

# **The Localisation of Video Games**

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of the requirements for the degree of PhD

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# THE LOCALISATION OF VIDEO GAMES

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It is worth noting that, in some cases, I have been unable to reference and illustrate all the details involved in the localisation of video games due to the legal constraints constantly emphasised by the professional business contacts who have made this research possible. In deference to them, I have had to maintain a high degree of confidentiality.

## **Abstract**

The present thesis is a study of the translation of video games with a particular emphasis on the Spanish-English language pair, although other languages are brought into play when they offer a clearer illustration of a particular point in the discussion. On the one hand, it offers a descriptive analysis of the video game industry understood as a global phenomenon in entertainment, with the aim of understanding the norms governing present game development and publishing practices. On the other hand, it discusses particular translation issues that seem to be unique to these entertainment products due to their multichannel and polysemiotic nature, in which verbal and nonverbal signs are intimately interconnected in search of maximum game interactivity.

Although this research positions itself within the theoretical framework of Descriptive Translation Studies, it actually goes beyond the mere accounting of current processes to propose changes whenever professional practice seems to be unable to rid itself of old unsatisfactory habits. Of a multidisciplinary nature, the present thesis is greatly informed by various areas of knowledge such as audiovisual translation, software localisation, computer assisted translation and translation memory tools, comparative literature, and video game production and marketing, amongst others.

The conclusions are an initial breakthrough in terms of research into this new area, challenging some of the basic tenets current in translation studies thanks to its multidisciplinary approach, and its solid grounding on current game localisation industry practice. The results can be useful in order to boost professional quality and to promote the training of translators in video game localisation in higher education centres.

## **Declaration of Originality**

I, Miguel Ángel Bernal-Merino, declare that this thesis is my own work and is based on the research that I have conducted during 2007-2013, and that it has not been submitted in any form for another degree or diploma at any other university. The information derived from the published and unpublished work of others has been acknowledged in full and exhaustively referenced in the bibliography, gameography, filmography and list of additional references and resources compiled in the final sections of this thesis.

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## List of Acronyms

**3G:** Third generation

**aDeSe:** Asociación Española de Distribuidores y Editores de Software de Entretenimiento

**AI:** Artificial intelligence

**BBFC:** British Board of Film Classification

**CERO:** Computer Entertainment Rating Organisation

**CGI:** Computer-Generated Imagery

**DIGRA:** Digital Game Research Association

**E3:** Electronic Entertainment Expo

**E-FIGS:** English, French, Italian, German, and Spanish

**ELSPA:** Entertainment & Leisure Software Publishers Association

**ESA:** Entertainment Software Association

**ESRB:** Entertainment Software Rating Board

**FIGS:** French, Italian, German, and Spanish

**G11N:** Globalisation

**GALA:** Globalization and Localization Association

**GBA:** GameBoy Advance

**GC:** GameCube

**GDC:** Game Developers Conference

**GILT:** Globalisation, Internationalisation, Localisation and Translation

**GUI:** Graphical User Interface

**HP:** Hit Points

**HTML:** Hypertext Marked-up Language

**I18n:** Internationalisation

**IGDA:** International Game Developers Association

**IP:** Intellectual Property

**L10n:** Localisation

**LAN:** Local Area Network

**LCD:** Liquid Crystal Display

**LISA:** Localisation Industry Standards Association

**LPM:** Localisation Project Manager

**LW:** Localization World

**MLV:** Multi-Language Vendor

**MM:** MultiMedia  
**MMO/MMOG:** Massively Multiplayer Online / Game  
**MMORPG:** Massively Multiplayer Role Playing Game  
**NDA:** Non-Disclosure Agreement  
**NINTENDO DS/DS:** Nintendo Dual Screen  
**NPC:** Non-Playing Character  
**NTSC:** National Television Systems Committee  
**OEM:** Original Equipment Manufacturer  
**OS:** Operating System  
**PAL:** Phase Alternating Line  
**PC:** Personal Computer  
**PDA:** Personal Digital Assistant  
**PEGI:** Pan European Game Information  
**P&L:** Profit and Loss statement  
**PS:** PlayStation  
**PSP:** PlayStation Portable  
**QA:** Quality Assurance  
**SDK:** Software Development Kit  
**SIG:** Special Interest Group  
**SKU:** Stock Keeping Unit  
**SLV:** Single-Language Vendor  
**TILP:** Institute of Localisation Professionals  
**TM files:** Translation Memory files  
**TMT:** Translation Memory Tool  
**TS:** Translation Studies  
**UI:** User Interface  
**USK:** *Unterhaltungssoftware Selbstkontrolle*  
**VO:** Voiceover  
**W3C:** World Wide Web Consortium  
**WAP:** Wireless Application Protocol  
**WYSIWYG:** What you see is what you get  
**XML:** Extensible Mark-up Language

# Chapter 1

## Introduction

Multimedia interactive entertainment software, most commonly referred to as video games, first became popular through gaming arcades in the United States and Japan in the late 1970s, with unforgettable titles such as *Pong* (Atari 1972), *Space Invaders* (Taito 1978), and *Pac-Man* (Namco 1979), and quickly spread to other countries such as Germany, France and Spain during the following decade. High level computing was still in its early stages, and due to the fact that it was mostly a US invention, the information displayed on screen was written in English. This was also because most games were developed in the US and for the US market, which was the only one for some time and remains the largest to date. Arcades began to open in most cities, and youngsters poured into funfairs all over the developed world in order to play the latest coin-operated interactive games, undeterred by the foreign words on screen. Luckily for fans, these arcade games (as the good old classic titles are now called) used to have rather simple mechanics and most players could learn to play them, despite their poor or non-existent knowledge of English.

Things have changed dramatically and nowadays video games are a multi-billion dollar industry catering for home entertainment markets, as well as arcades, portable devices, and online players. It is no longer an option to offer English-only games, because growing competence means that the market share is increasing for the providers, who, in turn, are more in touch with consumers and their needs. Although it is still possible to find games that have intuitive mechanics and control schemes, the game experience is not only concerned with mere button mashing, but rather with the immersion of the player in the game world, however briefly. Video games have become far too complex for fans to guess what they are supposed to do to derive the most they can from the game, beat it, and enjoy the time spent doing it. Most video games, even those that are predominantly action-based, have long manuals, complex controls, and rich storylines with many characters, so as to engage players and encourage gamers to keep on playing, to buy the next instalment of the series, to download the expansion packs, and to watch out for future releases from the same developer or publisher. *World of Warcraft* (Blizzard 2004-13), for instance, is an immensely popular game that can only be played online after paying a monthly fee. This game has more than three million subscribers and it allows for thousands of gamers playing together and interacting with each other at any one time.

The game publishing industry is slowly realising the crucial part that good language translation and product localisation can play in boosting sales globally, opening new markets and expanding franchises. Nonetheless, some developers still seem to be unable to integrate the best localisation practices into their structures and academics conducting research in the field of interactive entertainment are thin in the ground. The reasons include a mixture of the financial and the notional, and arguably include the misjudgement of the importance of translation and its impact as a factor in conveying the feel of the game and influencing the

players' appreciation of the product, as well as increasing their loyalty to the brand. In the current industry landscape, most game developers and publishers need to outsource the translation of their products to single- or multi-language service providers specialising in the localisation of utility software, websites, desktop publishing (DTP), voice-over recordings and video games. These companies can also offer advice on platform compliance standards, country-specific age ratings, legal frameworks, and similar information that is important for the integration of a product in the target culture.

With regards to language specialists, the video game industry requires a translation professional with an array of skills rather different from other areas of the established language transfer profession. The translator of video games needs to have good computer skills in order to work with different file formats and platforms, as well as to be able to translate a variety of textual types ranging from the promotional to the creative, the didactic, the technical and the literary. Although these skills may not in themselves be new to the field of translation, their convergence in this emerging specialisation is unusual and deserves to be studied separately and on its own merits. In this PhD thesis, the localisation of multimedia interactive entertainment software and the industry to which it is linked are analysed, resulting in the emergence of a new type of translation practice, a practice which could conceivably result in a change in the perception of translation in the 21<sup>st</sup> century.

Needless to say, until very recently, there has been no specific professional or academic training for this type of translation, although some higher education institutions have started to offer short courses and modules as part of their programmes. However, the game development, publishing and localisation industries are still somewhat reluctant to allow academics into their professional circles due to time pressures and fears of a confidentiality

breach, or simply due to lack of understanding of how collaboration might help them to streamline processes and to enhance overall best-practice. One of the signs of this lack of foresight is the fact that some game publishers and localisation companies are still very keen to employ untrained students with ‘some’ language skills, hoping to obtain maximum quality and productivity with minimum investment. These high expectations are rarely met and player forums are quick to denounce the deficient quality of localisation only a few hours after international release date. On the bright side, the game industry at large has witnessed some positive changes in recent years with the celebration of events such as the annual GDC game Localization Summit, where decision-makers are starting finally to realise the rather obvious idea that, if the language quality of the original, normally English or Japanese, is important for storytelling and immersion, and consequently to income generation, the same must apply for any other language version.

### **1.1- About video games**

Some people, unacquainted or uninterested in entertainment products belonging to popular culture, may still hold the notion that video games are essentially trivial and have no particular significance or interest as a subject of research. The reality is that this perception might have been true in the past, but, by the end of the 1990s, the situation had started to change thanks to several factors, including: the development of game studies with the creation of leading research centres like the Center for Computer Games Research at the University of Copenhagen (<http://game.itu.dk>); the publication of specialised journals such as *Game Studies* (<http://gamestudies.org>) and *Games and Culture* ([www.gamesandculture.com](http://www.gamesandculture.com)); the boom experienced by Translation Studies and particularly by Audiovisual Translation

(Díaz-Cintas 2009); the ever-growing industry revenues; the application of interactivity to educational resources; and the health risks associated with gaming addiction, side by side with the healthy application of fitness and brain training video games. The fact that ludic activities can be found in all cultures, regardless of their technological advancement or their geographical location, qualifies games in general, and video games in particular, as a truly fascinating matter for study. Ludic phenomena are plentiful; most children, and a growing proportion of adults, play some kind of game on a daily basis, be it a fully-fledged football match, a game of solitaire on the computer, or a quick *sudoku* on the way to work. If we think of all the games with which we are familiar, we will soon realise that they permeate many activities and situations, from card games, board games, and ball games, to quiz games, miming and signing games, sports games and drinking games, with a long etcetera. And, what is more, any activity can in effect be turned into a game.

Although there are games for only one player, most games tend to be inclusive and are designed for two or more participants. Sutton-Smith (1997: 214), an academic who has studied play as an essential concomitant to learning, considers that “play is difficult to understand because it is ambiguous”, it has different roles and rules depending on a variety of aspects such as its function, form, and history. From Sutton-Smith’s (ibid.) point of view these ambiguities are “instigated by the seven rhetorics of play: progress, fate, power, identity, imaginary, self, frivolity”. In his discussion on the nature of games, the author includes aspects of adult life, such as power, productivity, and social progression as components of play that children practise from a very early age in their games. The applicability of these seven rhetorics in our day-to-day lives varies, but there is little doubt as to their influence in our social performance, since they help us to test and develop our skills in a safe environment. In the more concrete arena of video games, they have not only

highlighted differences in preference, in terms of the themes and entertainment activities they focus on, but they have also emphasised the way in which language is entirely intertwined with the game experience as a whole. Thanks to technological advances in this field, video games are able to bring to the fore the social aspect of play, enhanced by game engines that enable communication across frontiers and time zones via the almost compulsory online playing option for top of the range games.

## **1.2- About the goals of this research**

Despite their prominence in society, there has been a lack of academic studies in the field of video games, especially from a cross-cultural and linguistic point of view. The fact that video games have suffered from a certain stigmatisation in the academic world until quite recently means that the research in the area is scarce and still has to develop considerably. Although, in the present thesis, ludic activity as a broad area of study is discussed, the main objective of this research is to focus on a rapidly growing digital sub-field of games, the video game, and on its linguistic and cultural adaptation to the requirements of importing countries with a different language and cultural environment. The various aims are to investigate the adaptation process, to map professional practice in order to detail the challenges localisation companies have to face when working for the multimedia interactive entertainment software industry, and to discuss the implications of this (new) practice for translation studies and translator training.

Owing to an awareness of the lack of an encompassing body of works functioning as a solid base for an in-depth investigation of video game localisation within the wider field of



Translation Studies, the foundations of the present research have been laid by empirically mapping the many differentiating features that set aside game localisation as a new professional practice, which also requires a new professional profile. Bearing in mind the many areas of knowledge involved in the process of transferring video games from one culture to another, my approach is multidisciplinary by necessity, in that it constitutes an attempt to explain the various multifaceted issues involved. Admittedly, in this study, more time and attention have been devoted to translational issues, both linguistic and cultural. I believe these to be at the core of game localisation, but they have been carefully interwoven with other features relevant to the profession and the game industry in order to illustrate how closely they are all linked, and how essential it is for the industry to take all these points into consideration, and view them as a whole, if the next generation is to benefit from them in the localisation of their games. Bearing all these points in mind, the aim of this thesis is:

- To bring the translation of video games into the academic spotlight by mapping current game localisation professional practices from the various viewpoints of the stakeholders involved in the process.
- To raise awareness among academics concerning game localisation and to position the translation of video games firmly as a discipline within the field of Translation Studies, with the ultimate goal of encouraging its inclusion in translation curricula.
- To encourage the game industry to continue the internationalisation of its products, taking languages and cultures into account, for example through the development of tools within their game engines specifically designed with language specialists in mind, so as to facilitate multilingual localisation.

- To apply, if only briefly, some of the models of existing translation theory to the localisation of video games in order to check their applicability and suggest possible adjustments.

### **1.3- About the structure of this PhD thesis**

In addition to the introductory chapter, this thesis is made up of six chapters entitled as follows: games, markets and translation; the translation of multichannel texts; the translation of multimedia interactive entertainment software; the industrial process of game localisation; training and research; and conclusion. The content of each chapter is briefly summarised in the following paragraphs.

A thorough overview of the penetration of multimedia interactive entertainment software in today's culture is presented in Chapter 2, from the top ranking games linked to blockbuster movies, to the growing mobile market. The use of the terminology connected with this type of leisure products is explored and the way in which it has gained mainstream recognition in recent years through award institutions such as BAFTA is highlighted.

The issues that arise when having to translate the various types of multichannel text encountered in the market are discussed in Chapter 3, and the way in which each of them relates to the translation of video games is analysed. The texts analysed include films, both subtitled and dubbed, literature and comic books, as well as websites and utility software. Finally, the terminological issue is analysed in an effort to find out how useful and appropriate the terms utilised to refer to the translation of these texts are in practice.

Chapter 4 is devoted to the analysis of the linguistic assets included in video games and their translation into Spanish, although other languages are occasionally used in order to illustrate the particular matters under discussion. This chapter is divided into three sections that deal with the wide textual variety encountered within each game, the unique characteristics of multimedia interactive texts, and the creative challenge facing the translator in order to maintain the playability and enjoyment of the players in the different language versions of the game.

Chapter 5 focuses on the industrial and technical issues surrounding the translation of games for different locales. Although some of the topics analysed in this chapter are neither strictly linguistic nor translational, it is important to understand how the game localisation industry works because it directly influences the performance of translators and testers and, therefore, has a significant impact on the end-product. This chapter has been divided into thirteen sections dealing with: the history and development of game localisation as an industry, localisation within the industrial game development process, the creative and translational impact of national age rating board classifications, the localisation options open to the game industry, the assets and instruction kits enabling localisation, the complex process of final quality assurance or linguistic play-testing, the obstacles for quality translation stemming from the way the game industry works, the added constraints imposed by the simultaneous shipment of all the language versions, the inadequacy of most tools used in game localisation projects, the make-up of the game localisation job market, the longstanding activity of fan localisation, the strategies used by the software localisation industry benefiting the game industry, and the community-based initiatives to create a document pioneering the standardisation of the translation and localisation of video games.

The current situation relating to the training of translators for the game localisation industry is dealt with in Chapter 6. The efforts currently being made by universities and entertainment software companies in this respect are analysed, and a number of recommendations concerning a closer collaboration of these two stakeholders in order to obtain better results are put forward. Finally, I suggest ways in which higher education institutions can integrate game localisation modules in their programmes and curricula.

Chapter 7 offers a summary of the main points discussed in the thesis and the conclusion to the long period of combining research, networking, publishing, promoting and teaching the localisation of video games.

This PhD thesis includes the lengthy list of references that have made it possible, not only scholarly books and journals, but also industry reports, game press and newspaper articles, as well as game and film references. The final part is comprised of three appendixes. Appendix 1 consists of a full glossary including the definitions of the most frequent terms and acronyms used in the industry and in this research. Appendix 2 includes an extensive list of valuable additional resources and websites relating to video game events and industry bodies, translation and localisation sources, tools for project management, translation and bug-reporting, and training programmes which are offered both by higher education researchers and industry professionals. Appendix 3 shows a short sample of game code used to contextualise the issues analysed in Chapter 4.

## **Chapter 2**

### **Games, Markets and Translation**

Multimedia interactive software encompasses a wide variety of products, from the games preinstalled on our personal computers to those on our mobile phones; from corporate services websites to government information, lottery and gambling websites; from educational resources and private professional training to the purely recreational, and from the applications enjoyed by all ages to those rated ‘adults only’. This research focuses specifically on those products which are widely available to the general public and are most commonly referred to as video games. Due to market pressures, many games will often have a ‘port’ (rendition) on many of today’s different gaming platforms - Sony’s desktop PlayStation 3 and Portable PS Vita, Microsoft’s Xbox 360, Nintendo’s Wii and Nintendo DS - as well as on personal computers (mostly based on Windows operating system, but also Mac OS and Linux OS), mobile phones and tablet computers .

So as to capitalise on their marketing campaigns and to minimise the effects of piracy, game publishers aim for a simultaneous international release, often abbreviated as ‘sim-ship’, in a minimum of five languages (English, French, Italian, German, and Spanish, often referred to in industry circles by the acronym E-FIGS). Despite its rather tentative beginnings, the game industry has grown rapidly in many countries around the world, and as is shown in Figure 1

below, it is a successful contender as a leisure occupation, together with socialising with friends, reading, watching television, going to the cinema, listening to music, and web browsing.

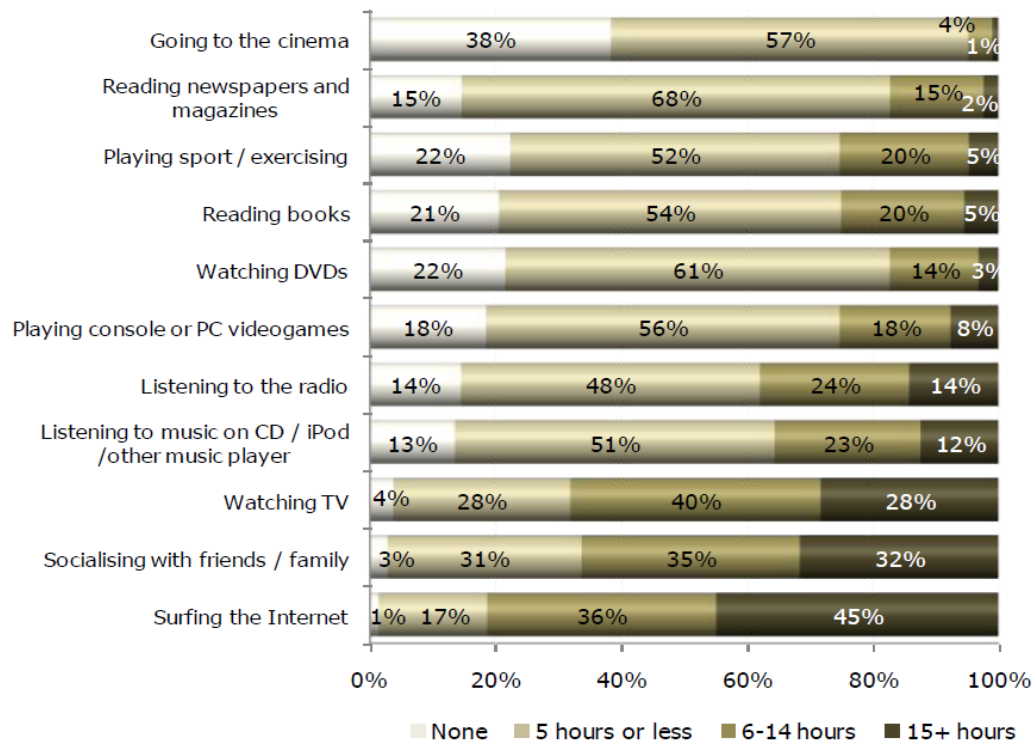
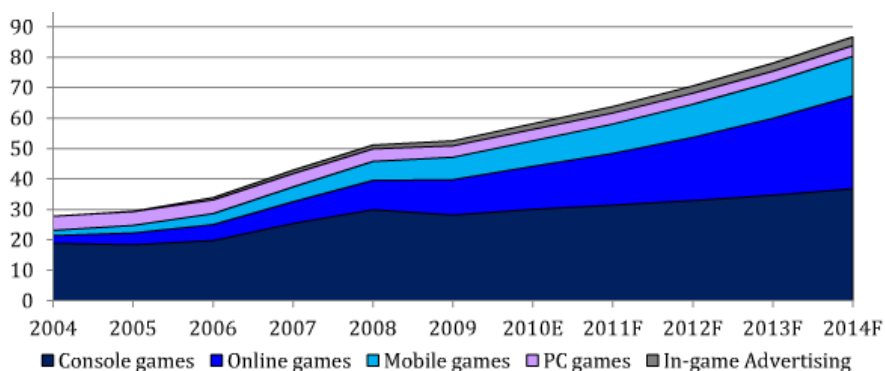


Figure 1. Time spent by gamers on leisure and entertainment (ISFE 2010: 44)

According to the consumer research report published by the Interactive Software Federation of Europe (ISFE) in 2010, interactive software sales in the European market exceeded the €8 billion mark in 2009 ([www.isfe.eu/industry-facts](http://www.isfe.eu/industry-facts)), while revenue in the United States reached \$15.9 billion in the same year (according to ESA’s diachronic analysis published in 2011), and €7.4 billion in the Asia-Pacific region in 2006 ([www.theesa.com/facts/index.asp](http://www.theesa.com/facts/index.asp)). When all the platforms and related business opportunities were calculated, the total revenue for the global video game sector for 2011 was forecasted at \$280 billion PWC (PriceWaterhouseCoopers)<sup>5</sup>. Figure 2 (below) shows the known revenues from all game

<sup>5</sup> See [www.pwc.com/gx/en/global-entertainment-media-outlook/segment-insights/video-games.jhtml](http://www.pwc.com/gx/en/global-entertainment-media-outlook/segment-insights/video-games.jhtml).

related markets and their foreseeable steady growth, as published in 2010 by PWC, one of the most reputable firms engaged in market research.



**Figure 2.** Global video game sector revenue forecast (PWC 2010)

An important factor concerning Figure 2, seen from the point of view of this research, is that more than two thirds of this income was generated by localised versions of original video games, thus highlighting the relevance of localisation to the entertainment industry in general and the video game industry in particular. There can be little doubt that localisation is a prominent and growing new professional practice for translators, and that there is a role for translation studies and universities in terms of the training required for this new skill as well as the research into a professional activity which, in certain aspects, apparently runs counter to previous theoretical models for translation.

Given the relative youth of the game industry, and in order to carry out research in this novel area, it is important to identify and distinguish between the terms employed in this field and to clarify the realities embodied by these terms, so that the complexities and nuances of the localisation of video games can be fully appreciated and understood. The most common terms used to refer to multimedia interactive entertainment software are explained in the following pages in an attempt to provide a taxonomy that could be of assistance when used for further research in this area.

## **2.1- Towards a classification of terms relating to video game products**

Although there are several books on video games and their design currently in existence, such as Crawford (2003), Simons (2007), and Thompson *et al.* (2008), none of them really deals with basic terminology, a factor which points towards the assumption that everybody apparently agrees on the principal terms and the right context in which to use them. The issue is that the wide variety of terms currently in use concerning this ever-popular pastime, refers to slightly different realities since they follow different criteria, favouring one particular viewpoint over another. As a result, there is some overlapping of definition, a fact which necessitates clarification in order to lay the foundations for a clear understanding of the material discussed in the following chapters as well as to clarify the essential object of study of the present research. In the following pages, the terms in question have been divided into two groups according to how comprehensive or specific they are. Consequently, they have been arranged under the two labels: comprehensive terms and narrow terms.

### *2.1.1- Comprehensive terms*

The following terms have been grouped under the label of ‘comprehensive terms’: ‘game’, ‘electronic game’, ‘digital game’, ‘multimedia entertainment software’, and ‘video game’. All of these are terms that can be understood to be more inclusive not only across age ranges, but also across game types, modes of play, complementary equipment, devices, gadgets and platforms.



### 2.1.1.1- Game

The term 'game' can be considered as the hypernym par excellence. Though the act of playing is universal, the themes and activities themselves may not be. Games may involve one or many players and, although there is normally an element of competition, their main objective is the amusement of the people participating actively by playing, or passively by watching those playing. There are many types of games, for example cards, football, billiards, catch, charades, marbles, I spy, dice, connect 4, grownups, video games and many more, each involving different rules and props. Some of these have probably existed for millennia; others may be invented, at any point in the future, by anybody.

Recently, a considerable body of research has been undertaken into developmental psychology, a part of which has focused on play therapy in which games are perceived as a way of learning life-long skills in a safe environment; it is in this context that new tools and technologies, such as video games, have a definitive role to play. In a review, which he coordinated on Information and Communication Technology (ICT) in early years education, Whitebread (2006: 96) states that adventure and simulation games "have much to offer in relation to the development of children's abilities as creative problem solvers". Some of the most internationally comprehensive and enduring examples might include games such as catch, chess, or general role-playing, and this inclination towards recreational play among humans is currently being utilised both by industry and society in general in order to enhance the process of learning. These games are undertaken for serious purposes, and are, thus, referred to as 'serious games'. They are mainly used to assist professional training and for raising awareness of social issues. Some of these games can be found on Tagd ([www.tagd.org.uk](http://www.tagd.org.uk)), a UNICEF UK website initiative aiming to provide "a network of young

people in the UK who are committed to children's rights". Further examples of socially minded video games can be found in the official websites of Unicef Canada<sup>6</sup> and United Nations CyberShool Bus.<sup>7</sup> These games are explored further in Section 2.2.

According to certain authors, such as Wittgenstein (1958), the activities we call games have very little or nothing in common. This may be one of the reasons why, despite the many attempted definitions and descriptions of games that have been proposed over the years, we are still unclear as to how to identify and categorise them, apparently an essential prerequisite for a discussion of their localisation for the enjoyment of other cultures. Huizinga's definition (1950: 15), one of the earliest and most often quoted, looks at games from a rather ethnographic perspective:

A game is a free activity standing quite consciously outside 'ordinary' life as being 'not serious', but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner. It promotes the formation of social groupings which tend to surround themselves with secrecy and to stress their difference from the common world by disguise or other means.

Today's video games would certainly fit within the free formation of social groupings and the absorbing elements mentioned in this definition, although, in some cases, they could be seen to challenge the idea of 'no material interest', since there are many individuals and companies whose main commercial activity is game playing. Their main objective is to sell game fans access to advanced levels and game avatars within the various playing universes that players either do not have the time or the skills to obtain themselves.

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<sup>6</sup> See website [www.unicef.ca/en/teachers/article/global-classroom-learn-about-unicef](http://www.unicef.ca/en/teachers/article/global-classroom-learn-about-unicef).

<sup>7</sup> See [www.un.org/Pubs/CyberSchoolBus/qui.html](http://www.un.org/Pubs/CyberSchoolBus/qui.html).

Another definition, more recent and perhaps more in touch with modern games, is the one proposed by Juul (2003: 34):

A game is a rule-based system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels emotionally attached to the outcome, and the consequences of the activity are optional and negotiable.

What both definitions have in common is the certain or even intense emotional involvement of the players, something that is very relevant to the game industry and the game localisation profession alike, because the translated versions of the games must elicit the same, or a similar kind of, response from their local consumers, maintaining the “look and feel” (LISA 2003: online)<sup>8</sup> of the original game. This issue is explained and analysed in Chapter 4.

