAppStore_Report2014.pdf

³ The *Google's Our Mobile Planet* survey was carried out in several countries and included paid as well as free apps, and it is available on-line at http://think.withgoogle.com/databoard/media/pdfs/US_OurMobilePlanet_Research_English_2013_2.pdf.

translation and localisation toolkits may be used for this purpose and more recently some collaborative on-line projects such as *Crowdin*.

The following section provides an analysis with examples of the major problems found in localising some apps into Spanish.

3. THE TERMINOLOGY OF MOBILE APPS: MAJOR CHALLENGES IN THE SPANISH TRANSLATION

Similar to computers terminology, abbreviating in all its different forms (acronyms, clipping, portmanteau or blending, etc.) is one of the most frequently used lexical resources in the terminology of apps designed for electronic devices in English. These abbreviated forms are used in Spanish with their original English shape as in the case of the acronyms *GPS* (from Global Positioning Service), *MMS* (from Multimedia Messaging System), *RSS* (from Rich Site Summary) or *EDGE* (from Enhanced data rates for GSM of Evolution). Most of these acronyms can be easily found in basic commands in Spanish such as “activar el *GPS*”, “añadir fuentes *RSS*” or “Redes *EDGE*”. Occasionally, we may find some efforts to adapt the original English abbreviated form into Spanish as in the example “*Sensor-G*” from the English *G-Sensor* or *GSensor*.

Several computer abbreviations are also used in software applications such as *OS* (Operating System), for example in *iOS* (iPhone Operating System) or in *Blackberry OS*. In fact, the initial abbreviated form in some cases has become a distinctive pattern for some electronic devices as the “i” from *iPhone*, to be found in examples such as *iOS*, *iCloud*, *iPod* or *iPod Touch*, all of them associated with *Apple*. All these abbreviations are similarly used in their Spanish translation and distinctly recognized by mobile users.

Portmanteau words or blending two different words or morphemes into one word are also common in the terminology of software applications designed for electronic devices. A good example connected with the above mentioned terms is *Podcast* (from *iPod* and *Podcast*) used in the English and Spanish versions alike. As

expected, the initial front clipping *app* from *application* may be also be found in combination with many other terms such as *Encrypt App*, *Killer app* or *App Store* in both languages.

Some clipped forms are very specific to mobile devices and have proved to be very productive in recent years as in the case of *geo-* from *geographical* which can be found in the hyphenated forms *geo-location*, *geo-tags* or *geo-dating*, but commonly translated into Spanish without hyphen as *geolocalización* or *geoetiquetas*. Although the use of *geo-* in the terminology of software applications is very recent, similar neoclassical forms from Greek or Latin (*video-* *tele-*, *hyper-*, *multi-* etc.) which are now used as prefixes have produced a considerable number of neoclassical compounds in recent years (Belda 2002). There seems to be no uniformity in the use of hyphens with such neoclassical forms in English and Spanish, and even the same application may offer different alternatives such as *autoguardar* versus *auto-guardar* in Spanish.

Regarding the use of English terms or Anglicisms in the terminology of software applications, they are not limited to abbreviated forms such as *GPS* or *MMS*. Anglicisms are one of the most important challenges in the localization of software applications into Spanish. For example, the original *gadget*, meaning *artilugio* or *utensilio* in Spanish, has now given way to *widget* or *mobile widgets*. The pervasiveness of *widget* in Spanish can be attested in such examples as “plataforma para *widgets*”, “crea tus propios *widgets*”, “*widgets* móviles personalizados” or “afecta también al *widget*”.

Most Anglicisms we currently find in mobile apps in the market have been long in use in computers and software applications such as the terms *cookie*, *tag* or *chat*. Although their adoption into Spanish was originally criticised by some academics and lexicologists who proposed different options, their frequency today in mobile phones is irrefutable as in the examples “aceptar *cookies*”, “mis *tags*” or the most popular “nuevo *chat*”, “eliminar *chat*”, “ocultar *chat*” and “ajustes de *chat*” used by *WhatsApp*, *Google Talk*, *Skype* and *Facebook* in their Spanish versions. Occasionally, some apps will

alternate the English original and Spanish equivalent forms as with “guardar conversaciones” instead of *chats* (*WhatsApp*).

Hybrid forms in which English terms and Spanish words naturally combine are very frequent in most mobile applications, *app* being precisely one of the most productive terms like “vibración en la *app*”, “sonidos en la *app*”, “*apps* para correr” or “compras dentro de la *app*”. Other examples of hybrid forms are “botones de *zoom*” used in *Google Maps*, “Rotación *Multitouch*” in *Google Sky Maps*, “Jugando como: *Guest*” in *Angrybirds Star Wars* or “Filtro *Safesearch*” in *YouTube*.