Due to their ever increasing popularity and the large amount of media exposure that video games have acquired over the past ten years or so, the term ‘game’ is recognised as the most generic within the realm of recreational activities. However, it has also become a shortened form used to refer to the young multimedia interactive entertainment software industry, often referred to as the game industry by both the specialised and the general press. It is a frequent occurrence that, nowadays, many people use the superordinate or hypernym ‘game’ to refer to ‘video game’. We frequently encounter this use of the term in the names of international conferences (such as the *Game Developers Conference*), magazines (*GameDevelopers*), TV channels (*Game Network*), retailers (*Game*), TV programmes (*GamerTV*), video game press websites (*Gamespot*), and game localisation companies (*Gameloc*), to name but a few. The shorter term seems to be very popular and is well understood by the general public, not only in the English speaking world, but also in Spain, and many other Hispanic countries, where

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<sup>8</sup> See [www2.ilch.uminho.pt/falves/documentos/LISAprimer.pdf](http://www2.ilch.uminho.pt/falves/documentos/LISAprimer.pdf)

we come across local branches of the same franchise (such as the retailer Game) and translated versions of publications and websites (EuroGamer.es) that retain the English name and branding, capitalising on the ‘cool factor’ that is still associated with the use of English words. Since this is a study focusing on video game translation and localisation, the term ‘game’ is always used in these pages to refer to ‘video game’ (unless stated otherwise) in order to avoid repetition. Nuances will be explained if and when necessary.

### 2.1.1.2- *Electronic game*

‘Electronic game’ is probably the most comprehensive term within early twentieth century game technology, even though the original game machines were actually electro-mechanic, since they had no computer chip. Strictly speaking, any interactive game operated by silicon-chip computer circuitry is an ‘electronic game’. However, not all ‘electronic games’ are ‘video games’, since the ‘video’ part of the term refers to the primary feedback device, that is, a television set or an LCD screen. Therefore, the fruit and darts machines which furnished many recreational premises and clubs for decades are not ‘video games’ but ‘electronic games’. The first of these machines, often referred to as the ‘one-arm-bandit’, was invented in 1887, and the first slot machine, in 1891 ([www.arcade-history.com](http://www.arcade-history.com)). In fact, these machines were so popular at the time that, by 1911, they had been banned in some American states, a fact which ironically helped to pave the way for the later development of Las Vegas as the biggest casino city in the world (*ibid.*).

Pinball machines became very popular after World War II, and although their ancestor the ‘Bagatelle-table’ dates from the late 19<sup>th</sup> century, the first coin-operated pinball machines did

not appear until 1931 (BMI Gaming)<sup>9</sup>. Nowadays almost all recreational machines have a digital component, and many may utilise a video display of some sort, but they belong to the electro-mechanic, or electronic, game group and are not included in the present research, where only modern mainstream video games are discussed.

### *2.1.1.3- Digital game*

The term ‘digital game’ is a fairly recent term deriving from the fashionable adjective ‘digital’; examples of its use would include: ‘digital camera’, ‘digital era’, ‘digital generation’ and the like. The term ‘digital’ has the virtue of referring to the technology that makes it possible, and, as such, when used in its more generic form, it encompasses a number of categories which include ‘computer games’. It is not, however, a term widely used in the game industry, although it can be found sometimes on websites that specialise in the study of game principles and theories, such as [www.ludology.org](http://www.ludology.org). It is also the preferred term used by DIGRA (Digital Game Research Association)<sup>10</sup>, because it is able to “embrace arcade, computer, console, and mobile games in all their diversity” (Kerr 2006: 3).

### *2.1.1.4- Multimedia interactive entertainment software*

The term ‘multimedia interactive entertainment software’ is a descriptive one which aims for a clear delineation of the parameters of the concept and products to which it refers. Any software, as the creator and controller of a virtual machine, is always interactive in the sense that it requires activation by a user. It is also the case that entertainment is, in essence, interactive since it often involves two parties: the consumer requiring amusement and the

<sup>9</sup> See [www.bmigaming.com/pinballhistory.htm](http://www.bmigaming.com/pinballhistory.htm).

<sup>10</sup> DiGRA is the association for academics and professionals engaged in research into digital games and associated phenomena. Official website: [www.digra.org](http://www.digra.org).

product or service providing it. ‘Multimedia’ is a noun that frequently functions as an adjective. According to the *Oxford English Dictionary (OED)*, the term appeared in the 1950s. A few years later, it was adopted by the computer industry to highlight the idea that their technology offered not only word processing on screen, but also audio and image editing, and not long after that, music and video playback, as well as three dimensional graphics. The term ‘multimedia’ is almost always linked to, or associated with, technology, and as far back as the 1970s, video games developers have made a point of capitalising on technological advances embracing the whole computer industry. Nowadays, most video games combine rich user interfaces, realistic 3-D graphics, 5.1 speech, music and sound effects.

‘Software’ could be described as a set of instructions that tell a computer what to do. The term differentiates these features from ‘hardware’ which encompasses the physical components of a computer system. Since computers were initially invented as a work tool with the functional aim of storing, retrieving, and processing data faster than humans could, it is important to add the ‘entertainment’ qualifier, so as to frame these software products (video games) clearly at the same level as the products from the cinema and the TV industries.

‘Multimedia interactive entertainment software’ is, although admittedly long-winded, an accurate term with which to describe video games. It incorporates the key concepts that set video games apart from other forms of entertainment, namely that they are multichannel entertainment products, with an emphasis on interactivity and the consistent feeling of commanding the game experience in contrast with what happens with the more passive experience of reading books or watching films.

### 2.1.1.5- Video game

The *Encyclopaedia Britannica* ([www.britannica.com](http://www.britannica.com)) states that the term ‘video game’ can be used in a generic sense to refer to “electronic games, computer games, and video games”. The term itself apparently suffers from some orthographic instability and can be found written as a single word, ‘videogame’; as a hyphenated word, ‘video-game’; or as two words, ‘video game’, without any apparent difference in meaning. The *OED* favours the two-word term because it seems to be more consistent with other similar terms in the English language such as ‘card game’, ‘football game’, or ‘board game’.<sup>11</sup> The two-word version is used most widely, both by the general public and by the game industry, and is the spelling most commonly found in the specialised press. For these reasons, it has been chosen as the preferred term and spelling for the present study.

The term video game did not appear until the late 1960s when, as he recalls on his website, Ralph Baer, chief engineer at Sanders Associates, came up with the idea of making “home video games” or “TV games”, using regular television sets ([www.ralphbaer.com](http://www.ralphbaer.com)). Although similar terms such as ‘video arcade games’ had already been in circulation for some time, owing to the popularity of arcades as a location at which they were played, it only appeared in print for the first time in *Business Week* on the 10<sup>th</sup> of November, 1973 ([www.oed.com](http://www.oed.com)).

When it comes to a definition, most sources seem to agree:

- The *OED* defines video game as “a game played by electronically manipulating images displayed on a television screen”. ([www.oed.com](http://www.oed.com))

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<sup>11</sup> See [www.merriam-webster.com/dictionary/game](http://www.merriam-webster.com/dictionary/game).

- The *Merriam-Webster Dictionary* describes a video game as “an electronic game played by means of images on a video screen and often emphasizing fast action”.  
([www.merriam-webster.com](http://www.merriam-webster.com))
- The *Encyclopaedia Britannica* states succinctly “also called computer game or electronic game, it is any interactive game operated by computer circuitry”.  
([www.britannica.com](http://www.britannica.com))
- *Wikipedia* specifies that a video game “is an electronic game that involves interaction with a user interface to generate visual feedback on a video device”.  
(<http://en.wikipedia.org>)

These definitions, although technically correct, are too broad to illustrate the variety and complexity of video games. None of them takes into account the apparent orthographic instability, evidence, perhaps, both of their complexity as well as testifying to a lack of interest among lexicographers. Even game scholars, such as Frasca (2001: 4), have put forward rather general definitions, stating that video games include “any form of computer-based entertainment software, either textual or image-based, using any electronic platform such a personal computer or console and involving one or multiple players in a physical or networked environment”. Taking into account the variety of today’s game industry, a definition is likely to become broader before scholars and professionals are able to reach a unanimous agreement on the most appropriate terms.

Indeed, the debate continues with game studies researchers, such as Newman (2004: 91), apparently struggling to distinguish between the play elements and the narrative aspects of the games. For instance, terms such as ‘cyberdrama’ are used within one of the most recent related disciplines, ludology. The cybernetic nature of the medium is highlighted, with an



additional allusion to the dramatic conflict requiring the intervention of the gamer by way of a machine in order to be resolved (Murray 2004). Mateas (in Wardrip-Fruin 2004: 19) prefers the term 'interactive drama' because, from his point of view, video games are stories that are unravelled by the player's unique reactions, prioritising, therefore, the idea of constant intervention by the player.

However, although it is true that some games do not tell much of a story, they do require a variety of skills, however, such as good hand-eye coordination, puzzle solving skills, dancing in tempo or singing in tune. The demographics of video games are equally varied, being evenly spread among all age groups and genders. In fact, according to both the Interactive Software Federation of Europe ([www.isfe.eu/industry-facts](http://www.isfe.eu/industry-facts)) and the Entertainment Software Association ([www.theesa.com/facts/index.asp](http://www.theesa.com/facts/index.asp)), the average age of players in the EU and the US is almost forty; 42 per cent of players are female. According to PEGI ([www.pegi.info](http://www.pegi.info))<sup>12</sup> only 9.8 per cent of the total games sold in Europe in 2011 are rated for adults only.

In contrast with the image portrayed by anti-video game lobbies and tabloids, many games involve sports activities, strategic thinking, resource management, problem solving, teamwork, driving, world building, group loyalty and role-playing. This wide array of activities requires different skills from players, and caters for different tastes and types of play. Immensely popular games, such as the *Brain Training* franchise published by Nintendo (2005-2011), have proved that activities normally associated with school homework (such as reading, spelling, counting, and basic algebra) can be turned into a successful video game. There are, in fact, so many different games (the subject matter being almost as broad as human activity itself) that it is difficult to suggest a comprehensive, all-encompassing

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<sup>12</sup> See [www.pegi.info/en/index/id/1068/nid/44](http://www.pegi.info/en/index/id/1068/nid/44).

definition. Despite being an extremely interesting topic, the task of defining the concept of play and games, and their implications from an anthropological and a philosophical point of view is, strictly speaking, beyond the scope of the present research.

For the purpose of this study, a tighter and more functional definition is suggested: a video game is a multimedia interactive form of entertainment for one or more individuals, powered by computer hardware and software, controlled by a peripheral (a control pad, a keyboard, a mouse, a joystick, a game pad, a motion controller, a steering wheel, a video camera, etc.), and displayed on some kind of screen (a television set, an LCD or plasma monitor, or a portable display). They can be used as entertainment or as part of a serious educational or training programme (they are sometimes referred to as ‘edutainment’ or ‘serious games’), with the advantage that they are fully independent computer applications offering detailed feedback to players in terms of their performance (through sound, animations, videos, or written reports) with regards to the activities for which they have been programmed without any external supervision. Thematically, they can portray any topic, activity, or parallel universe which the human imagination is able to conjure up and, although it is true that video games started as basic action-driven pastimes through arcades, this is no longer the case, and new gameplay has been developed in order to incorporate complex narratives, as well as cooperative team-playing, strategising, etc.

### *2.1.2- Narrow terms*

There is a second group of terms with a much narrower scope in which video game products are compartmentalised even further. Four main categories into which games can be grouped are proposed in Table 1, below:

Location of play	Gaming platform	Mode of distribution	Type of market
arcade game desktop game portable game	console game computer game handheld console game mobile game	pre-packaged game browser game preinstalled game	mainstream game serious game casual game

**Table 1.** Parameters within which to classify video games

This classification takes into account the existence of the most commonly used terms, in order to articulate a clear structure for the benefit of the present research. It is worth noting that these terms have been coined at different times, but that most are still in current use, adding to the potential terminological confusion. Of course, they belong in different contexts and were originally used by different groups of people (such as players, journalists, and industry professionals). Nowadays, due to the success and proliferation of video game products, they often coexist and overlap in many different ways. Definitions and explanations for each of them have been proposed in the sections which follow.

#### *2.1.2.1- Location of play*

This group of terms refers to the physical space or place where the actual play takes place: in an amusement arcade, on a home desktop system, or, more recently, on a portable device.

##### *Arcade game*

The term ‘arcade game’ was originally used to refer to all those games to be found in penny arcades at the beginning of the 20<sup>th</sup> century and included other popular games, such as foosball and pinball tables, referring therefore to the place as much as to the video games themselves. The first arcade video game was *Computer Space* created in 1971 by Nolan

Bushnell and commercialised by Nutting Associates (Gamespot).<sup>13</sup> Everything in these arcade video games (the monitor, the speakers, and the controllers) was physically built into a big wooden box often decorated with artistic representations of the game in order to attract players. Amusement arcades were very popular throughout the 1970s and 1980s, and they contributed significantly to the development of today's entertainment software industry. Arcades are less fashionable in the 21<sup>st</sup> century because many people have their own digital entertainment systems which they can use as they please, at home or elsewhere. Nevertheless, they have not totally disappeared and are still commercially successful, as the continuing success of the Trocadero arcades in central London proves.<sup>14</sup>

In recent years, the term has evolved and, as a consequence, the meaning has narrowed considerably. It is now often used to refer to a type of game with particularly good design and mechanics, effectively applying the pioneering principles that made those first video games (such as *Space Invaders*, *Super Mario*, and *Pac-Man*) so popular, and marking the beginning of a new era in entertainment products and services. In fact, these arcade games are so popular nowadays that they can still be found in their original form among retro-fans, and in new updated versions to suit new hardware, including computers, home consoles and even mobile phones. These products possessed simple game mechanics and are often regarded as models of good playability, a concept that is also relevant to game localisation and that is fully analysed and illustrated in Section 2.4.

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<sup>13</sup> See <http://uk.gamespot.com/computer-space>.

<sup>14</sup> The Trocadero has all kinds of amusement machines, such as pinball, darts, racing simulators, etc. spread over several floors, and it has been open for more than twenty years. The official website address is [www.londontrocadero.com](http://www.londontrocadero.com).

*Desktop game*

The term ‘desktop game’ refers to games played on consoles and computers often in a domestic context, but also in internet cafes and other public spaces, and where the gaming device has a fixed dedicated space, such as a game room or a game club. It is generally used in order to differentiate these games from arcade and portable games. The concept may be often linked to family entertainment, due to the fact that, in many households, gaming is increasingly sharing the limelight with the television, aided by the fact that these gaming devices can play music CDs, video DVDs, and the PlayStation 3 consoles can also play high definition Blu-ray discs. Consoles are easily connected to the main television set in the living room, while computers tend to require their own dedicated monitor, which allows for a higher display resolution than that of regular television sets (although this difference is diminishing rapidly with the new HD TV standards). Desktop games tend to be the most polished interactive entertainment products, offering the highest audio and video quality, together with a more flexible control scheme, such as keyboards, mouse, game pads, joysticks, driving wheels, cameras, and the like.

*Portable game*

This term refers to games designed for pocket devices, including PDAs, handheld consoles, classic mobile phones, modern smart phones, or other gadgets such as Tamagochi<sup>15</sup> and LeapFrog<sup>16</sup> devices. Portable games tend to be significantly smaller in size due to the hardware limitations in terms of storage capabilities, multimedia rendering power, and

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<sup>15</sup> Egg-shaped handheld computers with a digital pet simulator program created and distributed by Bandai in 1996 in Japan that quickly became a world sensation [www.tamagotchieurope.com/EN/index.html](http://www.tamagotchieurope.com/EN/index.html).

<sup>16</sup> LeapFrog designs, develops and markets technology-based learning products for children from early stages to the end of secondary education. See for example [http://microsite.leapfrog.com/leappad2\\_uk/index.html](http://microsite.leapfrog.com/leappad2_uk/index.html).

overall processing performance. However, portable games have greatly improved over the last few decades, due to competition in the industry and the implementation of the latest microchip technology, as we can see in the iPhone and the PlayStation Vita. Despite their high resolution, the size limitations of the screens on these portable devices directly affects the type and amount of text that can be displayed, a fact which, in turn, impinges on the user interface design and its localisation due to the complex and demanding requirements of each language and their particular character sets. This issue is fully analysed and explained in Chapter 4.

#### *2.1.2.2- Gaming platform*

This group of terms is classified according to the hardware, that is, the actual device used to play the video games. These include: console games, computer games, handheld console games, and mobile games.

#### *Console game*

Within the context of the game industry, and from the hardware point of view, consoles can be referred to as game-dedicated computers. In order to maximise return on investment, very often the same title is released for a variety of gaming platforms. This may require slight changes in the design or the input of completely different developing teams, depending on the hardware capabilities and the branding requirements of the particular device. As with the personal computer market, there used to be many different game console brands, such as Odyssey, Atari, and Dreamcast, but Sony's PlayStation outperformed all its rivals and reigned supreme for almost ten years until, in the last quarter of 2001, Nintendo and

Microsoft entered the arena with the GameCube and Xbox, respectively, (Waters 2001b: online).<sup>17</sup> PlayStation remained unchallenged up until the end of the 1990s and, with the new century, the era of “the console wars” began (Stuart 2011: online),<sup>18</sup> with the three big multinational companies competing to maintain and expand their share of the market with their latest hardware: PlayStation 3 and PS Vita, Nintendo Wii and 3-DS, and Xbox 360.

As a result of the increase in development costs of the Triple A titles craved by the public,<sup>19</sup> nowadays most game developing companies and publishers design their products for all the main gaming platforms. A good example of the significance of this escalation in cost is demonstrated by the transformation of the *Final Fantasy* franchise. It was created by Square Enix in 1987 and, more than twenty years later, it is still producing new instalments in the series. Both the developer and its games had been exclusive to PlayStation for twenty years, but in July 2008, Square Enix made an announcement that would signal a turning point in the game industry: *Final Fantasy XIII* would become a multiplatform game as a result of the growing trend in the global market (Sheffield 2008: online).<sup>20</sup> As has been mentioned earlier, console games tend to be ideal for fast-paced games such as sports, driving, fighting and shooting games, with clear, simple mechanics and intuitive gameplay due to the limitations of controllers and the pickup-and-play<sup>21</sup> philosophy behind the whole console game concept.

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<sup>17</sup> See [http://news.bbc.co.uk/1/hi/entertainment/new\\_media/1538073.stm](http://news.bbc.co.uk/1/hi/entertainment/new_media/1538073.stm)

<sup>18</sup> See [www.guardian.co.uk/technology/gamesblog/2011/apr/05/ps3-overtakes-xbox360](http://www.guardian.co.uk/technology/gamesblog/2011/apr/05/ps3-overtakes-xbox360)

<sup>19</sup> This term refer to titles with the maximum quality available in the market at the time of release.

<sup>20</sup> See [www.gamasutra.com/php-bin/news\\_index.php?story=19455](http://www.gamasutra.com/php-bin/news_index.php?story=19455)

<sup>21</sup> This phrase refers to the unwritten but widely accepted game developing philosophy that places an instantaneous immersion and pain-free game playing learning curve as its most important prerequisite.

### *Computer game*

The term ‘computer games’ refers to the nature of the actual machine required to create, and often to play, the game. In this sense, all contemporary video games are also computer games. The term, however, seems to have narrowed and shifted slightly, and is often used to refer to the type of platform utilised to play the games, in contrast with, and as an alternative to, desktop consoles and portable devices.

The computer platform option is very clear-cut nowadays, since there are only two contenders, namely the PC and the Mac. As Apple’s Mac computer is very rarely used for playing at all, when people mention computer gaming, they are most often referring to PCs. In the 1980s, there were many computer brands that developed products specifically for the nascent home computing market, all of them competing for a position as the platform of choice for both office computing and home entertainment. Spectrum, Amstrad, and Commodore were three of the most popular, globally, and they provided the perfect springboard for the Spanish game programming *aficionados* many of whom are currently in charge of the Spanish game development industry.

Computer games are therefore video games where the specifications have been adjusted to suit computer hardware. Thanks to their mouse and extensive keyboard,<sup>22</sup> computers have always been considered ideal for tactical, strategic, and simulation games, whereas consoles are normally designed for action games, where control bottoms have to be reduced to a

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<sup>22</sup>A full QWERTY keyboard has more than 100 keys and various modifier and function keys that multiply the instruction possibilities, whether inputting a character or initialising a command. See [http://en.wikipedia.org/wiki/Keyboard\\_layout](http://en.wikipedia.org/wiki/Keyboard_layout).



minimum for ease of use with a control pad.<sup>23</sup> Many players favour computers as a gaming platform because they can be upgraded modularly *ad infinitum*, as distinct from the console set boxes. This means that hard-core gamers can actually match and even surpass the technical specifications of the computers used to develop the game, thus obtaining a more intense and powerful gaming experience.

### *Handheld [console] game*

Handheld consoles are game-dedicated pocket devices. The first handheld devices appeared in 1976 (Graham 1982: 37) and came with one preinstalled game in its built-in memory, so people could only play one single game on that particular device. Fans had to wait until 1979 for the idea of interchangeable game cartridges to be made possible by Microvision (*ibid.*), followed by Nintendo with the popular GameBoy in the 1980s, and its successive redesigns. It is fair to say that, despite competition, Nintendo is still the unrivalled leader in the handheld market. By the end of 2008, there were only two clear contenders: Nintendo's DS and Sony's PSP (*ibid.*); all other challengers and previous models had either disappeared or were in the process of being phased out. Handheld consoles have considerable storage restrictions, limited display capabilities, and reduced processing power, all of which affects localisation (see Chapter 4). Although they can only play the less sophisticated games, they have been relatively successful, due to their lower price and convenient size, gaining popularity among people of both genders and of all ages (BBC 2006: online).<sup>24</sup>

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<sup>23</sup> A game pad can have up to up to 17 buttons with only four modifiers so gaming instructions are considerably different from those for computers. See [http://en.wikipedia.org/wiki/Control\\_pad#PlayStation\\_3](http://en.wikipedia.org/wiki/Control_pad#PlayStation_3) and [www.sony.co.uk/product/ps3-accessories/dualshock-3-controller](http://www.sony.co.uk/product/ps3-accessories/dualshock-3-controller).

<sup>24</sup> See <http://news.bbc.co.uk/1/hi/technology/4616324.stm>.

*Mobile game*

The term ‘mobile games’ refers to video games that are designed to be played on mobile phones, in other words, they are physically portable although they cannot be played on handheld consoles. In the technological race for more clients, mobile phone manufacturers and independent game developing companies are encouraging their engineers to design mobile phones which can be used for all kinds of entertainment purposes, such as listening to radio broadcasts and music, watching television, browsing the internet, taking photographs, watching videos, and of course, playing quality video games. Nowadays, the average mobile phone handset includes several preinstalled “demos” and the games can be downloaded cheaply and easily according to user requirements, by using wireless application protocols (WAP) and third generation telecommunication services (3G and 4G) offered by telephone and cable companies.

Traditionally, mobile games were seen by both game developers and players alike as unappealing, mainly due to their lack of processing power, low resolution screens, and the poor controls employed by mobile phones. Mobile phones are currently being designed with multimedia and gaming capabilities in mind, and they represent an area of enormous growth potential, for both the game and the mobile phone industry. According to Mitchell’s presentation (Online Game Developers Conference 2007) the market was valued at £9 billion in 2007, and this is set to go up to £12.5 billion by 2012.

Some of the most advanced technologies for mobile phones were demonstrated at the Game Developers Conference held in San Francisco in March 2009, technologies that included high-resolution 3D engines and motion sensors, with Apple’s iPhone leading the way

(Krzykowski 2009). Games of a quality vastly superior to those offered by desktop consoles only a few years ago are already appearing on new handsets. A variety of game genres are also being developed for mobile phones, including sports, music, action-adventure, brain training, strategy, and role-playing games. Another benefit of mobile phones relative to the game industry is that there are an estimated 4.1 billion telephone subscribers worldwide (Tryhorn 2009) with constant, direct access to mobile services. This enormous potential, combined with the fact that these games are faster and cheaper to produce, makes this platform a favourite with the game industry. The projections are that, by the end of 2011, mobile and online gaming will be confirmed as the generators of half of the total global revenue for the video game industry (Merel 2011, PriceWaterhouseCoopers 2008).

### *2.1.2.3- Mode of distribution*

The group of terms, included under the heading ‘mode of distribution’, refers to the manner in which users acquire or have access to the video game, and include: pre-packaged games, browser games, and preinstalled games.

#### *Pre-packaged game*

The term ‘pre-packaged games’ alludes mainly to the mode of distribution. These are a type of game that can be purchased over the counter, in high-street shops. They tend to come accompanied by glossy packaging and merchandising intended to attract and to help boost sales with extra content such as stickers, posters, T-shirts, figurines, comic-books, etc. In order to reach consumers, these games require retail outlets as intermediaries; in fact, this is the most traditional and still quite popular mode of distribution (because internet speeds

fluctuate so much from one location to another), since many game users derive enjoyment from the browsing and shopping physical experience. They are, however, losing ground to browser games in terms of popularity, owing to the fact that internet providers are improving on speed and bandwidth, changing distribution channels and consumer preferences. Although pre-packaged games may ultimately disappear, distribution modes are bound to remain varied for many years to come.

### *Browser game*

The ‘browser game’, sometimes referred to as the ‘web-based game’, is a term which refers to all the games that can only be acquired and played by using an internet connection and a web browser, with the games being downloaded directly onto the consumers’ home computers. The browser game family is made up of free small games, such as those that can be found on websites like the Warner-Brothers kids’ site ([www.kidswb.com/games](http://www.kidswb.com/games)), as well as highly elaborate subscription-only MMO games,<sup>25</sup> such as *Eve Online* (CCP 2003-present) or *World of Warcraft* (Blizzard 2004-present), which account for more than 12 million active subscribers (Blizzard 2010: online).

Thanks to the continuous expansion of fibre optic telecommunication networks in many cities around the world, the advent of high-speed internet connections has catapulted the demand for this type of interactive entertainment service. In addition, many stand-alone games incorporate excellent internet capabilities, which means that the games can be played with people from all over the world, dramatically increasing the gaming hours with downloadable expansion packs, and turning what used to be a solo experience due to its technical

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<sup>25</sup> This acronym stands for ‘Massively Multiplayer Online’ games, where literally hundreds of people can play concurrently in the same virtual universe from the comfort of their own homes.

limitations, into a highly social one. The bigger the fan base, the more multicultural the players, and the more important the localisation effort. While browser games, such as those that can be played through Facebook, only have a few hundreds or thousands of words that need to be translated, Massively Multiplayer Online Role-Playing Games (MMORPGs), such as *World of Warcraft*, can have millions of words.

### *Preinstalled game*

The term ‘preinstalled game’ refers to those games that are pre-loaded on a device when consumers acquire it. It applies, for example, to games that ship together with the operating system of the device in question, such as *Minesweeper* for PCs, or *Snake* for Nokia phones, *Marble Blast Gold* for i-Macs, or *Solitaire* for PDAs. These games are often seen as a little sample designed to attract users and remind them that the device in question can be used for entertainment, encouraging them to purchase updated, improved products. The mechanics tend to be simple and are easy to pick up without requiring complicated instructions, so that their localisation is easier to manage when compared with big commercial triple A titles.

#### 2.1.2.4- Type of market

The last three terms used to refer to video games, and presented above in Table 1, that is, games which are referred to according to the type of market for which they have been designed (mainstream games, serious games and casual games), are directly linked to several aspects of modern society. Their impact is so marked that it has been deemed essential to analyse the wide range of products available, as well as the penetration of games and game-like applications in almost all social and professional activities, in order to comprehend the

relevance of these products in today's world. Such an analysis will also shed light on why we need to study game localisation in order to understand its principles and improve its processes. For this reason, the game categories associated with a particular type of market are explained in the following section.

## **2.2- The penetration of video games in today's world**

In an affinity with Bakhtin's concept of the grotesque body, children's narratives are rarely allowed to settle in one format, making an almost infinite journey from picture book to comic strip, to graphic novel, to prose novel, to audio-cassette, to film, to CD-ROM. (Sainsbury 1998: 262)

What Sainsbury highlights about children's narratives can in fact be applied to almost any type of artistic creation (Bernal-Merino 2009a). Entertainment industries have been working together for many years, but it is only now that the success of their joint ventures can be fully appreciated, mainly due to the large number of followers which they attract and the huge budgets with which they operate which, according to Crossley (2010: online),<sup>26</sup> amount to an average of \$28 million. The following subsections elaborate on and illustrate each of the three remaining game categories with a view to assisting outsiders to comprehend the extent of video game penetration into people's lives. These three terms correspond with the standard three categories used by the game industry when talking about markets in a broad sense. These are: 'mainstream games' (those that are purely entertaining), 'serious games' (those with a high professional or educational value), and 'casual games' (simple mobile and browser games that require little skill and time commitment).

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<sup>26</sup> See [www.develop-online.net/news/33625/Study-Average-dev-cost-as-high-as-28m](http://www.develop-online.net/news/33625/Study-Average-dev-cost-as-high-as-28m).

### 2.2.1- Mainstream games

These entertainment software products currently represent the core business of the video game industry, because of the revenue generated by them and their value in terms of attracting consumers. They are often multimillion dollar projects that can take two to three years to complete and require the labour of multiple teams of creative and talented professionals. Although there may be significant differences, they are all designed with the aim of providing top quality entertainment. This is one of the most important reasons why they are often linked with established entertainment industries such as the cinema, television, literature and the toy and music industries.

Whether it takes place in a cinema or elsewhere, watching films has long been one of the favourite recreational activities for people all over the world since the invention of cinema in 1895. From the classic black and white silent films to today's 3-D colour blockbusters with Dolby Pro Logic surround sound and CGI enhancement,<sup>27</sup> the video game sector has had a clear example to follow, at least in terms of success and mainstream acceptability. The cinema industry has always seemed glamorous, and the entertainment software industry has often joined forces with film studios to increase their popularity and market share. The 1980s saw the fruition of some of these early joint ventures, with titles such as *ET: The Extra-Terrestrial*, *Raiders of the Lost Ark*, *Star Wars* or *Alice in Wonderland*, which despite having limited success as video games, can be deemed to be pioneers of this particular trend. Nowadays, it is almost impossible to think of an important cinema release that does not come with a simultaneous official video game version. Even in the United Kingdom and Spain, where the cinema industry has less influence than Hollywood, there are good examples of

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<sup>27</sup> CGI stands for Computer-Generated Images and it refers to the application of 3-D computer graphics to the creation of special effects in films, documentaries, commercials, and almost any type of media production.

this sort of collaboration, such as *007: Quantum of Solace* and *Torrente: El brazo tonto de la ley* (Figure 3):



Figure 3. From the movie to the video game

The success of these games depends on finding the right balance between the viewing experience offered by the film and the way gamers can interact with the virtual representation of the cinematic adventure. These video games tend to use as many assets as possible from the film, and are therefore likely to have video and audio extracts from the motion picture itself. Sometimes the main actors may be called to the game studio to allow graphic designers to create a 3D model for their game avatar, or to record a few extra lines to add audio feedback and realism to the interactivity. The translation of these two popular types of



entertainment product (films and games) shares the fact that a considerable amount of dialogue has to be lip-synched, a fact which can curtail the options available to translators (Chaume 2004: 237), and if care is not taken it may lead to the intrusion of calques and false friends in the target language (Bernal-Merino 2002: 45). This aspect is analysed in Section 3.2.3.2.

Likewise, there are games that are later reinterpreted for the cinema, such as *Super Mario Bros.* (Morton 1993), *Street Fighter* (De Souza 1994), *Tomb Raider* (West 2001), *Resident Evil* (Anderson 2002), and *Dead or Alive* (Yuen 2006). Figure 4 below shows some parallel illustrations.

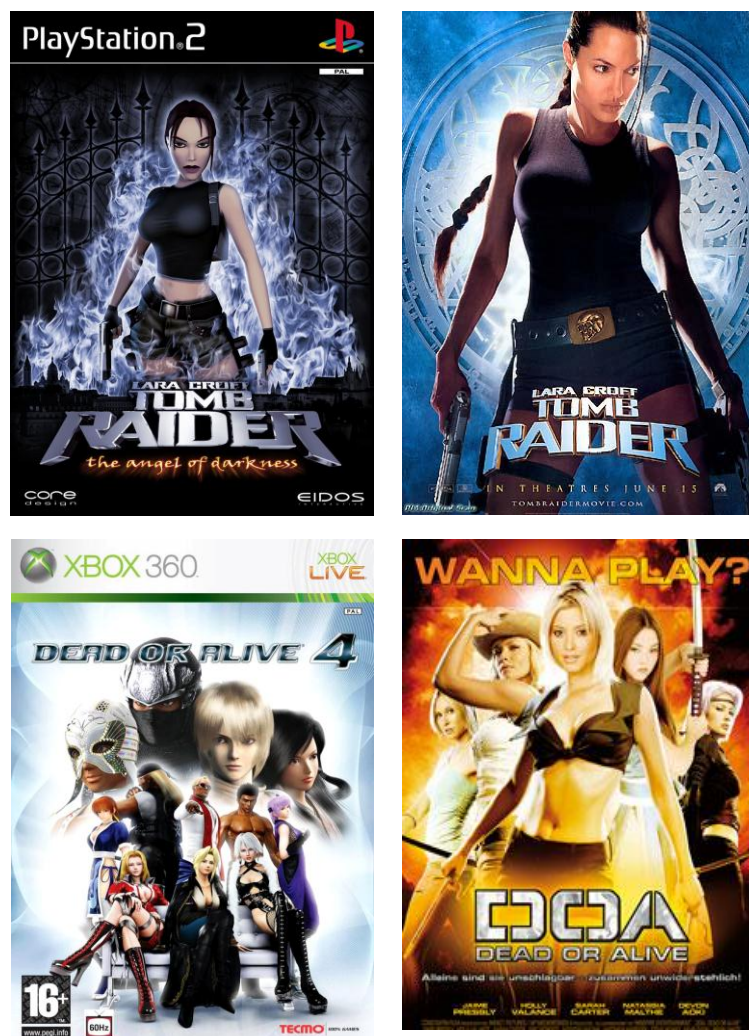


Figure 4. From the video game to the movie

Originally, game-based films only appealed to a very small, niche audience, but as new directors, with better knowledge of entertainment software and new perspectives on filming, have brought their vision to audiences, these productions have seen a notable increase both in terms of quality and popularity. It is still relatively unusual to see these films constituting big box-office successes, although titles such as *Tomb Raider*, with the popular actress, Angelina Jolie acting the game's main character, Lara Croft, have demonstrated that equal success is possible by generating almost \$275 million worldwide in 2001.<sup>28</sup> The number of games or tickets sold may vary enormously, but the partnership between these two powerful entertainment industries seems to be going from strength to strength.

As has been mentioned earlier, the stereotype of the teenage boy playing video games in the darkness of his bedroom is no longer an accurate representation of the demographics of players. Young adults account for the biggest section of the market for the video game industry, but they are represented by both male and female players, and other sectors of the population are also finding products they can enjoy. According to a BBC survey on UK players published in December 2005, almost 100% of children under fifteen years of age play video games and do so regularly (Pratchet 2005: online).<sup>29</sup> The other two main recreational activities when at home included watching the television and reading. It is no accident, then, that there are games based on most of the well-liked novels and characters belonging to children's literature. In fact, the same book often has a variety of game interpretations that are specifically designed with different age groups in mind. Some of the most popular and fertile teenage fantasy titles which have been turned into video games include such classics as *Alice in Wonderland*, *The Chronicles of Narnia*, *The Lord of the Rings*, and *Harry Potter* (Figure 5):

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<sup>28</sup> Figures of box office revenues can be checked on [www.boxofficemojo.com/movies/?id=tombraider.htm](http://www.boxofficemojo.com/movies/?id=tombraider.htm).

<sup>29</sup> See [http://open.bbc.co.uk/newmediaresearch/files/BBC\\_UK\\_Games\\_Research\\_2005.pdf](http://open.bbc.co.uk/newmediaresearch/files/BBC_UK_Games_Research_2005.pdf).



Figure 5. Popular children's books which have become video games

All of these are licensed games and they have to remain faithful to the original style and spirit of the literary classics from which they originate. Game creators need to find a compromise between using part of a favourite story and, at the same time, creating an adventure that, not only caters to the fans' enthusiasm, but also makes use of their prior knowledge without spoiling the overall game experience. The translation of these games is often marked by the same high degree of creativity which is displayed in the literary works themselves, although it is complicated by difficulties characteristic of interactive media and its constraints (see Section 4.3). If there is an existing translation of the books in the target culture, research concerning the terminology and style previously used is mandatory. If they have not been

introduced into the target culture, the game translator will have to find imaginative but appropriate solutions with which to enhance the game experience (Bernal-Merino 2009a).

Even though most book-based games mainly use works from popular teenage literature, where there is a clear predilection for action and prototypical heroic characters predominate, there are also some game designers who aim to emphasise the fact that it is possible for games to represent a new mode of artistic expression. These multimedia interactive software applications can be used to tell all manner of stories as well as to teach about the human condition. One remarkable example is *Les Misérables: The Game of the Book*, developed independently by Chris Tolworthy (Figure 6) and based on the literary masterpiece written by the French author, Victor Hugo, in 1862. Tolworthy's intention is to demonstrate that games can be used to tell the most celebrated stories and to make literary classics accessible to all in an uncomplicated and amusing way, yet without detracting from their intrinsic value. Other examples are *Fahrenheit 451* (Figure 6), where the player has to save books from being burnt by firemen following direct orders from a dictatorial government, as in Bradbury's homonymous novel, originally published in 1920. A final representative example is *La Abadía del Crimen*, a game based on the fashionable and well-liked novel by Umberto Eco, *The Name of the Rose*, published in English in 1984. The original was a very popular Spanish game that was later shipped in Spanish to a number of countries around Europe thanks to its good reputation. The game was never translated into any other language. In this game (Figure 6 below), players become Guillermo de Baskerville and his disciple, Adzo de Melk, and it is their task to investigate the crimes committed in the Abbey, which is apparently under the control of evil forces.





Figure 6. Games based on literary classics

Most comic books, from the sentimental to the quirky or the heroic, have one (or several) video game version(s), where players can enjoy acting their favourite comic book characters. These games take advantage of the colourful and attractive graphic style displayed in comic books, a style which can now be easily reproduced in a computer environment. Video games based on cartoons are equally fashionable. Whether they have been created for adults, teenagers, or for children, these creations have always been a source of inspiration to game developers from the moment computers reached the point at which they were able to render characters such as *Spider-man*, *Astérix*, *Mortadelo y Filemón*, or *SpongeBob*, (see Figure 7):





Figure 7. Popular comic books and cartoons have been made into video games

As society becomes increasingly accustomed to technology, and computers and gadgets become an everyday feature of people’s routine, both at home and at school, the demand for games for younger children will inevitably grow, catering for different age groups and targeting their main interests and leisure activities. Evidence of this can be seen in the wide variety of video games that are based on toys designed both for boys and girls, such as Barbie, Action Man, Lego, or the Bratz dolls, (see Figure 8):







Figure 8. Children's toys made into playable characters in video games

Sports competitions and championships provide another source of inspiration to game developers and a good investment for publishers, as they tend to adhere to yearly cycles, a fact which lends itself perfectly to the frequent releases necessary for generating revenue. Most sporting events are likely to have a video game incarnation, which is unsurprising, since television and radio broadcasts of these events, together with all kinds of publications and websites, enabling the enjoyment of sports fans from every age group within the comfort of their home. Nowadays, we can see video game renditions of most sports such as football, Formula 1 racing, tennis, boxing, golf, bowling, or snooker, to name but a few. These games capture all the excitement of viewing a favourite sports broadcast, with the added difference that the crowd, the commentators, and the opponents respond to the players, and to their skills in managing a team, their individual level of technique, and the skill with which their characteristic movements are performed. Most sportspeople and organisations lend their names, image, and voices to game franchises, such as Tiger Woods, Colin McRae, Rafael Nadal, Wayne Rooney and even organisations such as FIFA (Figure 9), a move that they see as a way of extending their brand and popularity.



Figure 9. Sports and international competitions have always been popular with gamers

Some of these games are now designed for the motion sensing controls of the Nintendo Wii, PlayStation Move, and Microsoft Kinect which make them ideal for the physical simulation of the movements involved in performing these sports activities. Together with other game peripherals such as the dancing mat, the Wii fit balance board, and the EyeToy, these games require body movements on the part of the players. The perception of these games has changed in such a way that the UK government has had to retract some of the negative comments made concerning the portrayal of interactive media on its *Change4Life* campaign.<sup>30</sup> The people responsible for this campaign had to acknowledge that some games

<sup>30</sup> *Change4Life* is a campaign initiated by the National Health Service of the UK to fight the growing obesity problem in the United Kingdom. See [www.nhs.uk/change4life/Pages/change-for-life.aspx](http://www.nhs.uk/change4life/Pages/change-for-life.aspx).



do actually promote exercise in a proactive manner, as opposed to the stereotypical image portrayed initially, in which video game playing was linked with the obesity epidemic in the UK (Ingham 2009: online).<sup>31</sup>

The music industry, glamorised even further by talent shows on television, and the constant presence in our daily lives of visually exotic and fast-paced video clips, represents another ideal source of inspiration for the game industry. Almost from the very beginning of entertainment software, audio design and music have played a key part in its appeal. Even when computing power was relatively low and games could only display eight colours, simple, catchy tunes would accompany fans while they played. Many musicians and singers have contributed music, and a few have tried to increase their popularity by offering their image for use by the game industry. Not only can music fans listen to music by their favourite artists during play, but they can also control an avatar that looks and behaves just like their idols, in temporary imitation of their individual qualities and stature. Examples of this partnership between games and music artists are *50 Cent: Blood on the Sand*, *Britney's Dance Beat*, *Def Jam's Icon*, or *Guitar Hero: Aerosmith*, (see Figure 10).



<sup>31</sup> See [www.mcvuk.com/news/read/change4life-in-shock-u-turn-on-games](http://www.mcvuk.com/news/read/change4life-in-shock-u-turn-on-games).



Figure 10. Singers and musicians expand their influence through games

These latest ventures are particularly important for the music industry, which has been losing the battle against illegal copies and downloads encouraged through file-sharing sites. On the one hand, this collaboration has the benefit of allowing for the controlled distribution of songs, as well as providing artists with increased publicity, and, on the other hand, it is helping to change the image of the game industry so that it is apparently more multifaceted.

Today's television broadcasting is a very versatile industry. There are many types of programme favoured by audiences with a corresponding official entertainment software product for almost every one. This is reminiscent of the development of the most celebrated television quiz shows by the toy industry. All types of television programme can be turned into video games because the feel and dynamics of the game have already been tested and established successfully. The intention of game designers and industry bosses is clear: if millions of people enjoy watching these game shows on television, even participating through their telephone or digital television subscription, it is safe to assume that many of them will also buy the video game, especially if it retains the key features and characters originally responsible for making the television shows popular. Good examples of this cross-

fertilisation include: *The X Factor*, *Who Wants to Be a Millionaire*, and *The Weakest Link*, (see Figure 11):



Figure 11. Many television game shows have been successfully turned into video games

Some television series, soap operas, dramas, and even sketch shows include a license for a video game rendition. Once again, these games exploit the popularity of a particular branded television show, at the same time as incorporating in them the mechanics and playability developed for existing games which are considered to belong to the same genre. For example, the TV series *Buffy, the Vampire Slayer* (Figure 12) is an action-adventure programme with similar dynamics to fighting games; *Little Britain: The Computer Game* (Figure 12) uses a variety of arcade game mechanics to make interactive the most popular sketches by the comic duo; *Desperate Housewives: The Game* (Figure 12) uses part of the people simulator concept developed for the very popular franchise *The Sims*, whereby players create virtual people and help them realise their particular ambitions; and *24: The Game* (Figure 12) is a classic shooter where players control the series protagonist, Jack Bauer from the LA Counter Terrorist Unit, and help to unravel the twisted storylines that made the television series such a success.





Figure 12. Television series and sketch shows have been successfully turned into video games

It seems clear that mainstream entertainment has embraced interactive media and that this partnership is likely to continue and grow in the future, refining the formula and improving the products. There is, however, another area, experiencing considerable growth, which is making use of the multimedia interactivity features developed for recreational purposes in a very different manner. These games are described in the following section.

### 2.2.2- *Serious games*

On a very different note, entertainment software mechanics are also being used for serious professional training purposes. For instance, a simulated operating suite which replicates a real operating theatre in a hospital opened in July 2008 at Imperial College, London. It is used to train and assess staff in various medical professions, including surgeons, nurses, paediatricians, anaesthetists and operating department assistants.

Game technology is not only used in colleges of higher education. The US government has been funding a computer game concerned with realistic role-play and deadly combat in warzone areas. While this may be seen as odd, since so many American politicians are opposed to violent games, it nonetheless raises interesting ethical and political issues. The video game, which is called *America's Army 3* (Figure 13), seems to have been successful in attracting young recruits into the US forces despite condemnation by critics concerning the glamorisation of war and violence for marketing purposes (Hurdle 2009: online).<sup>32</sup> Whatever the individual point of view concerning the ethics of government sponsorship of military games, there is no denying the advantages of simulating combat scenarios in a safe environment, where soldiers cannot get hurt and the logistics of the operation are cheap and easily to arranged, while the logic behind the military strategies can be explained and learnt.

Other private and rather secretive companies, Imedia.it for instance, have been working with the US army for many years, producing game-like multimedia applications, such as *Tactical Questioning* (Figure 13), where soldiers can be trained in non-combat skills such as

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<sup>32</sup> See [www.reuters.com/article/2009/01/10/us-usa-army-recruiting-idUSTRE50819H20090110?feedType=RSS&feedName=technologyNews&pageNumber=1&virtualBrandChannel=0](http://www.reuters.com/article/2009/01/10/us-usa-army-recruiting-idUSTRE50819H20090110?feedType=RSS&feedName=technologyNews&pageNumber=1&virtualBrandChannel=0)

intelligence gathering, and conversation techniques based on an enhanced awareness of cultural differences and language barriers.

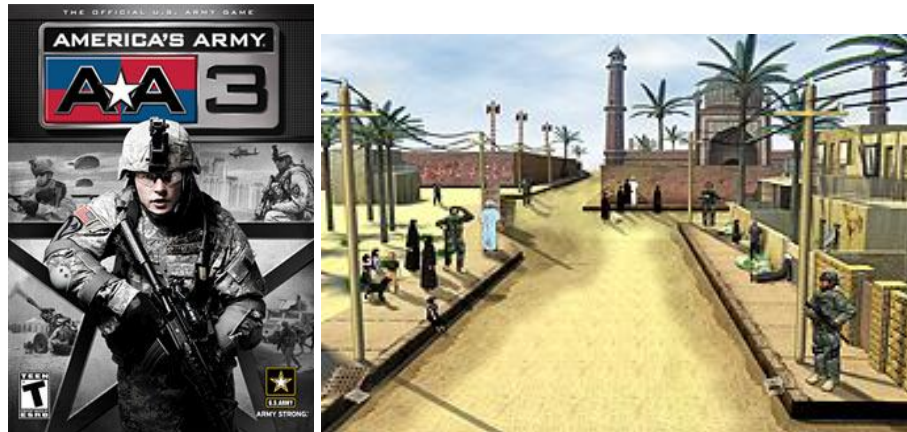


Figure 13. Training soldiers with game-like applications

Some companies and public organisations also use realistic and technically accurate video games, known as simulators, during the first stages of their staff training. A classic example is the *Flight Simulator* series (Figure 14), a game popular with amateur trainee pilots and commonly employed by national air forces and aviation academies to initiate trainees in a controlled environment, without worrying about possible hazardous situations. These software applications make use of video game mechanics to add an element of fun to the task of training, while imitating the physical realities and events related to a particular profession or training programme. By playing these highly realistic and complex games, trainees are able to improve their handling of specific problems, and trainers can tailor their programmes to suit the target trainees' weak points without any risks and at a fraction of the cost.

Computer tutorials to prepare learners for their driving tests by presenting them with interactive animations and video fragments is another example of the penetration of this type of product in our daily lives, (Figure 14). These computer programs combine the pedagogical

training methods often seen in printed books and manuals with the possibilities of interaction and immediate feedback developed for ludic applications.



Figure 14. Game-like applications used as a complement to professional training

Even some UK government initiatives aiming to fight youth-crime are resorting to video games. A good example is CrimeStoppers' *Gameover4knives* (Figure 15). This is a free, web-based game with very simple mechanics, which aims to educate young people concerning the dangers of carrying knives, as well as encouraging them to report possible dangerous situations by reaching out to them individually and on their own terms. *FoodForce* (Figure 15) is another interesting game developed for the World Food Programme and funded by the United Nations, with the main aim of raising social awareness concerning the many problems created by famine around the world. Players learn that, in some parts of the world, entire communities are suffering from the devastating effects of malnutrition; they offer help to these affected communities using the infrastructure provided by the UN's World Food Programme.<sup>33</sup> Many companies and organisations are funding other similar games; examples

<sup>33</sup> See [www.wfp.org/stories/online-game-food-force-puts-players-front-lines-hunger](http://www.wfp.org/stories/online-game-food-force-puts-players-front-lines-hunger).

include organisations such as the Reebok Human Rights Foundation (Reebok: online).<sup>34</sup> In addition, educational games may be funded as a result of the emotional and intellectual reactions of individuals, who feel they can start or contribute to this type of social debate. An example of the latter is Frasca's *September 12<sup>th</sup>, a Toy World* (Figure 15), which is free ([www.newsgaming.com/games/index12.htm](http://www.newsgaming.com/games/index12.htm)) and strives to illustrate the impossible situation in terms of the current military tactics of the so-called 'war on terror'. One of the many hubs of these activities is the website Values at Play, which operates under the motto 'designing social values in computer games'.<sup>35</sup>



Figure 15. Game applications with a conscience

*Re-Mission* is an example created by the private company HopeLab ([www.re-mission.net](http://www.re-mission.net)), which has been interested in promoting the development of a video game with possible healing and therapeutic effects. The aim is to help adolescent cancer sufferers understand the disease and how the different treatments they have to undergo help them to strengthen their immune systems by destroying carcinogenic cells (Figure 16). All these complex issues are presented in a game-like environment and players must digest all the relevant information in

<sup>34</sup> See [http://corporate.reebok.com/en/corporate\\_citizenship/archives/default.asp](http://corporate.reebok.com/en/corporate_citizenship/archives/default.asp).

<sup>35</sup> The Values at Play (VAP) project was conceived with the intention of investigating how video game designers consciously and unconsciously embed social values into video games through narratives and game mechanics. Their url is: [www.valuesatplay.org](http://www.valuesatplay.org).



order to win. The results of their study and clinical trials can be found in the medical journal *Pediatrics* (VV.AA. 2008: 305), and on their official website.<sup>36</sup> Games have been proved to be successful tools when used to teach and raise awareness concerning very serious matters in a way that minimises trauma and is easy to follow; players are able to learn at their own pace and genuinely improve their knowledge and health as a result.

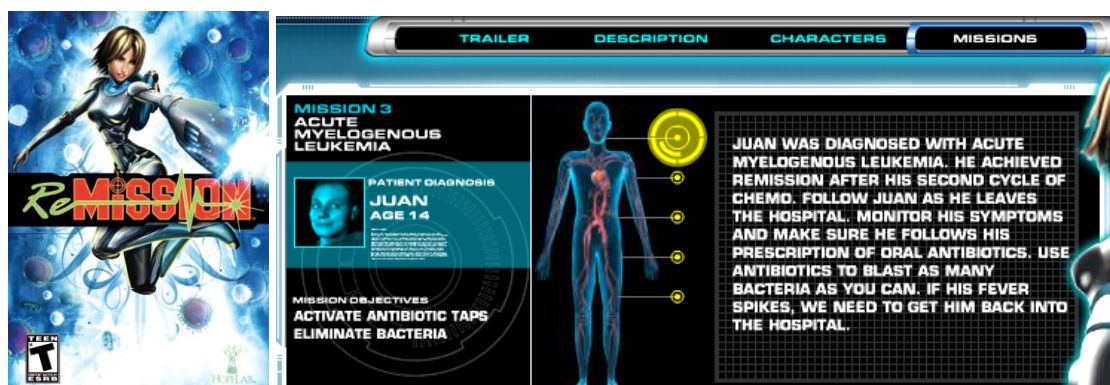


Figure 16. Video games utilised for their therapeutic value

Education is without a doubt an area where multimedia interactive applications have been making a slow but steady progress with regard to products designed for all age groups.<sup>37</sup> Nowadays, parents and teachers are able to purchase educational games related to all essential subject areas which are suitable for children from the time when they are learning spelling and counting, all the way through to the core subjects taught at GCSE and A-Level. Some publicly funded television channels, such as the BBC in the UK, offer free game-type applications<sup>38</sup> available through their websites as a service to the community. They usually aim to help students with their work, by making school revision more interactive and entertaining than classic printed exercise books. Apart from offering engaging environments with pictures, music, and sound, these educational tools make use of three dimensional

<sup>36</sup> See [www.hopelab.org/our-research/re-mission-outcomes-study](http://www.hopelab.org/our-research/re-mission-outcomes-study).

<sup>37</sup> Becta, the UK Government's lead Agency for Information and Communications Technology in Education, has an active interest in the computer and the video game sectors which may be both of use and provide inspiration for new ideas in education. See <http://news.bbc.co.uk/1/hi/education/1879019.stm#story>.

<sup>38</sup> See [www.bbc.co.uk/bitesize](http://www.bbc.co.uk/bitesize).

animations to explain the principles of spelling, physics or cellular biology, as well as illustrative, full-length videos.<sup>39</sup>

The possibility of programming direct feedback turns them into very useful independent revision tools. BBC Bitesize is a very popular free resource favoured by teachers and parents in the UK, alike, owing to the fact that it provides guidance and exercises for all key stages within the national education system.<sup>40</sup> Similarly, school teachers and university lecturers are being encouraged by their institutions to use computers, with all their multimedia interactive capabilities, as part of the teaching methods with a view to promoting independent learning by using existing resources or developing their own through software tools such as *Course Genie*.<sup>41</sup> This type of application has proved rather successful for children preparing for their GCSE and A-Level exams (Figure 17) because of the immediacy of the feedback, and the progress tracking tools. In other words, every time the programme is used, it takes on a different profile, offering targeted advice based on performance, whereas books tend to become damaged through use and occasionally contain wrong answers and even graffiti from previous pupils.

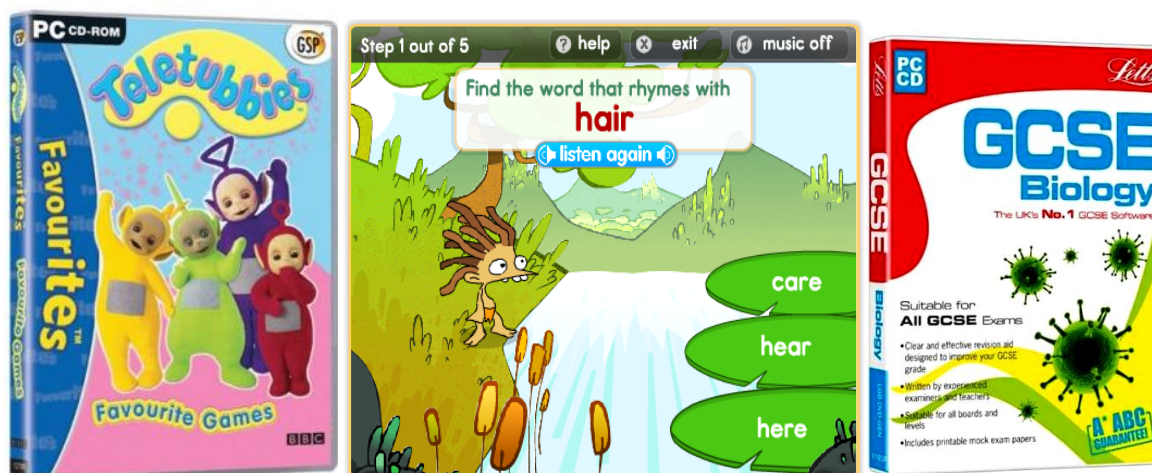


Figure 17. Game-like products used in the education in line with the national curriculum

<sup>39</sup> See [www.britannica.com/EBchecked/topic/1688997/human-eye](http://www.britannica.com/EBchecked/topic/1688997/human-eye).