The choice between the original English term (*app*) and its Spanish equivalent form (*aplicación*) sometimes depends on length restriction which is a major challenge in apps localisation but this factor may not explain all examples. Software developers may sometimes decide to keep the original and distinctive term for branding or marketing reasons as in “Mis *stickers*” or “Opciones de los *Stickers*” (*Line*) or “Street View” (*Google Maps*) in their localised Spanish version.⁴ Not surprisingly, the next step after adopting an English word or Anglicism in Spanish is its partial reshaping just by adding a native suffix to its original form, particularly in the case of verbal forms such as “taguear” (*to tag*), “rootear” (*to root*) or “swypear” (*to swype*).

As explained before, some developers may choose to have their own specific terminology as their mark of distinction by creating such hybrid forms as “swypear” in reference to the virtual keyboard for touchscreen smart phones developed by *Swype Inc.* Once these terms have been partly adapted, other derived forms will come to light as in the example “para aceptar la palabra de la lista, solo tiene que seguir *swypeando*”, with the original form *swype* oddly used as a gerund in Spanish. Likewise, the music identification service for smart phones *Shazam* created an app called *Shazam* with forms such as “toca para

⁴ Experts like Khushak (2014) call attention to the top three priorities for software developers and organisations when localising an application: precise and accurate translation, speed-of-delivery of translation and brand awareness.

shazamear” (from touch to Shazam). As with video games and gaming applications, freedom and creativity are clearly prioritised over conventional rules in the previous examples.

Although Anglicisms and abbreviated forms are frequent in apps terminology in Spanish, calques or loan translations are also common in some software applications. In such cases the English influence on Spanish is less evident but the quality of the output in its translated version is also very poor, as the examples “pagar *para* un amigo” in *WhatsApp*, “*mayormente* soleado” in *Yahoo Weather*, “usar la *aplicación nativa* si está preparada” in *Safari Browser* or the syntax in “activar *para también* usar los contactos ocultos” in *WhatsApp*,

In some cases, English lexical conversion and the capacity to change verbs into nouns, nouns into adjectives, etc. may require the use of prepositions in the localised translation. As a result, the Spanish preposition ‘de’ (*of*) has turned to be a catch-all word which is loosely used with very different meanings as in the examples “modo *de* entrada *de* texto” (*Text Input Method*) or “modo *de* pantalla *de* inicio” (*Start Screen Mode*), thus neglecting other more appropriate prepositions such as *por* or *para*.

Miniaturisation in computers and electronic devices such as mobile phones has created a pressure on translators because of length restrictions in software applications. So, this need for abbreviated forms in Spanish has given way to examples such as “cambiar *bloq.* de pantalla” (*bloq.* for *bloqueo*), “instalar *almac.* USB” (*almac.* for *almacenamiento*), “hora de *últ.* vez” (*últ.* for *última*) or the combination of two or more abbreviated words together such as “añadir *acc dir* a inicio” (*acc dir* for *acceso directo*) or even the more extreme and less transparent “Prese...itivas” (for *Presentacion de Diapositivas*) in *Image Gallery*.

In all the previous examples, string texts had been abbreviated in the Spanish version due to length limitation but when apps fail to meet that restriction users may find examples such as “Notificaciones de *invitaci*” (*invitaci* for *invitación*) in *Google Talk* or “Políticas de

privacidad para *m*” (*m* for *mi web* or *mi sitio web*) in *YouTube* in their Spanish localised version.

4. CONCLUSIONS

All estimates indicate that the number of electronic devices and smart phones in the market will continue growing in the next years. Similarly, software applications or apps are expected to increase as more companies will join the market designing and developing their own products. In a context of market fragmentation, multilingual applications will be essential for some companies to compete in a global world. But some end users may also have their own chance if they successfully create popular apps localised into different languages. There is a need for experts in translating and localising software applications who must keep up with the most recent mobile and social trends. They also need to be aware of the problems and challenges when translating apps into another language due to the amount of new terms that are permanently coined.

Length restriction and time pressure will continue to be key factors in this sector. For this reason, combining, contracting and abbreviating different forms will proliferate in the English terminology of software applications. Certainly, the number of acronyms, clipped and portmanteau words will be enlarged in the near future while they are incorporated into Spanish in their original forms such as *GPS* or *MMS*. Some abbreviated forms will soon be replaced by new ones fostered by emerging technologies. Others will continue producing a larger number of portmanteau and compound words as in the case of *geo-*, *multi-*, *video-*, etc. Occasionally, market segmentation may also determine the use of different terminology by software developers and end users depending on brand loyalty such as *i* in *iPod* or *iCloud*.

The adoption of English terms or Anglicisms will also keep on in Spanish as with the examples of *widgets* or *chats* but they may alternate with some Spanish equivalent forms such as *tag* or *etiqueta*. New hybrid forms of combining English product-based terms with

Spanish affixes will come out to light but they will hardly survive as they are closely associated with very specific products such as *swypear* or *shazamear*.

In the end, the terminology of software applications will evolve to an amalgam of technical terms whose survival will be subject to different emerging technologies, particularly in the case of abbreviated forms, and semi-technical vocabulary in which common words will acquire a new and more specialised meaning. This terminology will rely not only on brand awareness, time pressure and length restriction but also on geographical, cultural and social conditions in each market.

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