<sup>40</sup> Their educational tutorials and training guides can be freely accessed at [www.bbc.co.uk/schools/revision](http://www.bbc.co.uk/schools/revision).

<sup>41</sup> This is an application developed by Wimba to help teachers create interactive exercises: [www.wimba.com](http://www.wimba.com).

The effect of video games on our daily lives is increasing, thanks to advancements in nanotechnology and the miniaturisation of digital technology, the improvements in internet and telephone networks, and the advent of the smartphone era.

### 2.2.3- Casual games

This term refers to games that are designed especially for people who do not really have time to play, but would be interested if a result is achievable within the short timeframe that they have available: while commuting by train or bus, for instance, relaxing in their lunch break, or in similar situations. Prime examples of this type of game are classics such as *Solitaire* (Figure 18), *Minesweeper*, *Bejewelled* or *Angry Birds*, some of which are preinstalled on computer or the telephone operating systems. To complete a single game can take less than a minute in many cases, so that playing this type of game could be regarded as constituting a simple, but rewarding way in which to combat moments of tedium.



Figure 18. Casual games for PCs, mobile phones, and PDAs

These games started to be used relatively early on as part of marketing campaigns in which free trials were offered in order to attract players onto a particular site and then present them with a variety of products and services, such as films, cable television subscriptions,

takeaway meals and, of course, video games. Casual games, which always retained the simplicity which made them popular, quickly developed into a real business opportunity for many developers, who improved the various aspects of the game, enhancing their intuitiveness and appeal.

Mobile phones have also helped a great deal in the promotion and growth of this market. Nowadays, telephone handsets come with at least two or three games preinstalled, and more are easily available from service providers and on the Internet. Despite technical advances and the popularity of Blackberrys and iPhones (all mobile phone manufacturers currently have several models which fall into the category of ‘smartphone’), it cannot be denied that these devices have rather limited display possibilities, computing power and battery life, making casual gaming particularly suitable for this type of platform largely because these games tend to occupy little memory space, are entertaining, easy to pick up, to complete and ultimately to put down. This text has to be displayed on a small screen with varying sizes, from 240 x 320 (classic Nokia), to 640x480 (Qwerty keyboard Blackberry), to 1136 x 640 (iPhone 5), or 1280 x 768 (Nexus 4). Although high screen resolution can project a very crisp image the texts displayed in video games have to be sized specifically for each handset in order to enhance legibility and readability

The previous pages constitute a detailed account of the variety of multimedia interactive software applications currently on offer and their relationship with the video game industry. Many of these products are released locally using an intranet (examples might include those which are available through on-board entertainment systems on transatlantic flights), nationally (such as the pre-packaged games, or those accessible through cable and digital

television), or internationally (such as pre-packaged mainstream games or those available on the internet).

The translation of these products into languages other than that in which they are released is arguably not as straightforward as text-only translation, neither is it as inconsequential as some game developers and publishers seem to assume, judging by the insufficient provision both of time and data to enable proficient game localisation to take place. The localisation of video games is analysed in detail in Chapter 4, after studying the nature of multichannel texts and their translation in Chapter 3, so that this professional practice may be positioned firmly within the framework of audiovisual translation. It is clear that each game is bound to require a translation strategy specifically tailored to the product, the theme, and the platform. The correct strategy must, therefore, take into account the target audience and the distinct purpose of each game individually in order to guarantee its successful distribution and enjoyment by the target cultures.

Some of the fundamental characteristics that must be borne in mind when studying video game localisation, even within the context of translation, are the linguistic impact of interactivity, the concept of playability, and the audiovisual nature of the product. The first two dimensions are discussed in the next sections, while the third aspect is explained in detail in Chapter 3.

### **2.3- Game interactivity and translation**

The fact that translation studies have traditionally focused on words, sentences, paragraphs and texts can be seen as being rather more accidental than rigorously paradigmatic.

Translation in its broader sense is the result of the evolution of writing, technology and distribution channels, the establishing of linguistics as an academic discipline in the early twentieth century, the influence of comparative and world literature studies in the first half of the same century. It seems fair to state that words, sentences, paragraphs and texts merely constitute the framework of translation, since its real focus lies essentially in the intercultural communication arising from every situation in which people from different countries attempt to communicate with each other. Several communicative strategies are employed simultaneously, examples of which include body language, facial expressions, intonation changes, articulatory emphasis, etc. When all the elements of communication are channelled into written language, only a few of these characteristics are selected and rationalised. It is, in fact, a tribute to the efficiency of written language that its verbal and syntactical composition seems self-sufficient, although, in fact, the reality it portrays is always far wealthier in nuances and information. Audiovisual and multimedia products, now widely available thanks to advancements made with respect to digital technology, reveal the full extent of the wealth of expression communicative acts embody. For example the written transcript of a political debate is always less revealing than the video recording of the actual debate. It is therefore appropriate and perhaps long overdue, that translation studies should concern themselves with multimedia interactive entertainment products because, although all written language is communication, not all communication is written.

Similarly, the task of translators has evolved and adapted to the incredibly varied array of products and services that require a linguistic mediator for their success. Translation in the language services industry linked to software is understood as part of GILT, which stands for Globalisation, Internationalisation, Localisation and Translation ([www.gala-global.org](http://www.gala-global.org)). The present research on the localisation of video games must be understood in this business framework, so it is worth describing these concepts briefly before going any further.

Globalisation refers to the range of processes necessary to prepare and launch products worldwide based on the strength of a world-aware product design. Internationalisation is the process of designing a product so that it can be easily localised in order to achieve worldwide distribution and success. Localisation is the process of adapting a product to each of the importing locales in terms of their linguistic, technical, cultural and legal requirements. Finally, a locale is the language and culture variety natural of a particular geographic region, (for example, Portuguese from Brazil is a locale different from Portuguese from Portugal). The main difference from previous business practices and translation approaches is the designing for country-specific international distribution from the early stages of product development, in a way, the true sign of a globalised industry.

As has been previously discussed by Bernal-Merino (2006: 27), video games combine in one product characteristics of other arts and disciplines such as film, literature, 3-D design, and computer programming (see Chapter 4). It could be argued that video games are the epitome of twenty-first century pop culture entertainment in that consumers are able to choose a particular theme, adjust it to suit their individual skills, save their progress, and complete the game at their own pace, thanks to the customisation and interactivity offered by these software products. We could debate endlessly about the pernicious influence of violent games,<sup>42</sup> or how useful game-like applications<sup>42</sup> can be for education and professional training (see Section 3.2.2). The fact is that there is a variety of creative possibilities in the development of new games. The fact that there are many international game conferences taking place annually testifies to this. Examples of the most prominent international fora committed to game development include the London Games Summit and Develop in England, GamesCom in Cologne, Game Developers in San Francisco and the Tokyo Game

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<sup>42</sup> In 2007, the UK Government asked Dr Tanya Byron to conduct an independent review to examine the risks to children from exposure to potentially harmful or inappropriate material on the Internet and in video games. The full report can be found on [www.education.gov.uk/ukccis/about/a0076277/the-byron-reviews](http://www.education.gov.uk/ukccis/about/a0076277/the-byron-reviews).

Show, (Figure 19). The British Academy of Film and Television Arts (BAFTA) has had a section dedicated to video games (Figure 19) since 2003, with fifteen categories, recognising ‘multiplayer’, ‘artistic achievement’, ‘technical innovation’, and ‘story’ among other qualities.<sup>43</sup>



Figure 19. International Game Industry events

Although ‘interactivity’ may sound like a very new term linked primarily to computer technology, the concept is by no means new or exclusive to digital media. Indeed, it has been used before (Sainsbury 1998) to indicate that receivers have the power to influence their experience of a particular product or service and its outcome. The following paragraphs bring to the fore the use of interactivity in other arts in order to contextualise and highlight how video games relate to, but also differ from, them.

All modes of entertainment can arguably be said to be interactive by definition. In other words, they depend on a certain degree of contact between the recipient and the creator. The very concept of entertainment is connected with the energy of the creative process and the reaction to it. This process applies to all forms of entertainment, although one of the main differences seems to reside in the level of authorship granted to the recipient, the reader, the spectator, or, in our case, the video game player (Wardrip-Fruin and Harrigan 2004: 8).

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<sup>43</sup> The UK government sent two representatives to the London Games Summit which took place in 2006 to celebrate the success of this industry in the UK. BAFTA has also recognised the success of this industry since 2003, with the celebration of a special video game awards ceremony every October, celebrating excellence in video games: [www.bafta.org/games/awards](http://www.bafta.org/games/awards).



There are high levels of interactivity in drama, for instance, an example of which is illustrated by the shows performed by Catalan theatrical company *La fura dels baus*, where the representation takes place among the public and changes slightly depending on people's reactions.<sup>44</sup> Other examples include Reality Television, programmes such as *X Factor*, *Big Brother* or *Strictly Come Dancing*, where viewers can influence the contestants' chances of winning by voting for a particular favourite. This type of interactivity is linked to human performance and improvisation, and does not require computer programming and automation in the manner that video games do.

Literature offers a different kind of interactivity. Wolfgang Iser, for example, uses the term extensively in his books on literature and literary criticism – *The Implied Reader* (Iser 1974) and *The Act of Reading* (Iser 1978) – to explain the interaction between the written text and the reader. He analyses the way in which reading itself is interactive, and notes that neither the study of the actual text, nor the experience of the reader in isolation is likely to yield an adequate account of literary works.

*A propos* of modern practices in book publishing, Sainsbury (1998: 168) writes extensively about the communicative quality of literature, arguing that children's texts have always challenged "the boundaries defying literature itself, a challenge which appears to contain a typically postmodern contradiction, whereby outwardly disparate objects, such as toys, books or games, coalesce to form the body of children's literature". We must, however, highlight the fact that, as revolutionary as they may seem, these practices are not completely new nor are they only for children. Sendak (1989: 51) describes a collection of "rare and fragile

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<sup>44</sup> Shows like *F@ust 3.0* and *Ombra* blur the boundaries separating the public and the actors, with the result that patrons have no option but to engage actively with the performance or leave the show.

transformation books and mechanical toy books that went back to the seventeenth century, notably the flap books called harlequinades". These books were initially intended for adults but they were had been relegated to the nursery by the mid-nineteenth century. Examples include the popular mechanical books of the German artist and writer, Lothar Meggendorfer (1847-1925). Reid-Walsh (2006) is also a good source of information on these early transformation books.

While this is true of literature in general, there are some authors who have tried to push those boundaries even further. The novel *Rayuela*, (*Hopscotch* in English), written in 1963 by the Argentine author, Julio Cortázar, is probably one of the best examples of how a text is not something as simple and linear as appearances would lead us to believe. Written in an episodic manner, the novel has 155 chapters, the last ninety-nine being designated as 'expendable' by the author himself. The book can be read either in direct sequence (from Chapters 1 to 56) or by hopscotching through the entire set of 155 chapters (except chapter 55) according to instructions provided by the author. There are several other ways in which to read the novel, such as reading only the odd or the even pages. This literary opus certainly differed from previous works and may have opened new possibilities in the minds of modern writers.

In a similar vein, the *Fighting Fantasy* game-book series,<sup>45</sup> started by Livingston and Jackson in 1980, seems to have benefited from the existence of a novel such as *Rayuela*. Game-books offer a further degree of interaction where, besides the traditional relationship between readers and text, readers are asked to choose the actions for the protagonist of the story. This innovation enabled readers to jump from section to section, to fight monsters by throwing

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<sup>45</sup> First Published in 1980 by Puffin, they are now reprinted by Wizard Books, but still controlled by the authors who have their own dedicated website: [www.fightingfantasygamebooks.com](http://www.fightingfantasygamebooks.com).

dice, etc., making them responsible for the ensuing consequences and turning them into the actual heroes. A brief excerpt from one of these very popular books, *Caverns of the Snow Witch* by Livingstone (1984: 8), in which the involvement of readers in the creation of the adventure established a new way of interacting with printed literature, is provided below:

The iron ball flies through the air and hits the Frost Giant on the Temple. His huge frame crumples to the floor like a house of cards. The wooden chest he was lifting breaks open, spilling its contents. You find three ornate rings and a cracked bottle which emits a sweet, scented odour. If you wish to try on any of the rings, turn to **65**. If you would rather walk through the next tunnel, turn to **338**.

As some researchers like Sainsbury (1998: 214) have noted, due to the use of dice for particular encounters, as well as the extremely disciplined structure lying underneath, the “notion of textual ownership, or authorship, contradicts the central place of chance in the narrative construction of any reading”. It is undeniably true that pathways, although varied, are predetermined in game-books, and they are not spontaneously generated *ab nihil*, following the reader’s action. There is no denying, however, that this sort of book is responsible for blurring the boundaries between the traditional idea of literature and the nature of games and toys.

Video games have become very popular in what, historically speaking, is a rather short space of time, and the degree to which they use interactivity cannot be overstated. It empowers users and encourages them to become active agents in direct control of an adventure to an extreme never seen before in any medium. In an interview with Murdey (2006: online),<sup>46</sup> game designer, Chris Crawford, talks about interactive storytelling or, to use his preferred term, ‘storytronics’:

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<sup>46</sup> See [www.gamasutra.com/view/feature/131131/video\\_games\\_are\\_dead\\_a\\_chat\\_with\\_.php](http://www.gamasutra.com/view/feature/131131/video_games_are_dead_a_chat_with_.php).

Interactive storytelling has a more meandering feel to it. You don't charge down a plot line towards the end, you meander through a social environment. The key thing is that it's about people, not things. Social interaction, not mechanical interaction. The primary thing you do in interactive storytelling is talk to other people.

People who are not acquainted with the world of gaming may find it difficult to empathise with video game avatars, especially if they compare them to their experience of a masterful performance in the theatre, or the intimate and rich literary nuances perceived when reading a book. From that viewpoint, empathy in gaming is rather unlikely, simply because games have a different goal. Although some companies and advertising campaigns may want to add value to their games by capitalising on the 'cinematic' experience (the awesome graphics features and the high quality voice-acting comparable to Hollywood blockbusters), play is always about action and reaction.

Action takes place in the first person and, most often, through a computer generated avatar. Players assume the persona of the characters they play, and inhabit that virtual body and world for as long as they want. In fact, when players talk about the game or the story in the game, they normally tend to use the first person pronoun 'I' to talk about their characters and what they did in the game, as opposed to the third person used when talking about the protagonist of a book or a film. The game must adapt to the players' responses, achieving this in two ways: programmatically, through well-designed gameplay, and linguistically, through the correct flow of relevant information in meaningful text format exchanges. As with the game books mentioned in previous paragraphs, pathways are not limited, with video games offering more possibilities. On the one hand, access to secondary storylines can be delayed or

ignored, and, on the other, role-playing and open world<sup>47</sup> games offer a wide array of potential endings, all of which are considered equally valid, encouraging players to act variously and within various time frames.

Game interactivity is particularly relevant when seen from the perspective of translation because a significant proportion of the communication taking part between players and games is provided by language, whether in text, audio, or video format. There must therefore be a considerable amount of linguistic flexibility on the part of the game engine, enabling improvisation. This is analogous to what was said earlier concerning the performing arts, in the sense that the game needs to adapt to the individual choices made by players. Video game programming must take into account syntactical and morphological rules in order to phrase exchanges with players correctly. In some games, players can choose their character's gender, race, or profession, and this information ties seamlessly into the virtual world in meaningful ways. For instance, Non-Playing Characters (NPCs) may change the way they address players or the information they provide, depending on their gender, race, or profession. In other words, NPCs need to be able to phrase sentences correctly, such as: 'Come this way, *Sir* [or] *Madam*', 'We don't allow *Elves* [or] *Orcs* [or] *Humans* on our premises!' or '*Guards* are welcome at the inn, but *wizards* should not push their luck'. Errors in the rendering of these sentences in other languages - because of gender and number agreement, mode of address, etc. - risk disrupting the suspension of disbelief, defeating the game's main object, which is to provide an immersive experience in a virtual universe into which players can enter. These syntactical and morphological issues can affect the successful translation of video games in a significant way; these are described and illustrated more fully in Chapter 4.

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<sup>47</sup> An open world game is a type of video game level design where players can roam freely through the virtual world and they are given considerable freedom in choosing how or when to approach objectives.

It is clear that video game interactivity has a linguistic dimension that must be replicated in each of the localised versions of the product if this is to prove successful. Without the appropriate transfer of these reality-building linguistic exchanges, the experience of the players becomes more negative, because the notion of playability has been compromised. The following section explores the meaning and application of playability with respect to the localisation of video games.

#### **1.4- The link between playability and translation**

Although the main mechanical functionality of the translated game application may be exactly the same as in the original version, playability may suffer because of bad translation, confusing instructions, unclear menus, poor voice acting, and a long list of localisation ‘bugs’ discussed in more detail in Chapters 4 and 5. Playability is therefore a crucial concept for the localisation of video games because it affects, not only the final feel of the product, but more importantly the players’ actual enjoyment of the game experience. In the same way as the translation of plays (for the stage) and scripts (for television or cinema) must conform to ‘performability’ implying “a distinction between the idea of the written text and the physical aspect of the performance, and [...] that the theatre text contains within its structure some features that make it performable” (Nikolarea, 2002: online),<sup>48</sup> the translation of video games requires ‘playability’, so that game immersion can be achieved and maintained successfully by taking the suspension of disbelief a step further and creating a convincingly personal experience for players each time they enter the game world.

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<sup>48</sup> See [www.bokorlang.com/journal/22theater.htm](http://www.bokorlang.com/journal/22theater.htm).

At the most basic level, localisation must serve a purpose as close to the original as possible in the target language that it is substituting. However, due to the tight schedules in game development, the immovable international release dates, and perhaps the poor understanding of what game localisation entails, the reality is that often the translation of video games lacks the quality given to other products, literary and scientific books, for example. The result is that many players from different countries continually complain on official game forums and blogs about the distraction and annoyance caused to them by localisation bugs and translation mistakes. That the quality of localisation is relevant to gamers is borne out by the fact that they often form amateur translation groups in order to extract, and improve on, all the localisable strings in the game (Díaz-Montón 2011). Some of these projects may take them several months of hard work, but fans are happy to spend time developing their skills for the sake of better quality localisation for the benefit of the wider gaming community. One of the most popular and productive game localisation communities in Spain is ClanDlan ([www.clandlan.net](http://www.clandlan.net)). Its netizens<sup>49</sup> are responsible for more than forty patches to improve on the official versions of certain games. They even create completely new ones for badly translated games and even for titles that have never been translated into Spanish.<sup>50</sup>

Playability has to be taken into account when considering localisation, simply because the players' interaction with the game application can be either greatly enhanced or considerably diminished, depending on the quality of the localisation. Talking about *Smarty Pants*, a quiz game for children released by EA in 2007, Aaron Loeb (in Kumar, 2008: online) states the following:

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<sup>49</sup> Refers to individuals involved in online communities. They are also referred to as cybercitizens.

<sup>50</sup> Muñoz-Sánchez (2008) writes about fan localisation and 'romhacking' for classic games that are only available through used-games shops.

You can't localize trivia – especially trivia targeted to children, as they know totally different things in different countries. So, together we had to manage 120,000 questions (20,000 per territory) and all the potential headaches of that much data. [...] The *Smarty Pants* [focus] tests were fantastic: people jumping up and down, laughing, screaming. We knew we had a really fun game early on. From there, the goal was making it as fun and accessible as possible.

In the case of a game like *Smarty Pants*, simply translating the original questions from US English to Spanish, for example, would not cater for children in most Spanish speaking countries because familiarity with trivia is dependent on culture, education, personal experience, and everyday life in the community where one lives. These facts are even more inescapable in the case of children and young adults and, to be successful, games have to be developed in such a way that the core programming code can accommodate the requirements of each country with its language, culture, assumptions, system of decorum and, expectations. This process is called 'internationalisation' and it is normally promoted by marketing departments aiming to expand their network to include an overseas clientele. It is often still an assumption - and this is especially counterproductive when it comes from game developers and publishers - that the visual is sufficient for communication and, thus, that there is little reason to be attentive to translation accuracy. There may even be an additional assumption that what is enjoyable in one country will be equally agreeable in another, but this is not necessarily the case, since the concept of what constitutes fun is deeply rooted in culture, tradition, and history.

There are many external and internal parameters to take into account when translating and re-designing a game for a particular territory. Seen from the external perspective, the development of any video game will be mainly constrained by the allocated budget, sponsorships, and market expectations, apart from other considerations like platform



specifications (Xbox 360, PlayStation 3, Nintendo Wii), branding, time frame, etc. From the internal perspective, other parameters closely linked with the nature of the video game must be re-evaluated when considering its possible translation and release in different countries. Classic examples of the aspects that need to be tackled with due care include the soundtrack accompanying the game (*Project Gotham Racing 1* featured radio stations with the local DJs of the receiving territory); the characters (*Formula 1* highlights Fernando Alonso for the Spanish market, whereas it puts forward Lewis Hamilton for the British one); and the commentators (sports games often use popular sports commentators from radio and television that may have to be substituted to suit the country in which the game will be released).

Developers will also have to change part of the content of the video game to adjust it to the age ratings of the various territories (McCarthy 2005). Some games may be allowed to display blood, abusive language, and sexual storylines in the USA, while other countries may ask for specific modifications or sanctions and bans may even be put in place when the authorities consider the material to be inappropriate. A good illustration of this is the fact that, in Germany, the depiction of red blood and Nazi paraphernalia have been forbidden, as is noted on their official rating board web page, [www.usk.de](http://www.usk.de).<sup>51</sup> A prime example where crucial changes took place was the title *Return to Castle Wolfenstein* which had to eliminate all references to Nazi Germany (New York Times 2002).<sup>52</sup> Similarly, *Tomb Raider* “had to undergo a major overhaul to make it acceptable to Japanese sensibilities, so the grisly sudden-death sequences” featured in the western version disappeared (Chandler 2005a: 137).

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<sup>51</sup> USK is the German video game rating board, similar to the BBFC in Great Britain, PEGI in Europe, and ESRB in the US. The initials stand for *Unterhaltungssoftware Selbstkontrolle* [Self-Monitoring of Entertainment Software].

<sup>52</sup> A list of the changes posted by game fans can be found online in [mobygames.com/game/return-to-castle-wolfenstein/trivia](http://mobygames.com/game/return-to-castle-wolfenstein/trivia)

Starr Long (producer of NCsoft and one of the figures behind *Ultima Online*, an immensely popular massively multiplayer online game) expresses his concern in an interview, where he talks about the many changes required in game localisation and laments that, very often, the development team “believes that just because something works in their territory it can work just as successfully in another territory” (in Chandler, 2005: 236). In this sense, I would like to argue that it is only by applying the concept of playability that the creativity required for the localisation of video games can be fully understood (Bernal-Merino 2009c: 65). The concept of ludic creativity and its implications for translators are fully analysed in Section 4.3.

The impact of multimedia interactive entertainment software applications in modern society has been discussed in this chapter and the need for quality localisation for such products, if they are to be equally successful in other territories, has also been emphasised. The following chapter places video game localisation within the discipline relating to the translation of multichannel texts, often referred to in translation studies as audiovisual texts. It is important to recognise, and draw parallels with, the translation of other audiovisual texts in order to identify the unique features of game localisation and to understand its professional practice.

## **Chapter 3**

### **The Translation of Multichannel Texts**

Although the practice of language transfer can be arguably dated back to the practice of language itself, the study of translation as an academic discipline is rather young and, in the West, it did not emerge until the 1960s. In spite of the numerous efforts to map translation activities in recent decades, Translation Studies scholars are still in search of a theoretical framework that would also encompass mediation services highly in demand in the 21st century, e.g. illustrated publications, webpages, audiovisual productions and interactive productions. Independently of the nature of the text involved and the medium utilised to deliver it to readers, audiences and viewers, translation professionals have always played a necessary key role in mediating between original creations and their non-native consumers. There seems to be still more questions than answers in our discipline, but it can be agreed that, in general terms, translation conjures up the illusion that we are able to access and benefit from foreign creations whatever our mother tongue is. In this sense, successful translators develop what could be described as author-like writing skills (Bassnett and Bush 2006) in order to replicate the content and style of the original text, in a manner that is agreeable with the final product and for the benefit of the importing countries and their way

of consuming this type of products. This holistic approach can be said to be beneficial for all types of language transfer.

Although young, or precisely because of it, there are several theoretical proposals when dealing with translation studies but they seem to lack the maturity that would allow them to account for all current professional practices in translation. One of the specialised disciplines recently added to the area of translation studies is audiovisual translation (AVT), which has taken a long time to be recognised by academics as noted by Díaz-Cintas (2004b). There are three main reasons for the belated recognition of this professional practice:

- audiovisual products are relatively new when compared with more traditional media,
- translation research has often focussed on literature because main debates used to be initiated in linguistics or comparative literature forums, and
- the perceived academic stigma of mass-entertainment pop-culture products as an object of study.

The audiovisual specialisation in translation studies started to be formally introduced in some European universities at MA and BA degree level (Díaz-Cintas 2004b), catering for the needs of publishers for cinema, TV, and interactive software products. The present research takes at its object of study video games and argues that these are the most complex example of audiovisual translation, due to their multimedia and interactive characteristics. Their relevance is even more patent when we consider their strong presence as hubs for entertainment in households around the globe, their multibillion market value (higher than the cinema or music industries), and their ever-growing applications within education and professional training. Studying side-by-side the translation of these multichannel texts may

help translation scholars to understand the multifaceted nature of translation as both an intellectual and a professional activity.

Multichannel texts are texts that utilise at the same time different sign systems to communicate, such as those found in films, where the linguistic information works in synch and has to be understood together with the acoustic and visual information that make up the product. These semiotic systems can of course be studied on their own, but the filmic product has to be interpreted taking all semiotic systems into account simultaneously, which is a key concept for the translation of audiovisual and multimedia products.

It was the pioneering linguist Jakobson (1959: 2) who considered translation in his linguistics writing and hinted at the relevance of verbal and nonverbal systems for our discipline in the following terms:

We distinguish three ways of interpreting a verbal sign: it may be translated into other signs of the same language, into another language, or into another non-verbal system of symbols. These three kinds of translation are to be differently labelled:

1. Intralingual translation or *rewording* is an interpretation of verbal signs by means of other signs of the same language.
2. Interlingual translation or *translation proper* is an interpretation of verbal signs by means of some other language.
3. Intersemiotic translation or *transmutation* is an interpretation of verbal signs by means of nonverbal sign systems.

Products such as comic books, films, and video games are multichannel in nature because they combine a linguistic system with a pictographic or an audio and visual one, and these different semiotic systems are creatively interwoven to achieve a somehow more life-like, illuminating or even cathartic communication experience with the receivers of the product. It

goes without saying that the content and communicative value of these semiotic systems has to be analysed and conveyed if translation is required. Translating only the written word can lead to error and, therefore, a disruption of the continuum and coherence that exists amongst the various sign systems in the source text. The multichannel nature of some translation practices was pointed out as early as 1964 by Nida, but its formal introduction into translation studies has proven to be very slow and rather controversial.<sup>53</sup> One of the earliest formal attempts can be traced back to some thirty years ago, when Mayoral *et al.* (1988: 356) introduced the concept of ‘constrained translation’ explaining that: “we also deal with the existence of more than one communication channel, the factors of source culture, ‘noise’, and the role of the translators in this complex process”. According to the authors, the simpler, unilateral focus on linguistics prevents professional “from taking into account aspects of the translation process beyond this limited scope [particularly] those which depend on the relation of the linguistic message to other messages conveyed by non-linguistic systems” (*ibid.*).

Today’s technology allows writers, directors, and programmers to come up with texts that work in conjunction with other semiotic systems in order for their creations to communicate content in innovative ways. Sound, photos, videos and interactive three dimensional environments support or contradict each other and the linguistic information given, creating a rich multichannel melange that works harmonically in the original product, but that can create serious communication problems if not interwoven equally well when translated into other languages. There are still many freelance translators nowadays that are forced to work with a text-only file of the original multichannel product in hand because of a variety of legal, managerial, and technical reasons (all of which are analysed in chapter 5). Even the discipline

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<sup>53</sup> This has a direct impact in the professional practice, because translation service companies find it difficult to draw on authoritative research findings and strategies to help them streamline their work flow and price their services.

of translation studies is still struggling to reevaluate existing paradigms and theories in order to incorporate the requirements and challenges of audiovisual translation. With a view to help steer the translation debate into the growing area of research of video games, the present chapter focuses on the nature of multichannel products and how the so-called creative industries behind them go about the business of translating them. As mentioned earlier, video games can probably be considered as the most complex and challenging form of AVT as well as the most extreme form of multimedia interactive software, but it is possible nonetheless to distil from adjacent entertainment industries some best-practices from which the game industry can benefit.

### **3.1- Translation beyond the written text**

It is somehow easy to understand why so many people, especially those who have to pay for the service, wrongly limit the focus of translation to words, or in an even narrower view, to the actual graphic representation of words: script. The link between written language and translation has been an undeniable fact for more than three thousand years. According to Sandars (1972: 7), one of the earliest pieces of evidence of written translation activity is linked to ancient Mesopotamian history when archaeologists found the Akkadian (*circa* 1,300 BC), and Hittite (*circa* 1,000 BC) translations of the *Epic of Gilgamesh*, originally written in Sumerian *circa* 2,700 BC. The epic was written in old Babylonian cuneiform script and it was recorded in several clay tablets almost 5,000 years ago. Since translating an epic poem is a

rather artistic and complex activity, we may infer that interlingual communication must have started a lot earlier, both orally and in writing.<sup>54</sup>

From the development of script and durable writing technology, and with the interaction of different civilisations, translation has been used to transfer knowledge and entertainment from one culture to another from time immemorial. Although there would have been something similar to what we call today ‘over-the-shoulder interpreting’, the recording of taxation, lauds of leaders, and literary creativity required a somewhat more audacious technology. Script, arguably humankind’s most useful invention, was ideal because of its durability, repeatability, and portability as opposed to the spoken word. Indeed today’s constant medical, scientific, and technological advancements powered by the ever-growing possibilities of the internet would be simply unattainable without the systematisation of human language into graphic signs, and the projection of that into the invention of computer language with which to programme computers.

Writing made language more tangible, which in turn meant that knowledge could be stored, replicated, physically transported, and of course translated to and from other cultures that excelled at some particular discipline or art different from the resident scholars. Unlike nowadays, the content of these texts was rather elitist in nature, mainly religious codices, law and taxation annals, medical compendiums, and acknowledged literary works. This sequence of events seems to have given the written word value added over the spoken word; a certain prestige because, among other reasons, only learned scholars could read and write, book making remained expensive for centuries, and religious texts carried the authoritative word of prophets and deities. Script was a guaranteed source of knowledge wherever it may have

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<sup>54</sup> We may also infer from it that the practice of interpreting would have existed long before that of written translation, since writing technology and scholarship developed significantly later in all cultures. For more information about interpreting in antiquity see Hermann (1956/2002).



come from, and written translation was a relatively easy way for rulers to acquire power by benefiting from foreign wisdom.<sup>55</sup> In my opinion, this is still the case, even if modern societies have made it into such a routine fact of the so-called global village that it is no longer perceived as remarkable.

The written word became a tool that enhanced thinking processes and an object study for philologists, linguists and translators. Whether original or translated, the written word was always the main focus for academics since it is also far easier to control and study what is on the page. Developments in technology, however, have allowed humans to utilise text in synchrony with images and sounds, rendering these texts multichannel in nature and altering the way they are created, consumed, and inevitably, translated. Undoubtedly the task of translators, when simplified to its very essence, is always the same: to make information originally delivered in a particular language understandable to speakers of other languages. Many people uneducated in the complexities of language transfer still wrongly assume that this process is a simple equation where words are placed at either side of the equivalence sign, partly because of the chimerical intuitiveness of this reasoning, partly because of the influence of glossaries and dictionaries in foreign language learning. The idea is naïve at best, of course, and it proves to be wrong very early on when put to the test. Below there is a little example that helps to illustrate this wrong assumption with a very easy and well-known linguistic sign. Most people would agree that ‘house’ equals *casa* in the English-Spanish language pair, but:

- i. ‘the **House** of Commons’ could then be phrased in Spanish literally as *la casa de los comunas* but this term does not exist in the target language, and the correct one is *la*

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<sup>55</sup> Great examples of ‘centres of wisdom’ are the Library of Alexandria with the Ptolemy dynasty 3<sup>rd</sup> C. BC, the Library of Bagdad with the Abbasid dynasty in Persia during the 8<sup>th</sup> C., and the School of Translators in Toledo with Alfonso X the Wise in 13<sup>th</sup> C. Spain.

*cámara de los communes*, which could be back-translated as ‘the **Chamber** of Commons’.

- ii. At the same time, *la casa de socorro* could be translated into English as ‘the **house** of help’ but this term does not exist, the correct one being ‘the first-aid **post**’, which could be back-translated as *el puesto de primeros auxilios*.
- iii. ‘I’m going **home**’ would most often be translated as *me voy a casa*, but *hogar dulce hogar* is normally phrased in English as ‘**home** sweet **home**’.
- iv. *Casa* is used by Spanish children when playing catch up to refer to the safe place where they cannot be caught, whilst in English the term is ‘**sanctuary**’ and sometimes ‘**home**’.
- v. ‘On the **house**’ in English can be back-translated into Spanish as *paga la casa/empresa* and it means that something is *gratis* in Spanish, which is often translated into English as ‘**free**’.
- vi. A *castillo de naipes* is often translated as a ‘**house** of cards’ and not a ‘**castle** of cards’.
- vii. According to the *Oxford English Dictionary* and the *Diccionario de la Real Academia Española*, both English and Spanish have more than a hundred expressions each where ‘house’ and *casa* are commonly used. As it could be expected, direct correspondence is rare.

There are many more possible meanings but so far the terms ‘house, chamber, post, home, sanctuary, free’ are apparently interchangeable in English and equivalent to the Spanish *casa, cámara, puesto, hogar, gratis, castillo*. This may be partially true but essentially imprecise, part of a poorly-understood notion of equivalence and interlingual communication. Strictly speaking this debate lies outside the scope of the present research, but there is a wealth

insightful scholars that have written about the equivalence concept over the past decades, e.g. Rabadán (1991), Baker (1992) or Snell-Hornby (2006), who provides a clear and comprehensive account of equivalence in her book on the turns of translation studies.

The previous examples illustrate how easily a simplistic perception of language transfer can lead to confusion even when there is only one semiotic system (the written one) to be considered in source and target texts. The likelihood of errors and inconsistencies when different semiotic systems are concerned is understandably higher. When translators are commissioned a text that stands alone with no other communicative dimension, for example a novel, there is no doubt that they must focus on the linguistic information contained in the written words and the literary devices employed by the writer in order to recreate a similar network of meanings for the receiving culture. Translators need to be wholly proficient in both languages, as well as to “be able to write in a number of different styles [...] and I suspect that the translator needs a wider vocabulary than most authors” (Bell 2006: 65).

The focus on the linguistic text remains a key part even when dealing with audiovisual products but the analysing and the decision-making that guides translation changes. Some of the solutions that might have been available before are not possible anymore because images and sounds cannot be altered by translators, constraining their options in various degrees. In other words, the product consumed by the target culture carries both translated and untranslated data from the original version. As mentioned earlier, languages are only a part of the tools humans use to communicate. Words are inseparable from the gestures and signs, the intonations and accents, the cultures and local histories that have developed with them in a tightly weaved patchwork of meaning generation. They are all linked to the reality of a community (Hinde 1979, Spencer-Oatey 2008) and therefore it is essential that language

services companies and professionals are fully acquainted with their communication value. All this information is contained in audiovisual products and translators have to analyse it in order to interweave an equally meaningful text for the receiving country. Gambier and Gottlieb (2001: xviii) are two of the first scholars who started writing about the need to research the translation of audiovisual texts in view of the new challenges they present to both practitioners and scholars:

Within Translation Studies, the media force us to reformulate certain questions and to redefine certain concepts which have for a long time been taken for granted. For instance, the concepts of ‘text’ and ‘meaning’. With a film or a web page, ‘meaning’ is not generated by verbal signs only: it is based on the totality of verbal utterances and non-verbal signs [...] On TV and computer screens, there are dialogue lines or fluid discourse (hypertext), fragmented on the surface, the coherence being established through the context: visual and sound elements are not cosmetic features of embellishment but constitutive parts of the meaning.

While new technology permits easier manipulation of products and grants higher control for translators, most of the problems mentioned remain, for a variety of reasons which are listed and analysed in chapter 3. In this sense, the translation of video games can only be understood in the context of multichannel texts. A diachronic journey through multichannel texts can help illustrate the layers of linguistic and non-linguistic information present in this type of texts. All these different layers add to or modify the intended meaning, affecting communication with players, and ultimately the fun value of the product, i.e. the actual video game. A historical overview of multichannel texts and their translation can pay due attention to the first instances of these texts as well as to shed some light of how they evolved and influenced each other. This will hopefully validate the merits of the multidisciplinary approach proposed in this research, which is ultimately aimed at tackling the translation and localisation of multimedia interactive entertainment software.

### 3.2- The legacy of previous media

Obvious as it may sound, video games have a variety of characteristics that could be said to come directly from previous creations, mainly books, films, and utility software. Being a modern entertainment product, games make no apologies for borrowing the more exciting and successful features of existing media and incorporating them into a new interactive creation. It is more a question of recognition than a ruthless appropriation though, and is generally guided by a whole team of game designers, artists, programmers, and marketers who are fans themselves of those previous creations. The translation of these entertainment products shares at least one major translational challenge with video games, as well as with each other. Table 2 (below) tries to group and highlight the translational legacy from one type of product to another. Doing this from the start should help illustrate what is actually unique about the translation of video games and therefore justify the niche this research is claiming for this professional activity. The aforementioned products and their main challenges from the communication and translation viewpoints can be summarised as follows:

Format	Communication environment	Translational challenge
Visual	Text-only books. Illustrated books. Comic books. Pop-up books.	- Linguistic and literary creativity. - Text-image agreement. - Written oral register. - Culture, image, text cohesion.
Audio	Opera and musical librettos. Radio dramas. Loop audio-books. Audio-only books.	- Singability: Rhythmic and lyric quality of written text. - Performability: Believable oral quality of written text for drama delivery. - Culture, image, sound, text cohesion.
Audiovisual	Interlingual subtitling of audiovisual products Subtitling and signing for the hard of hearing. Stage dramas. Interlingual revoicing/dubbing of audiovisual products.	- Displaying text on screen and synching to sound track. - Oral performability of scripts and visual lip-synchronisation. - Culture, image, sound, text cohesion.

Tactile	Tactile audio books. Braille books.	<ul style="list-style-type: none"> <li>- Text-texture agreement.</li> <li>- Culture, texture, sound, text cohesion.</li> </ul>
Interactive	Utility software. Websites. Interactive multimedia books. Video games.	<ul style="list-style-type: none"> <li>- Interactivity through menus hyperlinked traditionally linear texts.</li> <li>- Playability: User-centred options that enable story-building logic.</li> <li>- Culture, image, sound, text cohesion.</li> </ul>

**Table 2.** Sources of video game creative and technical inspiration

The synergistic effect derived from the relationship amongst all the layers of linguistic and non-linguistic information found in these products enhances the receiver’s experience. By providing more details via other codes and channels, such as the graphic or the audio or the visual, information may seem redundant but it ultimately goes towards recreating normal human interaction, and elevating it whenever possible up to an enjoyable artistic level. This is the reason why when translating such products, all semiotic systems have to be analysed by translators, localisers, coordinators, and editors, if they are to guarantee the recreation of the same fun experience for receivers in different locales around the world. The following sections analyse this type of creative products and highlight the main translation issues that they share with game localisation.

### *3.2.1- Children’s books and video games in translation*

It must be said that many publications for children are not as innocent and simplistic as some well-meaning parents may want to believe. Lathey (2010: 9) writes how many of the children’s classics discussed today were in fact originally written for adults, such as the writings by Aesop, Jonathan Swift, Charles Perrault, Hans Christian Andersen and the Grimm Brothers. In her work, Lathey (*ibid.*) traces the role of the translator and the impact

that translations have had on the history of English-language children's literature from the ninth century onwards. She analyses how the treatment of popular texts in each era reveals fluctuations in the reception of translated texts, and also discusses instances of cultural mediation by both translators and editors through abridgement of the original length and adaptation. Translators have often recorded in prefaces and other paratextual writings their didactic, religious, aesthetic, financial, and even political purposes for translating texts with a child readership in mind. This way of reimagining past texts and ascribing them to the field of children's literature has continued to the present day. Disney's vision in films of the great children's classics is often rather far from their source texts. For example *Pinocchio*, as written by Collodi (1883), is not really the embodiment of childhood innocence, but a "headstrong puppet child" who knows that children cannot expect anything from adults but "lack of understanding and exploitation" (O'Sullivan 2007: 150-152). Many of what we consider today to be children's classics were not written as stories for children originally, such as *Gulliver's Travels* (Swift 1726) or *The Adventures of Tom Sawyer* (Twain 1876), but changes in society, literature, and politics have influenced the way these books have been reprinted, reinterpreted and updated to the taste of the expected readership. The translation of books for children attracts an equally poignant kind of debate with questions about how pedagogical should texts be and what degree of adaptation is appropriate if any at all (Klinberg 1986). The issue is more complex and may have more profound implications for translation studies in particular (and society in general) than it may seem at first sight (Lathey 2006). Some translators have been accused of taking far too many liberties, others have been charged with not being pedagogical enough, or with having fail to render the 'magic' of the original, betraying both authors and readers in the view of researchers like Klinberg (1986). It would seem that translators can never emerge winners in this debate.<sup>56</sup> Solutions may be in

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<sup>56</sup> Translation Studies should ideally be able to shed some light into these issues, making sense of possibilities,

some cases a matter of opinion, but there should be no uncertainty in the severity and implications of the unavoidable linguistic and creative judgements to be made sentence by sentence. From a comparative perspective, the translation of children's books and video games share the following contentious issues:

- The highly imaginative stories, worlds, and characters presented;
- The use of playful names, idiosyncratic dialogue, creative spelling, and even made-up languages;
- The use of highly cultural-specific elements and features, partly due to the age of the target audience;
- The low social and academic status attached to this professional practice when compared with the translation of financial, scientific, legal, poetry, religious texts and classic literary texts.

Whether translating literature or video games, a certain emphasis is going to be laid on the creativity of the ST and on how well can the translator render that sparkle of originality in the target language. Children's books such as *The Hobbit* (Tolkien 1937) display imaginative worlds and creatures, and a playful way of using language not only through poems and songs, but also by inventing languages and scripts. This creativity requires the level of translator authorship traditionally objected to by academics and readers who believe the over-simplified understanding of equivalence as almost an unequivocal mechanical process of assigning literal translation values. On the one hand, the translator has to be subservient to the original and cannot act freely, in what Nord (1989, 1997) coined as the loyalty of the translator to the source text. The loyalty principle as explained by Nord (2007: 3) "obliges the translator to

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clarifying strategies with a solid theoretical grounding to avoid sterile bickering, and training future professionals with better appreciation of the challenges ahead (Bernal-Merino 2007a).



take account of the difference between culture-specific concepts of translation prevailing in the two cultures involved [and] it induces the translator to respect the sender's individual communicative intentions" (*ibid.*) and so reduces the prescriptiveness of radical functionalism. On the other hand, equivalence can also be argued from the viewpoint of the target text and its function in the receiving culture, in which case an inspired and creative rendition of the original could be considered valid and even excellent, however different on the surface, if the translation turns out to be a bestseller for example. It seems as difficult, if not impossible, not to recognise the talent of the ST author, as it is to ignore the creative skills of the TT author. There is certainly an issue with breaking "the illusion of the unmediated word" (Bassnett and Bush 2006: 1) in translation, an issue that requires solid theoretical grounding to be resolved tied to the abundant evidence available, as well as a change in readers perception of the text they are reading. Independently of the language in which we read Homer, Shakespeare, Cervantes, Molière, Dostoyevsky, or Lao Tse readers tend to feel that they are in the presence of the original text directly written by the author, when in most cases the text they are reading is decades if not centuries away from the original source and it has gone through several translations that have been produced in different periods. Venuti (1995) has written on this 'translator's invisibility' and has foregrounded how publishers can manipulate the TT by asking translators to domesticate their work for the national readership's benefit, as oppose to foreignising the national frame of reference and culture. The germ of this approach has been in the mind of practitioners for quite long, as can be understood from Luthers' letter on translating written in 1530 (in Vega 1994: 45, my translation):

We do not have to ask the literal Latin how we are to speak German, as these donkeys do. Rather we must ask the mother in the home, the children on the street, the common man in the marketplace. We must be guided by their language, by the way they speak, and do our

translating accordingly. Then they will understand it and recognize that we are speaking German to them.

Linguistic disciplines cannot be equated to mathematical formulae because it is impossible to factor in human culture, epoch and interpretation, and although the meaning of texts can be narrowed down up to high certainty, but it cannot be calculated mathematically because it is not based on physical objects that can be counted, despite the many efforts of lexicographers, semanticists, and computer engineers to make it fit this approach.

Translation professionals utilise different linguistic strategies to analyse and replicate in the TT what the source text expresses; naturally this will always depend on the nature of the target language itself and the socio-cultural context of the receiving locale, as well as on the time and purpose of the new product. Here is an excerpt from *The Hobbit* (Tolkien 1937) and its two translations into Spanish, from two different decades:

CHAPTER 1: AN UNEXPECTED PARTY	
<p>This <b>hobbit</b> was a very well-to-do <b>hobbit</b>, and his name was <b>Baggins</b>. The <b>Bagginses</b> had lived in the neighbourhood of The Hill for time out of mind, and people considered them very respectable, [...]</p> <p style="text-align: right;">Tolkien (1937: 3)</p>	
CAPÍTULO 1: UNA REUNIÓN INESPERADA	CAPÍTULO 1: UNA TERTULIA INESPERADA
<p>Este <b>hobito</b> era un hobito próspero. Se llamaba <b>Baggins</b>. Los <b>Baggins</b> habían vivido en la vecindad de la Colina desde tiempo inmemorial y la gente los consideraba muy respetables, [...]</p> <p style="text-align: right;"><i>El hobito</i> (1964: 9), translated by T. Sánchez-Cuevas</p>	<p>Este <b>hobbit</b> era un hobbit acomodado, y se apellidaba <b>Bolsón</b>. Los <b>Bolsón</b> habían vivido en las cercanías de La Colina desde hacía muchísimo tiempo, y la gente los consideraba muy respetables, [...]</p> <p style="text-align: right;"><i>El hobbit</i> (1985: 7), translated by M. Figueroa</p>

**Table 3.** Two Spanish versions of *The Hobbit*

Immediately, there are some translation choices that draw our attention to them and make us ponder various questions: Why the disparities? What may their impact be on the reader? Is one translation better than the other? If the overall purpose and nature of translation is bringing the foreign into the indigenous, what policy should be followed? Is it appropriate or

even necessary to naturalise the noun ‘hobbit’ into *hobito* for a Spanish-speaking readership? Is it necessary to transfer the meaning of ‘Baggins’ into Spanish and, if so, is *Bolsón* [big bag] a good option? Would children reading experience lose out depending on the translators’ different choices?

The disparity between the solutions proposed by the two translators may in a way reinforce the idea of *traduttore, traditore*, which basically refers to the fact that all translations are to some extent wrong and a poor reflexion of the original. However, as mentioned above, these examples also highlight the fact that the translator’s task “is still, like acting, an interpretative craft” (Bell 2006: 59), and neither one-to-one equivalence nor mathematical formulation can be considered valid options with the current state of development of computational linguistics and machine translation engines.

The translation of proper names in literature and video games is evidence of the need for creativity and imagination, though the challenge is not always resolved with equal creative zest, or it is left in the original language which can actually go against the very nature of the text. Below, Figure 20 offers an example from the *Viva Piñata* video game series, a product design for family enjoyment that carries a considerable amount of its quirky creativity in the naming of its colourful *piñata* creatures [Mexican papier-mâché animal figures filled with sweets for children party games]. None of the funny and playful English names was translated for Spanish speaking children to enjoy:



Figure 20. Untranslated playful names in video games

The following is an example (table 4) of another very common problem when translating children’s books that can also be found in video games, i.e. the use of idiosyncratic speech and creative spelling to reflect it graphically. This is the moment when Bilbo first encounters Gollum deep in his dark, wet grotto in the Misty Mountains:

<i>The Hobbit</i> (Tolkien 1937: 53)	<i>El Hobbit</i> (translated by M. Figueroa 1985: 57)
“Sssss,” said Gollum, and became quite polite. “ <b>Praps</b> ye sits here and <b>chats</b> with it a <b>bitsy</b> , my <b>preciousss</b> . It <b>like</b> riddles, <b>praps</b> it does, does it?”	- Sss - dijo Gollum, y en un tono más cortés: - <b>Quizá se siente</b> aquí y <b>charle</b> conmigo <b>un rato</b> , <b>preciouso</b> mío. ¿Le <b>gustan</b> los acertijos? <b>Quizá</b> sí, ¿no?

Table 4. Original and Spanish version of a fragment from *The Hobbit*

In the above case, Tolkien characterises Gollum as someone who does not speak standard English and has rather idiosyncratic mannerisms essential to the role he plays in the novel. This is one of the many stylistic choices that writers make, and that translators may have to replicate in the target language irrespective of how distant the linguistic systems at play are. Video games often display such creative license to enhance storytelling and gameplay as can be seen in the screenshot below (Figure 21) from the cult video game *Planescape: Torment*.



**Elderly Hive Dweller** - “I’ll bet **ye’ve** got all **\*sorts\* o’** barmy questions!” She mimics your heroic stance: “**Greetin’s**, I have some questions... can **ye** tell me about this place? Who’s the **Lady o’** Pain? I’m **lookin’ fer** the magic **Girdle o’** Swank Iron, have **ye** seen it? Do **ye** know the portal **ta** the 2,817<sup>th</sup> **Plane o’** the Abyss might be? [...]

Figure 21. Unconventional spelling to enhance characterisation

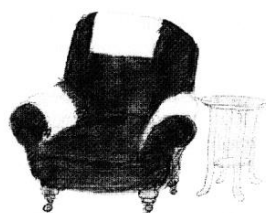
Video games tend to be equally demanding because of the constant intertextual references to elements of the video game culture, national folklore (Serón-Ordóñez 2007), and audiovisual or printed media (Mangiron and O’Hagan 2006:15). An example of this type of intertextuality can be seen in the following screenshot from the popular game franchise

*Escape from Monkey Island* (Lucas Arts 2000) where the perfume shop name ‘Scents and Sensibilities’ (Figure 22) is an educated and amusing reference to Jane Austen’s novel *Sense and Sensibility*, published in 1811:

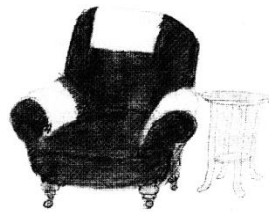


Figure 22. Educated intertextuality and amusing wordplay

When discussing the printed media, O’Sullivan (1998: 174) questions the way in which the German translation makes explicit and invents parts of the story told in *Granpa* (Burningham 1984). In the original final page of this English picture book, the author did not write a single word, the silent picture was supposed to allow young readers to deduce that the girl’s grandfather had died. The German publishers and translators considered it necessary to fill in the wordless page with the thoughts they assumed the little girl had, effectively adding eight lines to the last page of the picture book that are not present in the original English version (Figure 23). Whether this attitude can be seen as a patronising addition, a less negative twist to the end of the book or a necessary adaptation born out of the proverbial German culture literalism.



Und dann war mein Opa wirklich nicht mehr da.  
Zuerst war ich traurig. Aber später nicht mehr.  
Mein Opa hat mir nichts vorgelogen.  
Immer, wenn ich die Augen zumache und an  
Ihn denke, ist er wieder bei mir.  
"Mein kleines Mädchen!"  
"Ich bin gar nicht mehr so klein, Opa."



Ich bin bald so gross wie du."

**Backtranslation**

[And then my grandfather really was not there anymore.  
At first I was sad. Later but no more.  
My grandpa has lied to me nothing.  
Every time I close my eyes and  
Think of him, he is back with me.  
"My little girl!"  
"I'm not so little anymore, Grandpa.  
I'm almost as big as you are"]

Figure 23. Wordy German version of wordless English original

This type of localisation solution is not uncommon in the translation of children's books and can also be found in video games, where both addition and deletion are common options, not only with text but also with game features and characters, as stated by Honeywood (in VV.AA. 2006: 77): "Sometimes the planners are so impressed with changes to the translated version, they give us extra information or add extra scenes into the game to improve the presentation of the changes. It's more like we are planning the gaming together than translating".

These manipulations can be also detected in the translation of other illustrated media such as comic books, as seen in the following section, which also share some of their translational challenges with video game localisation.

### 3.2.2- Comic books and video games in translation

Comic books are considered very differently depending on their particular genesis in each country. They can be seen as a form of illustrated literature evolved from the subgroup of children's books, but they can also be granted the status of a different artistic form of expression, such as is the case of manga in Japan, or they can even be given the status of a

Ninth Art as they are regarded in France (Pilcher and Brooks 2005:12). In fact, there are many different types and their readership is larger than it might seem, as well as encompassing several age groups.

Comic books could be seen as the natural evolution of *a posteriori* illustrated works (such as *The Divine Comedy* written by Dante c. 1308-1321 and illustrated by Doré in 1867) and picture books (where text and images are conceived at the same time, such as *Alice in Wonderland* with illustrations by the writer himself, Lewis Carroll, in 1865), but it is worth analysing them separately from these other two types of works because they place a higher emphasis on the graphic image, utilising the available space in the page in a different way. Comic book pages are normally organised in rectangular panels (also known as *vignettes*) of different sizes, and text is displayed in speech bubbles, text boxes, or as part of the artwork in order to enhance the linguistic content by adding paralinguistic information relevant to the message being conveyed. This can be achieved by changing font style, colour and size, as well as the creative use of existing or innovative onomatopoeias. We can find examples of this in most comics and video games but also in literature in general. Below (Figure 24) are two examples of the combination of graphic art with linguistic information, one from the *Calvin and Hobbes* comic strip series, and another from the video game *Mad World*:

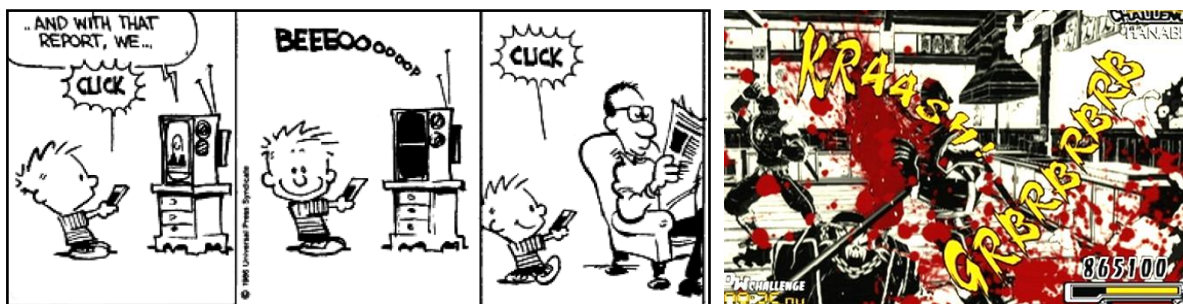


Figure 24. Spelling out inarticulate sounds in comic books and video games

The translation of non-verbal information and unarticulated sounds is still a rather poorly studied area of research, though some encouraging efforts have been made by Mayoral (1992), Pascua and Delfour (1992), Poyatos (1997) Valero-Garcés (2008), and Inose (2009).

When a text comes accompanied by drawings or photos, these are effectively ‘read’ at the same time as the words. The relationship between graphic and linguistic information can vary in hierarchy depending on the creator and that may have an impact on how the information is perceived, prioritised and digested by the reader. In any case, both the iconographic and the linguistic systems carry essential information for readers and translators because they are part of the artistic creation. As highlighted by Zanettin (2008:21), “Verbal language is not the only component of comics which gets translated, since visual components are often modified as well”. Comic books present specific challenges to translation both from the practical and the theoretical points of view (Celotti 2008: 33). The following is an example from the Spanish comic book *Mortadelo y Filemón*.<sup>57</sup> These images (Figure 25) show the importance of the symbiosis between words and images, so relevant in the translation of multichannel texts. Mortadelo, disguised as a ‘peeling potato’, is laughing because Bacterio, the mad professor in the team, has named a monkey after his boss, Filemón. Ibáñez, the Spanish cartoonist, often uses words and pictures in mutual support for greater effect. In this case, the reflexive verb *me mondo* means both ‘to crack up with laughter’ and ‘to peel’, so Mortadelo appears disguised as a peeling potato to reinforce the joke. The German version (there is no English one) had to find an image-related solution in Filemón’s speech bubble, by referring to ‘mashing potatoes’ (reinforced by Mortadelo’s costume) as an anger outburst against Bacterio, instead of *mondarse* as illustrated by Mortadelo’s laughter outburst, consistent with the Spanish expression and the drawing:

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<sup>57</sup> Very popular in several European countries, in the UK it has been released as *Mort & Phil*, not in comic book but in cartoons for the TV and the home video market. The official website is [www.mortadeloyfilemon.com](http://www.mortadeloyfilemon.com).



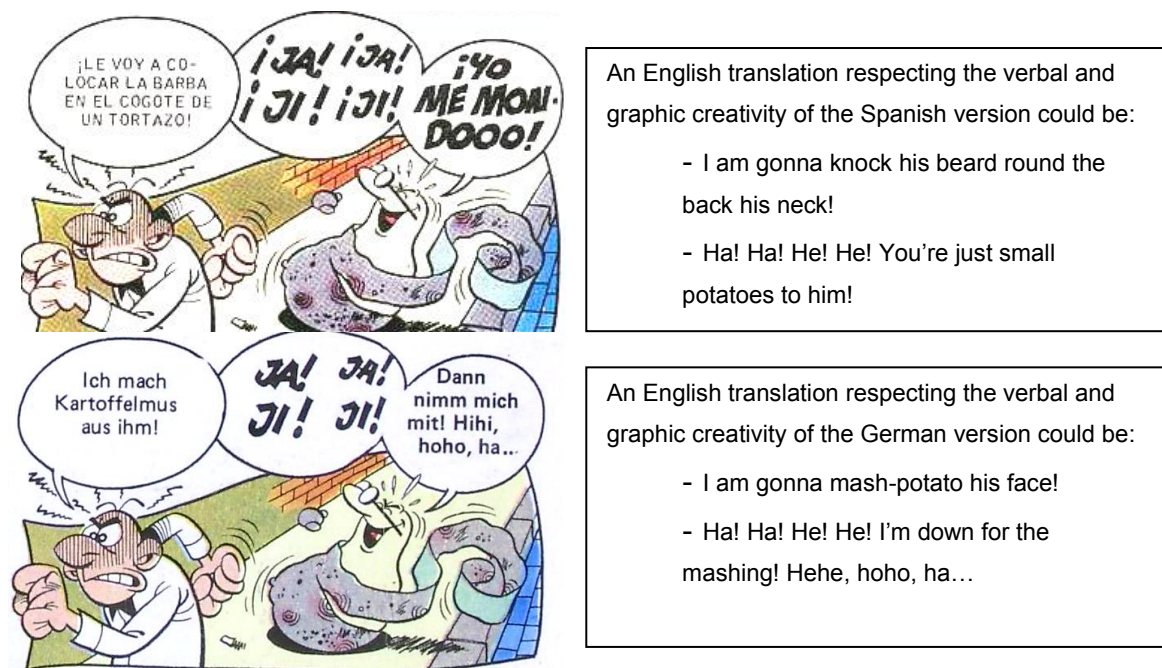


Figure 25. Graphic and linguistic information working together in comics

Although the interplay of the two concurrent semiotic systems may not seem terribly transcendental, ignoring this type of information will no doubt result in the loss of part of the humour, and it would risk changing readers’ perception of this comic. If this neutralisation of the characteristic silliness of Ibáñez’s comic books is applied throughout the whole work, due to time constraints or lack of creative zest, the product itself cannot be said to be fully equivalent.

We can also observe a very common technical issue in the translation of comics in the previous example, namely, that only part of the original text has been translated. Indeed, the first and the third speech bubbles have been transferred into German whilst the second speech bubble containing the ‘loud’ laughter of Mortadelo has only been modified by deleting the opening exclamation mark sign from the Spanish original image. Thus *¡Ja! ¡Ja! ¡Ji! ¡Ji!* remains *Ja! Ja! Ji! Ji!* in German, which can lead to unnecessary confusion with the German affirmative adverb *ja* [yes] and, more importantly, is in clear contradiction with the spelling of Mortadelo’s laughter in the next speech bubble: *Hihi, hoho, ha...* The fact that some lexical

units are drawn by the artist, as an integral part of the picture, to convey additional information can turn a technical/aesthetic issue into a translational challenge.

A similar interplay between image and text can be found in video games where images tend to be more costly and time-consuming to change, and the process of localisation often fails to provide a valid solution, if at all. For example in the hilarious game *Grim Fandango* (Figure 26), a detective's adventure that builds on the folk tradition of the Mexican day of the dead, the player's character is a skeleton fittingly called *Calavera* [skull], which loses its connotations in the English version as it has been left untranslated:



Figure 26. Graphic and linguistic information together for comic effect

When visual elements come into the equation a translational mismatch between the information conveyed graphically and linguistically can let the target product down. In the following example (Figure 27) from *Astérix chez les Bretons* one such instance can be seen in the original French and its translations into English and Spanish. The musical notes accompanying the text make readers think that Obélix is singing in the original French and in the Spanish translation, but he is laughing in English which does not really tie in with the graphic musical suggestion. The Spanish version displays a solution that is not only musically right because it uses a popular drunken song, but it also makes the appropriate adjustment by

favouring *Bretaña* [Britain] over the original verse from the Spanish song that refers to the proper name *Asunción*. Arguably, given these solutions, French and Spanish readers get a bigger laugh out of this vignette than the English ones.



Figure 27. Conflict between graphic and textual information (French, English, Spanish)

Often video games borrow techniques that were originally developed for comic books, especially in the way of utilising the space on the page and the iconography to represent words or concepts, as we can see in these screenshots (Figure 28) from *The Sims 3*.<sup>58</sup> The green prism points at the character the player is controlling, but the player can guess what the non-playing characters (NPCs) are thinking by paying attention at their thought and speech bubbles. In the screen capture below, the blonde woman is thinking that she has to buy some groceries, the man in black is thinking of the child (in this case the player's character) because of his behaviour, and the woman in the hat is thinking of the man next to her (her partner). This approach is seen as the best alternative to words because images are often thought to be universal and therefore do not need translation:

<sup>58</sup> This game, in the 'simulator' genre, features a made-up language called 'simlish' which helps developers avoid the need for audio localisation. Simlish seems to be randomly generated gibberish that when uttered with conviction can sound similar to human language, leaving its meaning open to the imagination of players.



Figure 28. Games use iconographic techniques like in comics

However, some pictographic icons may convey a different meaning or no meaning at all to the foreign eye since, as highlighted by Zanettin (2008: 21), pictures are by no means universal or unequivocal. Erik Lourden, localisation engineer at Enlaso, mentions an example where the word was more appropriate than the icon used in the original source version. The game displayed ‘a light bulb’ in the pop-up help-text window signifying an idea, something quite common in countries such as the US or the UK, “however in the target language a light bulb signified nothing more than a light bulb”, so the icon was “replaced with the translation for the word idea” (in Chandler 2005: 86).

Game developers are therefore advised to use icons scarcely or to establish their meaning early on in the game as well as reference them in the manual. For example the three icons seen in the image below (Figure 29) from the same game may convey, from left to right, a generic reference to radioactivity, riches and death in some Western countries, but some cultures may not be able to decode the icons at all because they do not belong to their national iconographic folklore. Admittedly, drawings were the beginning of written language and they may be less cryptic than words, but however closely they resemble the real object

they represent this does not guarantee smooth communication across cultures. Egyptian hieroglyphs are irrefutable evidence of this.



**Figure 29.** The meaning of icons is not international

In video game localisation the relationship between linguistic and pictorial information can be seen as even more important than in other textual types because players often depend on it to continue playing and have to act on it: maps, graphic signs with words, etc. Since video games are digital creations with several potential story lines, which adapt to players' choices, it can be said that they are new each time players run them. In this sense, the hardware behind the software calculates and displays everything anew by executing the information contained in the lines of code, and obtaining assets from a vast array of resource folders. This means that the actual linguistic localisation can be done to perfection and it can be completely invisible to players. But localising graphic information is not only time-consuming and expensive; graphics in video games can be easily missed out when translating because this text is stored in an image format within a graphics folder, and it can only be edited with graphic editing software. If game developers do not have a strategy in place to name and process translatable strings stored as graphic files, they are likely to be forgotten during the translation process and be left in the original language in all the localised versions of the game, such as in the following example (Figure 30) from *Tales of Monkey Island: Chapter 1* (Telltale Games 2009):



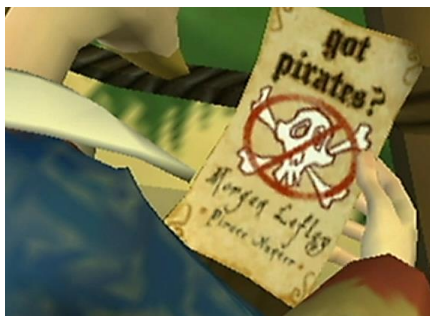


Figure 30. Words left untranslated in textures (graphics) in the Spanish version

### 3.2.3- *Films and video games in translation*

Audiovisual technology and entertainment (feature films, cartoons, TV shows, and sports broadcasts to name but a few) are another clear source of inspiration for the video game industry, and as such, some of the issues when translating these products for foreign markets are also comparable. The most common challenges shared between audiovisual and multimedia productions are:

1. The translation of information conveyed graphically and acoustically with meaningful cultural and linguistic relevance.
2. The time and space constraints when dealing with subtitling.
3. The synchronous display of subtitles onscreen, whether verbatim or edited.
4. The voice recording of the different characters, often requiring good performance and lip-synchronisation.

In chapter 124 of the popular mute TV cartoon series *Tom and Jerry*, entitled ‘Tall in the trap’, we can see a wild west type saloon called ‘Band-Aid’ with a tongue-in-cheek motto written underneath it: ‘Come in and get plastered’ (Figure 31):



Figure 31. Wordplay and graphic information limit translator's choices

The fact that the saloon sign is accompanied by pictures of actual plasters acts as a hurdle to the translators' options to creating something funny in the target language that somehow contains a (reference to) plaster. Nonetheless, there could be various ways of dealing with the translation of this pun, for example: *Salón La Tirita. La pena, el alcohol la quita* [Saloon Band-aid. Sorrows alcohol will take away]. This option maintains the reference to the crossed plasters in the image and compensates the lost 'plastered' of the original with rhyme and alliteration for comic effect because the semantic field of 'plaster' is not used in Spanish to express drunkenness. Taken advantage of the fact that there is no speaking in Tom and Jerry's cartoons, translators could have more display time for the subtitles so that the information can be read comfortably by the viewers. Sadly, the play on words has not been exploited in Spanish and in the commercial version has been left in English jeopardising its understanding by most Spanish viewers.

The problem is similar to the one described above (section 3.2.2) about the translation of comic books, but editing and re-mastering the graphics in audiovisual products is not only very costly, but rarely allowed because of copyright reasons. When working into Spanish, on-screen signs would often be translated by means of subtitles or voiced-over by an extradiegetic narrator.

But this type of issues is not unique to cartoons. In the film *Snatch* an apparently senseless dialogue exchange takes place between some of its characters (Figure 32). They are surrounded by lively dogs from the beginning of the scene and the script utilises this to create a humorous situation where Tommy, a supposedly clever guy, is initially unaware of being mocked by Mickey and his mother (who seems to fancy Tommy). The dialogue goes like this:



Figure 32. Wordplay and audiovisual information constrain translation

English Script

Mickey: Good dags. D’ya like dags?  
Tommy: Dags?  
Mickey: What?  
Mum O’Neil: Yeah, dags.  
Mickey: Dags! D’ya like dags?  
Tommy: Oh, dogs! Sure, I like dogs.

Spanish dubbed version (my transcription)

Mickey: Buenos chuchos. ¿Te gustan loh chochos?  
Tommy: ¿Chochos?  
Mickey: ¿Qué?  
Mum O’Neil: Sí, chochos.  
Mickey: Chuchos, ¿Te gustan loh chochos?  
Tommy: ¡Ah, chuchos! Sí, me gustan los chochos.

Translators of this excerpt will be forced to look for solutions that maintain the sexual innuendo, as well as the phonetic similarity for better comic effect between ‘dags’ [slang for scruffy old people] and ‘dogs’, with the added challenge that dogs are contained in the visual and acoustic information that viewers are receiving together with the linguistic one, as they are barking and coming in and out of the picture. The Spanish translation for dubbing resorts to a wordplay between *chucho* [mutt or mongrel dog] and *chocho* [vulva and to be gaga]. On a related note, Swan (in VV.AA. 2006: 77), from Nintendo of America, explains how they tackle the translation of jokes that appear in video games: “Our first goal is to make sure that



we're capturing the spirit of the original game, so if there is a joke which has a certain meaning in Japanese we give that to our creative writing team, and they try to write a new joke which has the same effect as the original”.

When working with audiovisual programmes, translators have to develop their skills further and think of strategies that take due care of the audiovisual medium, depending on whether the way of delivery of their translation is subtitling or dubbing.

### 3.2.3.1- Film and video game subtitling

Historically, the first time dialogue appeared in audiovisual products as written words was in the early 20<sup>th</sup> century as part of the image itself, in what were known as boards or ‘title cards’ that had to be filmed just like actors. This was the way in which the masters of mime in silent films displayed the little text they needed in order to complement their acting, such as in Figure 33 taken from Chaplin’s film *Modern Times* (1936):

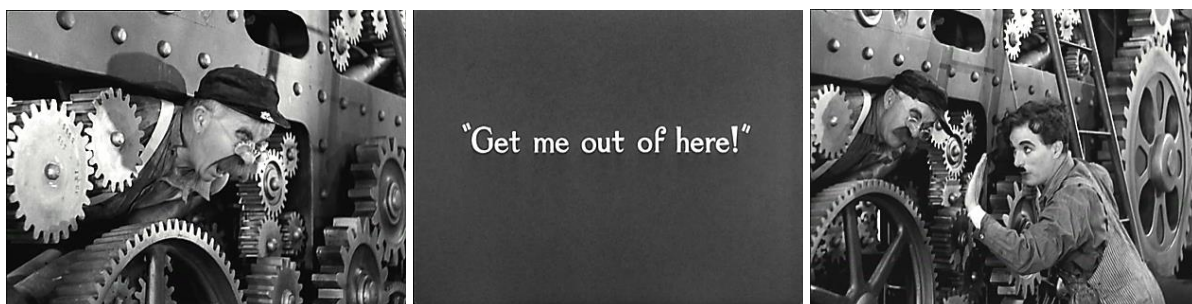


Figure 33. Intertitles from the silent movies era

Most scholars today refer to them as intertitles clearly indicating their belonging to the same lexical family of subtitles, but marking a difference between them.<sup>59</sup> As Díaz-Cintas and Remael (2007: 26) explain, when these films had to be translated and prepared for foreign markets, “the original intertitles used to be edited out and replaced by new title cards in the target language”. When retranslated for today’s viewers these silent films tend to be either subtitled or voiced-over in the target language, rather than replacing the original intertitles, because part of their filmic value is understood to be in the aesthetic dimension of the age in which they were first produced and the authenticity the granted to the first films. Intertitles have by no means disappeared from today’s media, in fact they can be found in news reporting, advertising, music video clips, documentary making and films, although nowadays they are more commonly referred to as running titles, captions, or inserts.

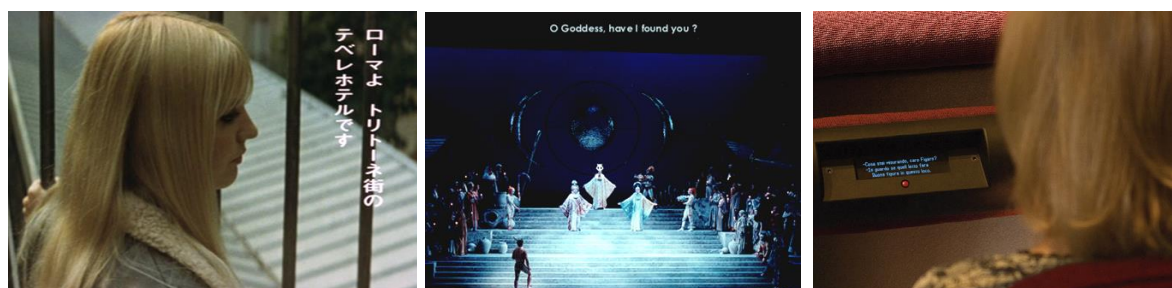
The first thing to say about the use of synchronised text on screen is that there is a wider typology than it may seem to people who do not use subtitles regularly. In fact, it could be argued that the term ‘subtitle’ is no longer valid as an all-encompassing category because it cannot cover such a wide range of realities. The semantic value of the term alludes to a text normally positioned on the bottom part of the screen, a decision that is based on the cinema projection technology of the time, on Western writing systems, and on an attempt to avoid ‘polluting’ the images as much as possible. Of course, this is not surprising since subtitles were firstly invented and popularised by US film distribution companies (Gottlieb 2002; Ivarsson and Carroll 1998). It is worth noting that in some countries, such as Japan, films may display ‘side-titles’, presented vertically in the right-hand side of the screen (Figure 34, left). Other type is the ‘surtitle’,<sup>60</sup> which can be normally found in theatre and opera productions, and is electronically displayed on stage, either at the bottom or at the top (Figure

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<sup>59</sup> More information about intertitles and their translation can be found in Weinberg (1985), Izard (1992), and Díaz-Cintas (2001: 53-59).

<sup>60</sup> Also called supertitles in the US or supratitles by some scholars (Gambier 1994: 276).

34, middle). Some theatres also provide individual displays on the backrests of seats so that members of the public can decide on the language they prefer for their surtitles (Figure 34, right). Nowadays they can be found in many live performances to enhance accessibility for the deaf and the hard-of-hearing, and sometimes as an extra rhetoric element to be used by directors and performers. More information can be found in Díaz-Cintas and Remael (2007: 25), and in the featured video interviews in *The Journal of Specialised Translation (JoSTrans* 2008, issue 10).



**Figure 34.** Different ways of delivering subtitles

Nevertheless, even within Western established subtitling practice the concept of text on screen is being stretched and developed further, encouraged by more flexible technology, social inclusion laws, and the creativity potential unleashed by new media. On the other hand, the term ‘subtitle’ is immediately recognised by most people, and it seems to have established itself in most languages as the preferred one to refer to a substantially diverse range of professional practices. Therefore, the term is not to be taken in its topographical, traditional sense anymore but rather as an umbrella term that encompasses various incarnations in the audiovisual production world.<sup>61</sup> This very general sense is the way in which the present research prefers to use the term.

Subtitling has been defined by Díaz-Cintas and Remael (2007: 8) as:

<sup>61</sup> The US term ‘caption’ also shows a similar polysemic nature.

a translation practice that consists of presenting a written text [...] that endeavours to recount the original dialogue of the speakers, as well as the discursive elements that appear in the image (letters, inserts, graffiti, inscriptions, placards, and the like), and the information that is contained on the soundtrack (songs, voices off).

Most audiovisual products nowadays are broadcast or released with various subtitle possibilities at the disposal of the consumer. Teletext subtitles, for example, started to be shown on television in the 1980s and have been a reality in some countries for decades. In many Western countries there are regular screenings of national and foreign films with subtitles both on television and the cinema. We can also buy an audiovisual product on DVD or Blu-ray with a range of subtitle options that can be broadly grouped as: interlingual (for different language pairs), or intralingual (usually for the deaf and the hard-of-hearing native community). Figure 35 (below) shows three examples of the variety of communicative and translational techniques used in the subtitling of audiovisual products such as character identification, colour and positioning, as well as the description of linguistic and paralinguistic information in brackets, characteristic of subtitling for the deaf and the hard-of-hearing (SDH):



Figure 35. Different techniques in subtitling

Although there are no internationally agreed standards, some professional and academic associations do propose their code of good practice, such as the one written by the European Association for Studies in Screen Translation (ESIST) freely downloadable at [www.esist.org](http://www.esist.org).

Nowadays subtitlers have the benefit of specialised dedicated software for synching their subtitles to the audio and visual cues of the product of which they form part, reducing the amount of time required to complete the technical spotting of a 90 minute programme to an average of three working days. These software packages can also generate subtitle templates in various text formats, allowing for simultaneous work in different languages, but the benefit of the increased speed of work can be counterbalanced by the loss of quality if the actual audiovisual programme is not made available to subtitlers. In any case, and looking across different practices, some conventions seem to be rather similar from one country to another, and indeed from one company to another, such as maintaining semantic units in the same line, using hyphens in the same subtitle to indicate that a different person is speaking on each of the two lines or moving subtitles to the top of the screen when credits or other important written information appears at the bottom of the screen. Traditionally, from a technical perspective, subtitles use only two lines at the bottom of the screen with around forty characters per line, and reading speeds that range between 150 and 180 words per minute (120 for children's programmes). From a linguistic point of view, subtitles tend to reduce the length of the original utterance and to present the translation in standardised language, following established grammatical and spelling rules typical of written language. One of the reasons claimed for this standardisation is to ensure both legibility (aesthetic dimension: colour, size, position), and readability (technical dimension: linguistic clarity, reading speed) as explained in Gambier (2003: 171-189), D'Ydewalle *et al.* (1987: 313-321), and Neves (2005: 120-273). It is worth noting, however, that different practices may be adopted depending on technical limitations, national traditions and preferences, internal company guidelines, type of programme and audience, whether the programme is live or pre-recorded, and whether the distribution will be via the television, DVD or the cinema (Díaz-Cintas and Remael 2007: 13-26).

Video games display dialogic text onscreen in a variety of ways that are similar to those seen in films, but instead of following a standardised system, each game seems to reserve the right to use text onscreen in whatever way they see fit, i.e. if and when they serve the specific game and user interface design. In a similar way to comics and cartoons, they tend to make use of the whole screen as if it were a digital page to present the information rather than following the standard practice of placing the subtitles on the bottom of the screen.

They often have verbatim intralingual subtitles available in the original version, usually English, which tend to be the transcription of the dialogue exchanges or instructions on how to proceed with the game. When it comes to its localisation into other languages, interlingual subtitles are normally used as the overall translation approach for those languages where low projected sales do not justify the costs of audio localisation, which are considerably higher as they require the participation of voice-over actors and studio time. But, as can be seen in Figure 36 below, “video game subtitling is different from movies” (Le Dour 2007: online) in several formal aspects and they are loosely synchronised to the audio. Some of their most noticeable characteristics are that subtitles in entertainment software can have more than a hundred characters per line and be made of one to five lines, producing a rather cluttered text box:

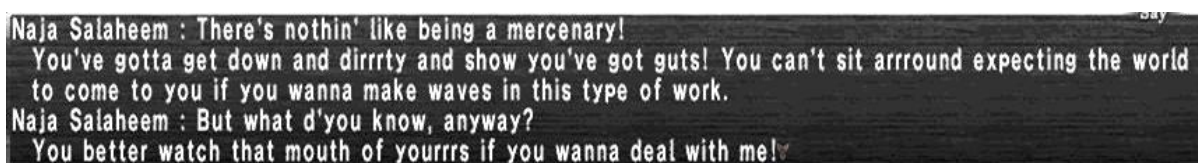


Figure 36. Video game subtitling allows for idiosyncratic spelling

From a creative point of view, translators working in the field of games may be faced with the fact that their TL does not allow for the same linguistic freedom when writing simply because there is not an established way of writing certain mannerisms, or because

orthography rules make it very confusing and unusual to stray away from the norm. In the previous example, writers represented Naja Salaheem’s cat-human nature by tripling some of the ‘r’ in her speech: ‘dirrrty’, ‘yourrrs’. This is a rhetorical device also used in literature and comic-books, as well as in their translations, to convey certain characteristics that would otherwise be lost. Exaggerated or goofy foreign accents are another favourite of game creators as seen in the image below (Figure 37) from *Rent-a-Hero*, in which the player, whose character is a hero for rent, pays a visit to his French friend who comments after welcoming him: “I’ve ‘eard or your latest job...I’ope it paid well?”



Figure 37. Representing French accent in English writing

These creative solutions can be seen as contrary to the previously mentioned *raison d'être* of subtitling, i.e. enabling the general public easy access to the audiovisual product, as they may be seen as an obstacle to fluent reading. Nonetheless, the balance is tilted here in favour of the creative literary experience, which is often utilised and encouraged in game writing and translating because it is understood that this approach can enhance the fun factor of the game. Game subtitles are further explored in section 4.2.2.

It is naïve and perhaps even ill-advised, to expect subtitles in video games to be like those in films or other fictional programmes. However, it should be possible to harmonise linguistic and ludic principles with best practices in subtitling so that some of the shortcomings mentioned above can be addressed. If game developers and publishers could agree on the suitability for video games of certain parameters that some professionals are already using in TV and cinema, subtitle readability and legibility could be boosted along with players' overall satisfaction.

### *3.2.3.2- Film and video game revoicing*

The revoicing of video games is reserved almost exclusively for AAA titles and countries with highly profitable margins. Traditionally, most of the dialogue recorded for video games used to be sound-only because the technology available at the time could only store and process a rather small amount of data per second. For the same reason, graphics were very simple and lip synchronisation did not need to be as precise as in film dubbing where is essential to match bilabial and fricative consonants, or open and close vowels, etc. (Chaume 2004a, 2004b). It goes without saying that for many years audio localisation was reduced to the very minimum, if done at all, because sales did not justify the financial investment in foreign studios and actors.

As the technology utilised in entertainment software improved, video games have developed lengthier and richer audio tracks in the main three areas: music, sound effects, and voice recordings. Some games can have more than 20 different voices which would require dozens of hours of voice recording time. Video game industry professionals use the term voice-over



(VO for short) as a generic for all sound files containing actors voices, and lip-synch to refer only to those specific files that require careful lip synchronisation due to the images they accompany. The need for lip-synched dialogue is also growing as game graphics become more photo-realistic and part of their storytelling borrows techniques from film and television productions, such as close-ups. In terms of audio, a big game in the past couple of years could have over 10,000 recorded lines, meaning that localisation teams in key territories, where fans expect fully dubbed games, need to plan carefully for the revoicing of the game. When discussing the money needed to hire studio time and voice talents, Le Dour (2007: online) mentions that, “With next-gen platforms and publishers banking on massive contents, those Figures are likely to grow by 3 if not by 5 or 10 in the medium or long run”. In fact, audio localisation, as it is normally referred to in the industry, accounts for 50% to 70% of the localisation budget, while text translation tends to hover between 10% and 15% (*ibid.*).

Although there was already a well-developed and established voice-over and dubbing industry catering for cinema and TV productions when video games started to include recorded voices back in the 1980s, most game developers decided to treat voice files like all other audio files, almost ignoring that these files contained language. The main reason behind this *modus operandi* was a financial one, as the game industry simply could not afford hiring that type of service. But there was also a technical factor since with the use of audio files it was easier to do their own recordings in house, in a digital format, and with a level of quality tailored to the capabilities of the computer hardware of that time. This approach was also better in terms of scheduling because it could fit into their workflow, as opposed to outsourcing this task and having then to accommodate their calendar to the dubbing studio. Funnily enough, this way of working has come full circle. The establishment and growth of the entertainment software industry, as well as new developments in technology, and the

renewed partnerships between the game, film, TV, and publishing companies, have allowed the game localisation industry to utilise professional recording studios previously used for the dubbing of films only. One of the greater advantages is the fact that these studios can record and process actors' performances in a wide variety of audio formats better tailored for video game platforms.

Although there is no set of common European standards for preparing scripts for lip-synched dubbing (Chaume 2007), professional (best) practice is similar in many countries around the continent. Translators for dubbing, usually trained in dialogue writing, divide the translated script in takes and add special notations in between words and sentences, in order to help dubbing actors, dubbing directors, and sound engineers, who may not know the original language, with performance and synchronisation.

Chaume (2004a: 96) provides a list of general conventions in Spanish dialogue writing. It consists of about 15 words, initials, and symbols such as: 'ON' to indicate that the character is visible on-screen, 'G' which stands for *gestos* [gestures] and indicates inarticulate sounds, and 'P' which stands for *pisar* [overlap] and is used when characters talk at the same time, to name but a few.<sup>62</sup> Here is an example from the first episode of the cartoon series *Zorro. Generation Z*, illustrating how the original dialogue is transformed into an annotated script to be used by the dubbing director, the dubbing actors and the audio engineers:

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<sup>62</sup> See Agost (1999: 68) and Chaume (2004: 262) for examples of scripts before and after being annotated for dubbing.

Pre-production script by R. Ungar	10	LITTLE DIEGO DE LA VEGA (whispering excitedly) So can you tell me now, Grandfather? Can you tell me the secret?	10
		GUSTAVO smiles. He loves telling his grandson stories and Draws it out. Conspiratorially he says,	
	11	GUSTAVO DE LA VEGA I think if I do, your father will Be angry with me. (a beat) Tell you what. Let us first see if you are a great horseman. Only a de la Vega who rides like the wind can be permitted to know the family secret.	11
		ON little DIEGO who gets very full of himself.	
	12	LITTLE DIEGO DE LA VEGA Oh, I can ride a horse alright!	12
Pre-production script by R. Ungar		ON LITTLE DIEGO as he jumps off his grandpa's knee and runs Over to his SHINY BLACK (LIKE TORNADO) ROCKING HORSE and Jumps on. He rides the rocking horse hard.	
	13	LITTLE DIEGO DE LA VEGA (CONT'D) Look, grandpa! How's this?	13
		WIDEN TO INCLUDE GUSTAVO, who has gotten to his feet and is standing over Diego. He's enjoying his grandson immensely.	
	14	GUSTAVO DE LA VEGA Excellent, Diego! There is no question about it! It is your destiny to wear...	14
		CLOSE ON GUSTAVO'S HANDS as he slips a BLACK MASK over LITTLE DIEGO'S head and over his eyes.  PULL BAK on the smiling Diego wearing the mask and riding his rocking horse.	
	15	GUSTAVO DE LA VEGA (O.S.) (CONT'D) ... the mask of Zorro!	15
Spanish script with notation for accurate lip-synching	3) 10.00.42.00		
	PEQUEÑO DIEGO	¿Me lo puedes contar ahora, eh, eh, abuelo? ¿Me contarás el secreto?	
	GUSTAVO	Escucha esto: Primero veremos si eres un buen jinete... Sólo un De la Vega que cabalgue como el viento puede conocer (OFF) el secreto de la familia.	
	PEQUEÑO DIEGO	Oh, sí que sé cabalgar bien. (P) ¡Mira esto! ...(G) Mira, abuelo, ¿Qué te parece?	
	GUSTAVO	(01.02) (OFF) Excelente, Diego. Ya no cabe duda. (OFF) Tu destino será llevar puesta... ¡LA MASCARA DEL ZORRO!	

Table 5. Script and translation with lip-synching notation

Although production scripts are a great tool to know what the director of the film intended, they rarely reflect changes that take place during the actual filming or recording sessions (Gambier and Gottlieb 2001, Díaz-Cintas 2001), which means that translators have to treat these documents with due care. This metalinguistic information on the way the performance takes place can only be found in the actual film and it needs to be indicated in written form in the dubbing script so that dubbing actors, directors, and audio engineers can easily prepare the voice-over sessions. This is the reason why special symbols and acronyms are used to signal when characters are on or off camera, when they utter inarticulate sounds, etc. Agost (1999: 68) and Chaume (2004: 262) reproduce and explain several examples of Spanish and Catalan scripts before and after being annotated for dubbing.

In the video game industry, there seems to be certain confusion and overlapping in the terms utilised to refer to the audio assets that need to be re-recorded by foreign actors. This is specially the case when different professional practices and countries have to come together due to a more globalised entertainment industry. Within the game industry, ‘voice-over’ is the generalised term to refer to any type of revoicing activity, and it is also used when referring to the narrator’s voice. The term ‘dubbing’ is also used although rather loosely, sometimes meaning exactly the same as voice-over, and other times limited to refer to sequences that do “not need to synchronise exactly with the dialogue” (Maxwell-Chandler 2005: 186), either because characters have very little facial changes due to a cartoony type of graphics, or because mouth movements and face features are not visible at all. Finally, ‘lip-synching’ is preferred when the synchronisation of dialogue and mouth movements is considered essential (*ibid.*).

Original dialogue scripts for video games may be provided to translators in the very same document and format (usually a pdf file) in which they were created by the writing team. Alternatively, like with most other translatable assets in video games, the dialogue exchanges may have been extracted from the game code into spreadsheets, as seen in table 6 below, an example given by Chandler (2006). This second alternative is the most likely scenario when the game offers a ‘Subtitles On/Off’ option. The information contained in these files is organised in various columns. When the script has been prepared for voice-over there will be information for all professionals involved in the process such as context, inflection, location, area, and effect. If the original strings have been extracted directly from the game code only columns 1, 2 and 8 in the example below are likely to be included in the spreadsheet sent to translators (*ibid.*), with the obvious risk of not providing enough contextual information for a successful transfer:

1	2	3	4	5	6	7	8
Character	Cue	Context	Inflection	Location	Area	Effect	Filename
Guinevere	Oh, hell no.	She knows that she and Lancelot are so busted.	Mumbling	Throne Room, Camelot	1.2	None	M01-a02-gue01
King Arthur	Yeah. No, I'm sure there's a great explanation. Go ahead, I'm listening.	He's ready to beat somebody down, looks like it's going to be Lancelot.	Sarcastic	Throne Room, Camelot	1.2	None	M01-a02-art03

**Table 6.** Spreadsheet for voice-over script

The situation nowadays is that more software products are using high definition computer-animated scenes thanks to the availability of affordable, top-end gaming devices and TV sets. In some cases, the game engine incorporates a tool which allows engineers to modify animations depending on the target text provided. This piece of software can manipulate the graphics so that facial muscles move in synch with the phonetic content in the written script. Despite technology permitting it, this is not however standard practice and lip synchronisation remains a challenge in the field of video games. The best solutions tend to

resort to copying what is done in cinema and TV products, which seems to suggest that the game localisation industry could incorporate some of the techniques and strategies that these older audiovisual entertainment industries have come to develop and master along the years. Video game voice-over and dubbing is analysed in detail in section 4.2.2.

### *3.2.4- Utility software and video games in translation*

Utility software includes all those applications that can be installed in computers and whose main purpose is to make certain tasks not only possible, but easy to perform by any user with only a small amount of training. Therefore, from the operating system running the actual hardware to a word processor, a web browser or an email program, they all are ‘virtual’ or ‘logical’ machines designed with instructions (programming code) in man-made computer languages. These applications can be rather basic and dull or very professional and attractive but they all aim at being clear in their purpose, functional to the extreme, and intuitive in their use; their ubiquity in today’s society is testament to their success (Dunne 2006).

Software products usually come accompanied by instructions, tutorials and help files with information on how to get the best out of the program and on what is the easiest way of doing the tasks the application has been designed for. The translation of these software products must therefore favour clarity and brevity over other characteristics, especially when dealing with the use interface (UI) and the pop-up captions boxes with contextual help that activate when passing the mouse pointer over an active area of the screen (Esselink 2000). However, because of the pragmatic and productive expectations of these products, software localisation is not only a linguistic process since it involves many other tasks that have nothing to do with

language nor communication, at least not directly. Of course, this could be interpreted as true for almost any kind of translation if we focus on the product as opposed to the text, and follow the whole process from beginning to end, when the finished item for consumption reaches end-users. The difference is that the product itself, as well as the way consumers utilise it and the tools used to design and translate it, also require hardware and software. The computer machine itself together with electricity grids, plugs, television standards, legal systems, etc. may change from country to country in line with national history, cultural evolution and scientific development; so non-linguistic issues need to be addressed in the localisation process. Yet, because all this wealth of information is contained in digital formats, localisation companies are expected to produce seamless, functionally-tested programs for all destination countries: perfect functional clones displaying different languages in their user interface and content explanations.

It is worth pointing out that one of the main characteristics of the translation of utility software is that translators have to deal with a dynamic interactive product, in other words, part of the text contained in them does not have to be read in a linear way and many of the words and phrases utilised are commands that trigger a particular behaviour from the computer, as opposed to being part of a linear narrative created for entertained purposes.

Companies dealing with website and utility software localisation cater for a variety of languages and, as mentioned in chapter one about the general nature of video games, E-FIGS used to be the minimum standard some fifteen years ago. Nowadays, the translation into a minimum of eight to ten languages to cover all five continents is commonplace. Multilanguage vendors translate and test their localised versions by running the programs and checking that translations are correct for the application in question, adequate in size for the

concise user interface, and accurate to elicit the behaviour they are meant to trigger. Multilanguage localisation companies often advise software developers and publishers about linguistic as well as cultural, legal, religious, and political issues that may influence the timing of the release and the success of their products in a particular locale.

Most programs can be translated by using visual localisation tools such as *SDL Passolo* or *Alchemy Catalyst* (Figure 38 below). They facilitate the translation of natural languages strings (words, phrases and sentences) embedded in artificial languages programming commands (HTML, Java, C++, Linux, etc.) for software products by leaving game code out-of-bounds while allowing translators direct access to the linguistic, translatable assets in their natural environment within the software application. These visual localisation tools grant them access to menus, buttons, system messages and the like in the same graphic environment in which users of the program are going to find them, so the interface has a dedicated window displaying the program being translated with its natural look and context, and other windows and toolbars providing the most commonly used functions according to the element or string being selected. Figure 38 below shows the translation of the ‘Cancel’ button in a budgeting program:

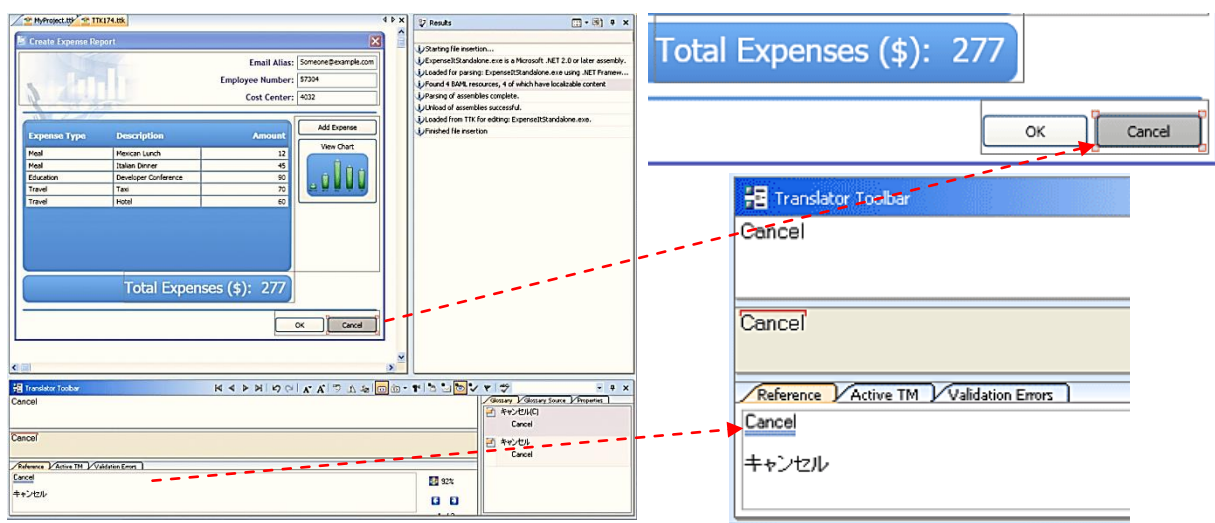


Figure 38. WYSIWYG localisation tool for utility software



The immediate benefit for translators working with these tools is that there are less mistyping mistakes to start with, translation memory databases can be plugged in to guarantee brand and style consistency. Contrary to video games (see section 5.6), there is little need for separate linguistic bug-reporting because software applications translated with these tools allow for direct WYSIWYG ('What You See Is What You Get') editing, and all proofreading can be done within the tool itself which also includes spelling, punctuation and formatting checks typical of word processing programs. In addition, computer engineers are not overwhelmed with having to correct languages they know nothing about and, overall, localisation is faster because each expert is allowed to carry out his/her task in the best situation possible.

Video games share part of the above-mentioned menu mechanics to control the game but the translation part of the process can rarely benefit from visual localisation tools such as those available for utility software and websites for the mere reason that the latter are designed to a different coding and file formatting standard (such as '.NET' or '.XML') and do not prioritise rich multimedia worlds nor entertainment like games do; in other words, they are completely incompatible. This means that game translation is usually done outside its natural multimedia interactive setting which forces translators to work in a double-blind process (no audiovisual context, no text linearity) that is bound to produce more linguistic and culturalisation mistakes than they otherwise would.

A different but still related issue occurs when going into the linguistic testing part of the quality assurance (QA). Although linguistic testers play the actual game in order to proofread all strings, they can rarely edit the text directly; instead they need to report each one of the mistakes and pass the information via a database (or a spreadsheet) to the localisation

engineers who will have to correct languages they are not proficient on from the descriptions reported by testers. This makes the process more costly, unnecessarily long and difficult to manage. Bugs can be of any nature, from the silly typo to the textual style, an unsuccessfully translated cultural item, or exceeding the number of characters allowed for a given string. Linguistic testing is analysed and illustrated in detail in Section 5.6, but table 7 below shows a sample of one of the numerous correction reports generated by this necessary but terribly slow and cumbersome method of proofreading video games. Bug number 116 shows a rather minor and simple rephrasing, which consists in changing the order of the protasis and the apodosis in the conditional sentence: ‘^7mine^1’ is a linguistic variable that will be automatically substituted by the program. As translators and testers are never allowed to modify any text directly in the delicate game code, lengthy spreadsheets and descriptions have to be completed for computer engineers to understand and execute the changes.

String ID	Original text (US English)	Localised text (Spanish)	Bug number	Corrected text
TIP_3A	Look out! That spiky skull is a ^7mine^1, and it will explode when the chain of balls touches it, causing you to lose!	¡Cuidado! Esa calavera con pinchos es una ^7mina^1. ¡Explotará y perderás la partida si la cadena de bolas la toca!	116	¡Cuidado! Esa calavera con pinchos es una ^7mina^1. ¡Si la cadena de bolas la toca, explotará y perderás!

**Table 7.** Bug report spreadsheet

This reporting system might have been appropriate thirty years ago, when video games had only a few strings to translate and the game localisation industry was too young to think of costly visual environments for text translation. However, with games having thousands or even millions of words nowadays, and the localisation industry having proved that it is possible to agree on certain formats and standards, it seems unwise not to try and adjust game localisation tools and practice to the more cost-effective procedures, such as visual localisation tools, that have proven to work for the utility software and the website localisation industry.

### 3.3- A terminological maze: talking about language transfer

In many countries nowadays, people have access to an astounding amount of information through printed media, radio, TV and the internet, using one single communicative channel (as in novels and radio plays) or a combination of them (as in comics, films, and video games). Whether for work or for pleasure most users are so accustomed to translated products that language transfer may pass unnoticed to many of them. On many occasions, translation seems to be simply taken for granted, which may be considered a triumph in terms of bringing down language barriers and a sign of how far we have come. Many of the texts people read and hear on a daily basis come originally from a language other than their mother tongue yet everybody seems to accept them as the actual real words that were spoken or written by political leaders, scientists, artists and celebrities. What this may point to is the fact that translated texts function as originals in their own right within both traditional printed media and new broadcasts and webcasts.

The translation needs required by today's information and entertainment-hungry world are so varied that new terminology has been thrown around and coined without much debate. The following pages are a review of the terms often employed by academics and professionals alike when referring to translation as in "the action or process of turning from one language into another" (*OED*: online). Perhaps new terms are not needed and, following Toury (1978) translation is what is accepted as such by the readers of the texts. It is however worth recapitulating in order to understand why some new terms have appeared, to discard unhelpful nomenclature, and to try and clarify the more appropriate terms for the present research on the translation of multimedia entertainment software. It also seems appropriate to avoid the mistake of ignoring the past:

Like many emerging disciplines, translation studies suffers from at least two childhood diseases: one is that of always reinventing the wheel, and the other, concomitant with the first, is that of not reading what other people have written, either in the name of (sometimes proud) insularity, or else because one does not even suspect that what they might have written might constitute any important contribution to the field. Add to this that many books on translation still claim, with predictable regularity, to be the first to address whatever it is they address. They are added and abetted in this by the third childhood disease besetting translation studies, namely that of ignoring its own history.

(Lefevere 1993: 229)

Having gone over the different comparable products (in printed and audiovisual media) and related professional practices which the game industry could benefit from when planning for the translation of their products, the issue of choosing an appropriate term to encapsulate this task still seems to remain elusive. In recent years, new terms have been coined and old terms have been appropriated by the language service and the game industry to try and convey alleged new realities, terms such as localisation, transcreation, transadaptation. Unfortunately, little effort seems to have been gone into considering how these terms and professional practices fit in the general picture of the translation studies. The following sections explore the most commonly used terminology when referring to the translation practice that takes place in this field, and clarify some of the most frequently used terms in order to frame the present study and to help future research in this terminological debate.

Linguistically speaking, software products are multitextual (see section 4.2) as they contain different types of texts: end user agreement (legal), hardware specifications (technical), manual (pedagogical), and specific to the purpose of the application. In the particular case of video games they divide into different assets and file formats: (1) in-game texts (system messages, menus, and documentation), (2) art assets (in-game graphics and textures), (3) revoicing (scripts for the dubbing actors), and (4) subtitling (text for the subtitles option).

This combination of texts within the same product is one of the characteristics that sets the translation of video games apart from other audiovisual products. It seems to be the first time that one single product (or translation commission) may require so many types of language transfer specialisations and, because of this, it may be appropriate to look for a new term that captures the full translational complexity of video games. The following sections, organised from the most widely used to the least common one, analyse the pros and cons of each of the terms used to refer to products in a language other than its original one, whether in literary, audiovisual, technological or game development circles.

### **3.3.1- Localisation**

The translation of software products is generally referred to as 'localisation'. In the first instance, it may be appropriate to clarify the issue of the spelling with '-s-' or with '-z-'. According to the *OED* the noun 'localization' comes from the noun 'locale' (adopted from the French noun 'local' in the late 18<sup>th</sup> century). The suffix '-ize' has been in use in English since the 16<sup>th</sup> century and although its spelling with a '-z-' is mainly North American, it is not an Americanism. Alternatively, the British English spelling has developed into '-ise', probably due to the influence of French words such as *localiser* and *localisation*. For the purpose of this thesis, I shall therefore conform to the British usage to maintain spelling consistency with morphologically similar words used in England, such as 'analyse', 'nationalise' and 'rationalise'.

The term 'localisation' is used nowadays in different disciplines such as geography, medicine, or economics, but it has also been appropriated by the software industry to

designate the process of “taking a product and making it linguistically and culturally appropriate to the target locale (country/region and language) where it will be used and sold” (Esselink 2000: 3). It was explored by Parra (1998) in his dissertation at Universitat Autònoma de Barcelona, but Esselink (ibid.) was the first to detail this new professional practice and terminology. The term is by no means new and, according to the *OED*, instances of the word ‘localization’ with a similarly linguistic meaning can be found as early as 1813. As the first multi-language vendors were only formed rather recently, in the mid-1980s, how did this term come to be identified with the translation of software? And, more importantly, what is its terminological value?

The quick development and devaluation of computer technology in the mid-1980s led to a rapid growth in hardware and software demand from many countries around the world in the so-called digital revolution (Cooke 1992). Software developers and publishers soon realised that it was difficult to cope with the development of applications and their preparation for international markets at the same time, since it required teams of writers and translators for each language version. In-house translation departments were rather rudimentary at the time. Big translation teams were not cost-effective because they could not be kept busy all year round, so companies could not possibly undertake the growing complexity of the task anymore and started outsourcing the translation to companies dedicated to translation. The software localisation industry was born. It focused mostly on websites because of the global reach of the internet and the HTML standard made localisation applications viable and more cost-effective.

For LISA (Localisation Industry Standards Association), founded in 1990 and dissolved in 2011, the term ‘localisation’ went hand in hand with ‘globalisation’ and

‘internationalisation’, both these terms originally used in business strategy and global economics circles after World War II Cooke (1992). The opening of international markets in the 1970s brought the opportunity for companies to go global like never before, i.e. to easily free-trade beyond national frontiers, but it also highlighted the need to design products in origin that could easily accommodate the requisites and tastes of potential importing countries. The economist Cooke (1992: 212-3) discusses the pressure for leading-edge firms in the Triad markets – namely US, Europe and Japan - to move towards global localisation, stating that “as competition intensifies the nuances of market culture make it more and more difficult to satisfy the more discerning user without having the capacity to tailor a generic product to the finest degree possible to meet local demand”. This is the process of ‘internationalisation’ and it can be applied to all types of products, from cars to burgers, TV sets, hotels, and internet services. Once the product has been ‘internationalised’ in its core design, it can be adapted linguistically, technically, culturally and legally to each of the receiving countries, i.e. it can be ‘localised’.

The term ‘localisation’ is normally used in a broad sense and involves many tasks, many of which are not linguistic but technical for example. In fact, Esselink’s (2000) definition quoted above does not include anything that may be considered in detriment of the term ‘translation’, but it is clear that there is a change in the weight placed on this intercultural communication activity: the emphasis is now on the product or service and the community it caters for, and localisers may not be obliged to maintain too close a link to the identity of the source culture that created it in the first place. On the contrary, if too specific culture items have not been neutralised in the video game’s core design, localisers are usually encouraged to take an approach that favours solutions fully embedded in the target culture. In this sense, it can be

argued that video games localisers show a clear predilection for domesticating over foreignising strategies (Venuti 1995).

In a globalised marketplace, the acceptance of the product by the receiving culture is often perceived as more important than its nationality, which on many occasions may be difficult to determine because production is often spread over various countries anyway. So ‘localisation’ is a target-oriented translation that calls for many non-linguistic, technical adaptations. In this sense, it does not seem to be an entirely appropriate term for Translation Studies. Based on Esselink’s (2000) definition, the term does not seem to contribute greatly to the more traditional concept of ‘translation’. On the other hand, if as Hatim and Munday (2004: 321) argue, “the localization process models used by commercial companies may contain up to fourteen steps (Esselink 2000: 17-8) and translation is just one of those”. Terminologically speaking, localisation seems to confuse both the expert and the layman by creating ambiguity, sometimes interchangeable with target-oriented translation, sometimes with a whole industrial process.

It is interesting to note, though, that the term ‘localisation’ had already been used in translation before but within the field of comparative literature. It was Klingberg (1986: 15) who introduced the term when discussing a Swedish translation of the German *Kinderleben oder Karl und Marie* (Averdieck 1856) to refer to a specific translating technique required in the adaptation of cultural contexts. In his view, localisation involves, among other things, renaming characters and reallocating places to suit the target culture. The essence of this old definition is very similar to the way the term localisation is used nowadays. The translator had a piece of didactic writing aimed at children and she wanted them to focus on the learning without their attention being diverted by foreign spelt names and places. Similarly,



game localisation's main emphasis is not linguistic faithfulness to the original but entertainment, and anything that might interfere negatively with the player's enjoyment of the product is likely to be either substantially changed or deleted. Opposed to this way of translating, there is also a counter-argument put forward by those who defend a source-oriented translation, arguing that children (and readers in general) should encounter cultural differences to some degree in order to encourage curiosity and awareness of the Other, as well as to attract consumers who are genuinely interested in the foreign. In the translation of video games, the final decision as to which of the two approaches should be prioritised usually lies with marketing departments and localisation strategists, who act on what is popular in the local market and what the fan-base is saying in official game sites and informal chat rooms.

In my opinion, the term 'localisation' would be more appropriate if used to refer to the overall industrial context. That is, localisation should only be used within translation studies when referring to the whole industrial process of customising a software product to the requirements and needs of another locale, and not to refer to the translation of texts appearing in computer applications. However, given the fact that the term has already been established in the industry and its use is inescapable, we should make a distinction between the all-comprehensive 'product localisation' which would encompass all aspects (technical, functional, legal and linguistic), and the narrower 'linguistic localisation' that would only include language-related aspects.

### 3.3.2- Game localisation

Maxwell-Chandler (2005: 4) describes ‘game localisation’ with a rather generic definition as “the actual process of translating the language assets in a game into other languages”. However, throughout her book, she then uses the term in two different ways: one referring to linguistic translation, and another one referring to all the adjustments the product has to undergo in order to be publishable in other countries, such as, for example: “NTSC/PAL support for console versions [...] the methods to get the assets integrated into the game” (*ibid.* 18-9), and automatic language selection in multilingual discs (*ibid.* 193), to name but a few.

Indeed, changes and modifications to the video games may occur at any stage of the production process. For example, Atari, one of the leading game developer companies, reckons to have increased sales in Japan of one of its US driving games by 20% as a result of switching the soundtrack from dance in the US to rock in Japan (McCarthy 2005: 149). Heimburg (2006: 136), one of the coding engineers behind the popular game *Asheron’s Call 2* (Turbine 2002), states that the localisation of online games “is just a catchphrase for a long list of smaller tasks”. It is clear to him, and an acknowledged fact in the industry, that text translation is only a part of the process of adapting a software product for its distribution in different countries. Although ‘game localisation’ may be appropriate for the game industry and the services they required (Maxwell-Chandler 2005: 93), it would be inaccurate to use it within translation studies to refer solely to text translation since it also refers to non-linguistic activities. When appropriate, it would make better terminological sense to be more specific by qualifying the term with the adjective ‘linguistic’, as in ‘linguistic game localisation’, to

avoid confusion with functional, technical, commercial and legal aspects of the industrial process. These aspects are presented and explored in Chapter 5.

### 3.3.3- Transcreation

Another increasingly recurrent term used in academic and business contexts is ‘transcreation’, although it does not appear in Palumbo’s (2009) compilation of key terms in Translation Studies. It is being used by a group of professionals and companies such as Transcreation ([www.transcreation.ca](http://www.transcreation.ca)) and Lingo24 ([www.lingo24.com](http://www.lingo24.com)), who seek to distance themselves from traditional translation agency firms. This apparently new business specialisation offers a translation-like service that incorporates creativity (Yunker 2005: 1). The activity these businesses carry out can be considered as a type of mediation (Tonkin and Esposito-Frank 2010), but since they do include language transfer as part of their core activity and the term has been used by scholars writing about video game localisation (Mangiron and O’Hagan 2006), it seems necessary to include the name in this term review. These companies are perhaps capitalising on the fact that many clients would take ‘literal translation’ to be the only option that other companies can offer. As it usually happens with labels, the term ‘transcreation’ had been used earlier by Vieira (1999: 96) when writing about the Brazilian author and his view on poetry translation saying that “[a]s cannibals, translators take, and do with their ST, what they please, their purpose being that of benefiting the target culture. STs thus become food to be digested and exploited for purposes that are different from those of the original texts.”. Even before that, and in a rather less negative way, Lal (1964: 1) writes about his translation of Indian plays and how some English scholars had checked his work “in order to establish the ‘neutral’ tone of transcreation which I felt was called for if the plays were to mean anything significant to the three kinds of readers I kept

in mind when on the job: American, English and Indian”. To some extent, this term shares similarities with other terms such as ‘domestication’, ‘localisation’, or ‘target-oriented translation’, as it implies a target-reader centred philosophy of translation. Within a business context, the term target-market oriented has more currency than that of target-reader oriented. However, defining its characteristics and proven validity in TS has not been greatly discussed in academic circles so far (Di Giovanni 2008: 27).

Creativity is a necessary translation competence for effective text transfer. The need to get away from a word-for-word approach is particularly acute in popular culture where successful communication is paramount. For example, *Pedro Picapiedra* [Peter Chipstone] is the Spanish name for ‘Fred Flinstone’, the protagonist of the popular cartoon TV series *The Flintstones*. Translators not only maintained the reference to the original ‘stone’ but they also came up with a new alliteration of the phoneme /p/ present in the Spanish lexical family of *piedra* [stone] and reinforced by the verb *picar* [to chip] and the the proper name given to the character, Pedro. The end result is both a meaningful and playful name that is certainly very creative. In this sense, it seems rather unclear where translation finishes and transcreation begins.

In a similar vein, Mangiron and O’Hagan (2006: 20) also defend the idea of ‘transcreation’ to describe what takes place in game localisation, highlighting that “localisers are granted *quasi* absolute freedom to modify, omit, and even add any elements which they deem necessary to bring the game closer to the players and to convey the original feel of gameplay”. To illustrate their point, they offer the example of ‘Yitán’, a character of the popular Japanese video game series *Final Fantasy* (Square Enix 1987-2013). The original transliteration for Western players was going to be ‘Zidane’ but they wanted to avoid the resonance with

French footballer ‘Zinedine Zidane’. Since he was a well-known sports personality in the south-western part of Europe, in the French and the Spanish video game versions the name was changed to ‘Djidane’ and ‘Yitán’ respectively. But, as mentioned earlier, this translational license is very similar to the one used by the Spanish translators of Tolkien’s novel *The Lord of the Rings*, who conveyed the original ‘Bilbo Baggins’ as *Bilbo Bolsón* [Bilbo Bigbag], so ‘transcreation’ does not seem to add anything new other than the fact that the source text is part of a video game and not a novel. Either both examples are considered instances of transcreation, and then the term should be systematically applied to all similar occurrences throughout ancient and modern history of translation, or there is really no valid point to abandon ‘translation’ as the most appropriate term.

‘Transcreativity’ does not only affect namesakes as there are also lexical and syntactical items that need to be resolved creatively since neutralisation in the translation would seem to defeat the purpose of creative video game entertainment products. Mangiron and O’Hagan (*ibid.* 18) mention another example of what they call transcreation taken from the localisation of a *Final Fantasy* game. In the original Japanese dialogue, Rikku, one of the characters, answers to the question ‘are you OK?’ by conjugating a noun ダイジョバナイ! which the authors explain could be back translated as ‘were NO-K’. The phrase ended up being translated as ‘Disasterrific!’, amalgamating the adjectives ‘disastrous’ and ‘terrific’. Yet, it could be argued that this is no different from the examples found in Tortoriello (2006: 60) when she analyses some of the strategies utilised by translators to create neologisms in the case of the subtitling of children’s cartoons, such as when dealing with the idiosyncrasies and mannerisms of *Winnie the Pooh*’s Tigger:

English - Tigger: Stupenderific, Owly pally. (Stupenderific = stupendous + terrific)

Italian - Tigro: Spettacoloso, Uffa muffa. (Spettacoloso = spettacolo + favoloso)

In a different but similar argument on creativity and cultural adaptation, Shrivastava (2004: online) writes that there has been a recent development in the way comic book characters are exported that could prove to be a landmark in the industry and signal the beginning of a new era in the comic book industry. Spiderman, a superhero from New York's Queens, who was already well-known in India, has been 'transcreated' as a young Indian boy. Peter Parker becomes Pavitr Prabhakar, lives in Mumbai, wears *dhoti* (white baggy trousers), and fights *rakshasa* in the US version), a horned-demon from classic Indian mythology (Figure 39):



Figure 39. Spider-Man comic-book (centre) 'transcreated' for India (left and right)

The editors of the Indian comic-book do not seem to be translating words alone, but a whole concept in order to create an Indian character with the successful features of the existing US one. Plenty of similar examples can be found throughout history.<sup>63</sup> Were it not for the fact that the Indian creators own the copyright, the whole enterprise could be labelled as plagiarism. Sharad Devarajan,<sup>64</sup> CEO from the Gotham Entertainment Group, said in the official press release:

<sup>63</sup> For example the character of 'Don Juan', originally created by Spanish playwright Tirso de Molina (1630), was later re-imagined by Zorrilla (1844) in Spain, Molière (1665) and Dumas (1836) in France, Shadwell (1675) and Byron (1824) in England, and Mozart in Germany (1787).

<sup>64</sup> Found in the official website [www.gothamcomics.com/spiderman\\_india/](http://www.gothamcomics.com/spiderman_india/)

We feel this is one of the most exciting and unique projects in comic history. Unlike traditional translations of American comics, Spider-Man India will become the first-ever ‘transcreation,’ where we reinvent the origin of a Western property like Spider-Man so that he is an Indian boy in Mumbai and dealing with local problems and challenges.

Taken to the extreme, it could be said that all translations are transcreations since they require a certain degree of creativity on the translators’ part, although they are not creating anything from scratch but from a very clear and declared source. ‘Transcreation’ might be a suitable term in the sense that it acknowledges unashamedly the fact of consciously replacing images, text and references that are deemed too culturally specific to be understandable or appealing for the target country. The end product is a translation that completely tilts the balance towards the target audience but claims to be the same product as the original, despite those differences. From the developers’ point of view, they are maximising their investment in the form of one basic concept and multiple different finishes depending on the local taste. It is the same basic principle that companies apply to cars, mobiles, or burgers. Despite the currency of the term ‘transcreation’ in the industry, it seems that there is a lack of terminological consistency or enough theoretical backing to validate this term against the more traditional ‘translation’. I do not think a clear definition can be established or that video game translation would gain anything by embracing this term without further evidence of its unique features and usefulness.

### **3.3.4- Rewriting**

The idea that translation can be regarded as a form of rewriting was developed by Lefevere (1992), who sees translation as an act carried out under the influence of particular categories and norms constituent to systems in a society. The most important of these are patronage,

ideology, poetics, and the universe of discourse. Lefevere (*ibid.*) was referring to literature in particular and how its translation or rewriting could be viewed as the adaptation of a literary creation to an audience with different mother tongue and cultural heritage, often with the intention of influencing the way in which that audience reads the work. Lefevere (1985: 234) sees translation as “the most obvious instance of rewriting”, and he highlights that probably “rewriting shapes the evolution of a literature or a culture at least in as much as actual writing” (*ibid.* 241). Aksoy (2001: online) noted, perhaps in an excessively optimistic and biased argument, the “civilizing power of translation throughout the centuries” and how translation “has guided nations towards westernization and modernization”. The author focuses on the emergence of a national literature in Turkey, with the help of the translation of foreign literature, and her emphasis rests on the building or creation of a national body of knowledge and self-expression. The term rewriting seems to open the flood gates to considerable changes beyond the translational or communicate potential of the actual text, following a different creative motivation, aesthetic criterion or political agenda.

Although video games may appeal to a different type of audience, from the communicative point of view their localisation can involve similar influences and systems in society as the ones mentioned by Lefevere, but they aim at being the same product recognised under the same brand. Pronounced changes can be found in video games at times but these are applied by the publishing company with the agreement of the development company, the two legal owners of the game intellectual property. A clear example is the game called *Wolfenstein* where all references to Nazi Germany, icons, gestures and paraphernalia as well as the gore usually found in first person shooters were removed from the German version (Figure 40 below) by Activision, the game publisher, who wanted to appease the German game rating board (USK) in order to be allowed to sell the game in Germany (Remo 2009). The gameplay



remains the same otherwise. The historical references in the game-world are merely a gloss at the beginning that evolves into yet another fast-paced, paranormal, sci-fi shooter without much of a story or history, let alone any political message. It is true, however, that a political message could be inferred from this act of self-censorship on the part of the game publishers, but that is a topic for another thesis.

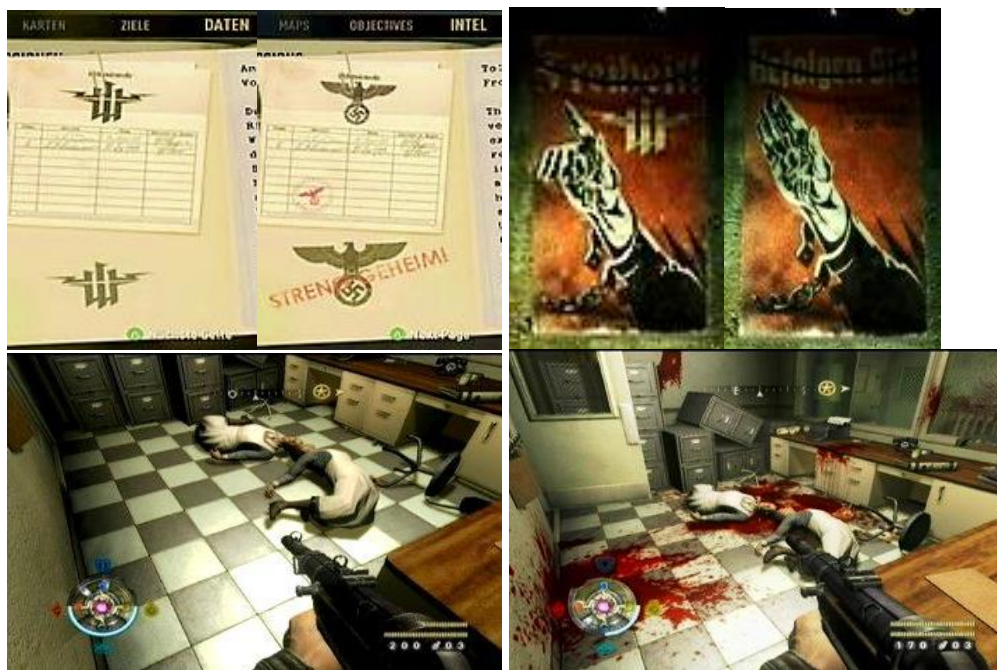


Figure 40. Modified German version (left) of Nazi-themed American game (right)

This term is more frequently found in the field of comparative literature and is sometimes applied to interlingual translation but often referring to the complete reinterpretation, or remake of a known story or a fictional world. The idea behind its usage is that rewriting is not a ‘copying’ act, as its etymology might suggest, but it actually implies originality. The way some of the stories by Enid Blyton, the very popular British author creator of *Noddy*, *The Famous Five*, and *The Secret Seven*, have made their way into other languages and cultures may be used as an illustration of this procedure. For instance, the French translation of *The Secret Seven* was set entirely in France, an approach which could be labelled as transcreation by some. The fact is that from the translation viewpoint the creative and linguistic effort

required can be seen to be almost the same as in the case of the aforementioned comic books (see section 3.2.2). There is no clear differentiating feature that would neatly and clearly separate this type of rewriting from translating; at times it seems that the preference for one term over the other depends on book publishers choosing a translator with writing skills or a writer with knowledge of the foreign language in question. Rewriting can be useful in debates in creative writing and in comparative literature, but it seems too broad terms to be used for the process video games undergo in order to become accessible and enjoyable by speakers of other languages.

### **2.3.5- Adaptation**

Another of the commonly used terms when referring to translation is adaptation. One of the first problems encountered when using a term such as this one is that it is so present in common everyday language and used in such a wide variety of different contexts (Bastin 1993), that trying to attach a translation-related specialised meaning to it is more likely to confuse than to clarify. In light of this, Bassnett-McGuire (1985: 93) tries to set aside the misleading use of this term by stating that “the distinction between a ‘version’ of a SL text and an ‘adaptation’ of that text seems to me to be a red herring”, a vision that is endorsed by Snell-Hornby (2006: 89). For the former author, such a debate is wholly unproductive since the term is often used to describe very different realities, such as an updated version of a play by Shakespeare, or a screenplay version based on the same original text. Munday (2009: 166) explaining adaptations gives the example of classical plays, such as Wole Soyinka’s *The Bacchae* after Euripedes, which develops the plot of the ancient play but does not purport to be the translation of the classic Greek dialogue.

Adaptation is very often used when the changes taking place are very pronounced, e.g. changing from one art form or medium into another, like migrating from a novel into a comic book or a video game. Tolkien's *The Lord of the Rings* (Figure 41) is a good case in point as it has seen many different incarnations since the original novel was published in 1955.



Figure 41. Comic book and video game adaptations of Tolkien's novel *The Lord of the Rings*

From a rather general perspective, Hutcheon (2006: 170) defines adaptation as “an extended, deliberate, announced revisitation of a particular work of art”, and then proceeds to place translation in one extreme of the adaptation spectrum:

we find forms in which fidelity to the prior work is a theoretical ideal, even if a practical impossibility: (1) literary translations which are, in fact, inevitably refractions of the aesthetic and even ideological expectations of their new audiences (Lefevere 1982: 17), or (2) transcriptions of orchestral music for piano, which cannot help altering the relationship between the public and the private (Christensen 1999: 256).

In the field of audiovisual translation, Nir (1984) places all the language transfer that occurs in subtitling under the sphere of adaptation which implies using the generic meaning of the term again invalidating its terminological benefits for Translation Studies. In his opinion:

the transfer of the original dialogues to printed captions involves a triple adaptation: translating a text into a target language (interlanguage conversion), transforming a spoken utterance into a written text (intermedia conversion), and finally reducing the discourse in accordance with the technical constraints of projection time and width of screen. (*ibid.*: 91)

To strengthen even further the unsuitability of this term, adaptation has also been applied with negative connotations to the field of audiovisual translation as it has been seen as an attempt to detract from the translation nature of this professional practice (Díaz-Cintas 2004b: 51). Hutcheon (2006: 177) explores the ubiquity of adaptations in all their various media incarnations (covers songs in the pop charts, video game versions of fairy tales, or roller coasters based on successful movie franchises) and challenges their constant critical denigration concluding that “in the workings of the human imagination, adaptation is the norm, not the exception”. It seems clear that there is a very broad, extralinguistic dimension to adaptation and consequently it has little terminological value for the translation of video games as described in the present thesis.

### **3.3.6- Transadaptation**

Although this term is not used by the game industry it has been used by some scholars in the academic debate about the nature of translation and indirectly video games. Neves (2005: 153) resorts to the concept of transadaptation only to talk about the audiovisual translation practice of subtitling of for the deaf and the hard-of-hearing (SDH) and comments the following:

In the case of SDH, translation will happen at two levels. On the one hand, with interlingual SDH, it will happen in the transfer between two different languages. On the other hand, intersemiotic translation will occur when non-linguistic acoustic messages are translated into

verbal messages in the written mode. In intralinguistic SDH, the transfer between languages is not in order but there is still (intersemiotic) translation when comments on sound effects are included. These instances of translation alone are not enough to characterise the adaptation effort in SDH. In whichever situation, interlinguistic or intralinguistic subtitling, different degrees of adaptation will be needed in order to make subtitles both readable and meaningful to people who cannot perceive sound fully and thus cannot complement their reading of the visual components with acoustic cues.

Transadaptation, therefore, tries to account for the necessary issues that subtitles must address if they are to successfully cater for the deaf and the hard-of-hearing communities. In this sense, it can be seen as a valid term wanting to signal that there is an effort to cater for a receiver different to that of standard subtitles. The myriad of communicative tasks that subtitlers carry out when transadapting are essential for the enjoyment of audiovisual media by the hearing impaired community because these subtitles compensate the lack of the hearing sense by increasing the amount of information received visually. In this respect, video games do not generally offer a special option for the deaf community of players and, in order to compensate for this niche in the market, some gamers have created [deafgamers.com](http://deafgamers.com). This is a website where most games are listed according to their own deaf gamers classification grades for games, which goes from (A) when all voice-over content is clearly displayed on screen in synch with the action, to (E) when it is impossible for deaf gamers to obtain most information because it is given only in speech. It also contains reviews by people who have played the games and advice on how to enjoy playing them better.

The concept of transadaptation as described by Neves (2005) can be useful when discussing accessibility questions in the field of audiovisual communication but it seems to be too narrow to be of use in video games as proposed in this research.

### 3.3.7- Audiovisual translation

Although audiovisual translation (AVT) relates more to a field and not a method or strategy of translation, it is worth exploring it here in relation to the terminological maze that seems to exist when referring to language transfer. Perhaps the most widely accepted term in academic circles, the umbrella quality of AVT may provide the right disciplinary context where the translation of video games as analysed in the present study fits.

As Díaz-Cintas and Remael (2007: 9) state when discussing the translation of audiovisual programmes: “For some, this activity falls short of being a case of translation proper because of all the spatial and temporal limitations imposed by the medium itself which constrain the end result. They prefer to talk about adaptation”;<sup>65</sup> a rather negative perception that seems to take away the ‘translational’ nature of this practice by making it ‘adaptation’. The fact that written text translation is the only one considered translation ‘proper’, as described by Jakobson (1959) in the late fifties, highlights the traditional bias that has existed against any other kind of interlingual exchange format, forgetting in most cases the communicative requirements imposed by the nature of some other products, notably the audiovisual and the interactive ones. Centuries of translating written texts seem to have propelled written language as the one and true vessel for language exchanges, and it certainly is a great vessel, but it is also true that nowadays the communicative work of translators goes beyond what is written down, as films, graphic novels and video games exemplify. Although the epithet ‘audiovisual’ in AVT seems to refer the combination of both auditory and visual information typically found in films, AVT is used to encompass products such as comic books which are only visual, and video games which add interactivity. Video games do share features with

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<sup>65</sup> See also Chaume (2004: 30) and Díaz-Cintas (2003: 32) for a similar opinion.

some audiovisual productions, such as films, and translators can benefit from the strategies and techniques that are applied when translating them into other languages. The audiovisual translation umbrella label is a valid one to encapsulate professional practices such as film subtitling and dubbing, but I think that the innovative nature of video games and the newness of the localisation industry that caters for it may benefit from its own dedicated term.

### **3.3.8- A term for the translation of video games**

Different terms are always being used in the professional environment as well as in academic circles; this is more a sign of the complex realities being described than an organised attempt to debunk previous terms. It seems ill-advised to choose terminology based on fashionable terms or on the technological advances of the time, since they may eclipse the most relevant characteristics of the new professional practice and risk being outdated in a short period of time. I would propose the translation of multimedia interactive entertainment software:

1. Translation because it is the name of the study of our academic discipline and although it can be used by a rather long list of other disciplines from genetics to math and engineering, the term is always understood to comprise two stages: interpretation and recreation for a different specific purpose, in our case, two communicative systems.
2. Multimedia because it highlights the multichannel nature of video games weaving in the legacy of all previous media such as novels, comics and films in a new product that combines many of their characteristics and translation challenges.

3. Interactivity because it changes the traditional passive reader or viewer position of the individual into that of the player, the agent that interacts directly with the game world causing the story to unravelled.
4. Entertainment because of the inherent creative and culturally-bound nature of its ludic content adds to the priorities that govern other translation practices. Video games may contain a great variety of text types such as technical, legal, and promotional but their main aim is entertaining.
5. Software because interactivity sits at the very core of all computer applications and video games are only one example of it. The way software programs are created dictates the way they are translated and proofread.

The next chapter is devoted to the analysis of the linguistic assets that go into video games and their translation into Spanish, although others languages are used in order to illustrate particular matters.



## **Chapter 4**

# **The Translation of Multimedia Interactive Entertainment Software**

This chapter contains five different sections dealing with the textual contents included within each game, the unique characteristics of multimedia interactive texts and the creativity and playfulness natural to games. Even in the planning stages of a new project, game designers already have a clear idea of the kind of experience they want to provide for players, which in turn allows them to create a product with a particular target audience in mind, normally related to a particular country of residence. Even when teams are multinational, which is increasingly the case, a single approach must prevail in an attempt to focus single-mindedly on the creation of the imaginative worlds, storylines, characters, and features, which result in the 'perfect' game.

To date, the academic literature written on this subject remains limited, and in many cases articles are superficial or repeat what has already been written. Fortunately, there have been several conferences to remedy the situation, such as the Localization Summit which is central to the video game industry, and the Game Localisation Roundtable, one of the leading events

within the software localisation industry. These have enabled professionals to come together and share their ideas on the best practices for game localisation.

Due to the high costs involved in the development of Triple A titles, a budget “in excess of £20 million” (Wilson 2011: online), and the competitive nature of today’s global market, it has become almost mandatory to release all new games in as many countries as possible in order to cover the investment and to maximise profits. This approach calls for a full i18n (internationalisation) of the product,<sup>66</sup> signifying that attempts must be made to incorporate within the game design itself all the potential changes importing countries might require. This customisation, which is made in order to accommodate different national tastes and preferences, is normally referred to as ‘localisation’ (Maxwell-Chandler and O’Malley-Deming 2012). It aims to cover the costs of production as well as to generate further profits within the highly competitive multimedia interactive entertainment software market. From a technical point of view, it includes, among other things, the implementation of Unicode to guarantee that all the characters in all writing systems are properly displayed; the adjustment to different hardware requirements such as the analogue television signals PAL and NTSC,<sup>67</sup> and more recently the wide screen high definition (HD) upgraded to 1980x1080 pixels with, in addition, a multi-network configuration to enable lag-free, simultaneous online playability in all corners of the world. If they wish to maximise distribution potential, in addition to the obvious technical adaptations, game publishers also need to look into the legal framework, cultural preferences and age ratings current in each country in which they intend to commercialise the game.

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<sup>66</sup> The localisation industry uses three main concepts: globalisation, internationalisation, and localisation. These can often be substituted by their abbreviated versions g11n, i18n, and l10n respectively, the figures referring to the number of letters in between the first and the last one.

<sup>67</sup> PAL, Phase Alternating Line, is the analogue broadcast TV signal for most countries in Europe. It has a resolution of 720x576 pixels and 25 frames per second (fps), while the NTSC’s (National Television System Committee) works with 720x480 pixels and 29.9 fps, which has become the standard for the US and Japan.

The linguistic and cultural aspects of this customisation are not issues in which the industry has been very interested until rather recently, particularly in the US, the UK and Canada, where only a knowledge of English is needed to reach their respective domestic markets. English has also been the dominant language used for distribution in Japan, as well as for non-English game developers, because it remains the lingua franca of international commerce and mass entertainment, making it the most profitable market option from the language point of view if only one version is to be released. Indeed, most game publishers show some detachment from localisation issues and tend to outsource this part of the process to specialised companies, while retaining the control and final vetting rights. However, this detached attitude with regards to the localisation of video games is gradually changing due to the fact that sales in foreign markets are growing relatively fast, and can sometimes represent more than half of worldwide sales.

In 2007, Pricewaterhouse Coopers ([www.pwc.com](http://www.pwc.com)) were already forecasting sales of \$50 billion by 2011, but the revolutionary changes that have taken place in online, social and mobile gaming meant that, by the end of 2011, the market had in fact reached over \$180 billion (Merel 2011: online). While in the US, there was a decrease in the rate of growth in the game market during the first decade of the 21<sup>st</sup> century due to the virtual saturation of its domestic market, in most other countries around the world consumption nearly trebled, turning localisation into a justifiable and profitable investment.

Another factor contributing to the change in attitudes towards translation is connected with adverse public opinion and the consequent game brand and company image damage caused by products which lack the necessary localisation awareness and fail to accommodate the sensibilities of other cultures. Some prime examples directly concern two of the biggest

companies operating within the sector. In the first case, Sony/PlayStation was seen as having been highly irresponsible for including Manchester Cathedral as one of the battle grounds in its first person shooter game *Resistance: Fall of Man* (BBC 2007). Microsoft, the other video game giant, lost most of the money spent on *Kakuto Chojin* after having to recall all its stocks because, in order to create an atmospheric soundscape, a fragment of the traditional Muslim call to prayer was included. It was considered blasphemous by members of Muslim communities not only in Arab countries, but all around the world, prompting the recall of the game (*The Guardian* 2004). Another interesting localisation setback involved Sony/PlayStation and concerned the music used in *Little Big Planet* (Gamepolitics.com, 2008: online). On this occasion, Sony/PlayStation acted very early in the process, deciding to postpone the official launch of the game so that the musical theme could be deleted. It was considered to be disrespectful to the Muslim faith because, despite being a modern Arab song, it contained some verses from the Qur'an (these issues will be analysed and illustrated further in Section 5.3).

The game industry is currently highly technical and design oriented and is primarily controlled by mass market forces and profitability. This particular focus means that linguistics, translation, and even communication, are rarely taken into consideration. As a result, and perhaps unwittingly, game development and publishing companies seem to be wasting both the time and the money spent on the translation of their products for foreign markets due to an essential lack of understanding of what the process entails and the bad planning that ensues. This in turn affects language professionals because they are forced to work under unnecessarily extreme time constraints, to unrealistic deadlines. It is worth noting, however, that the situation is gradually improving and that discussions concerning cultural and language topics are being included at some of the international conferences held

by the game industry, such as the ‘Localization Summit’, which is part of the annual Game Developers Conference taking place in San Francisco ([www.gdconf.com](http://www.gdconf.com)). Highlighting the importance of the cultural and linguistic dimensions can benefit the game and the localisation industries, as well as being of interest within the academic field of translation studies. This lack of co-operation between the two is one of the existing gaps that it is the intention of the present research to fill, in an attempt to open the possibility of a fruitful collaboration between all stakeholders, based on a cross-referenced knowledge.

#### **4.1- The internationalisation and mass production of video games**

A video game is both a product designed for mass consumption and an artistic creation at the same time. In this respect, and due to the youth of the industry itself and its link to computer technology, video games can be perceived as being somewhat different from more established and respected art forms such as films, even though both of these may be considered as mass media products belonging to popular culture (Gambier and Gottlieb 2001a; Peeren 2008; Ricardo 2009). The view of the video games industry as an ‘outsider’ plays a key role when analysing the games and their translation for the different international markets (see Section 5.3). This is particularly so because of the importance that linguistic localisation has in the playability of the game and, consequently, in the sales of the versions being commercialised in different locales.

Before discussing internationalisation in depth, it may be useful firstly to differentiate between the concepts of ‘work of art’ and ‘product’ in order to understand the nature of video

games and their translation better. According to the Merriam-Webster dictionary,<sup>68</sup> a work of art is “Something giving high aesthetic satisfaction to the viewer or listener” often associated with specific historical periods. In this sense, it could be argued that works of art and products occupy the two extremes of the same scale. In the epistemological sense, art can be considered to represent a profession since it is obviously capable of generating money, but the creation and its value are linked to the artist in every case. Copies will never be worth the same as an original so that an original is always regarded as constituting a work of art *per se*. A painting by Goya, a sculpture by Michelangelo, an *opus* by Bach, or a novel by James Joyce, as works of art, remain unique throughout their existence, even if copies and variations of them can be made. They need no justification other than the pleasure of creating them, and the author remains largely independent, despite the influence of ‘Maecenas’ if, indeed, there is one.

In contrast, products must be understood as a “something (as a service) that is marketed or sold as a commodity”,<sup>69</sup> as constituting merchandise for mass consumption and, as commodities for the wider population to buy and enjoy, they are generated in their thousands and all share the same commercial value and qualities, however many copies are sold. Indeed, the number of copies sold adds value to these creations because their popularity is understood as an indicator of their quality. Because they are the result of industrialisation and chain production processes, products are, in fact, merchandise. This is not to say that there is no artistic skill involved in producing them but, as a result of the industrial process that allows for mass production, these items are universally available. In the words of Benjamin (1937: online):

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<sup>68</sup> See [www.merriam-webster.com/dictionary/work%20of%20art](http://www.merriam-webster.com/dictionary/work%20of%20art).

<sup>69</sup> See [www.merriam-webster.com/dictionary/product](http://www.merriam-webster.com/dictionary/product).

that which withers in the age of mechanical reproduction is the aura of the work of art. This is a symptomatic process whose significance points beyond the realm of art. One might generalize by saying: the technique of reproduction detaches the reproduced object from the domain of tradition. By making many reproductions it substitutes a plurality of copies for a unique existence.

Companies may try to highlight uniqueness in their products with labels such as ‘first copy’, ‘special edition’, or ‘autographed edition’, but it can easily be argued that these are somewhat gimmicky sales strategies. Modifications to actual works of arts are normally considered illicit, and the only option is reinterpretation by another artist. In these cases, a new work of art is created, inevitably linked to a new artist. A clear example of this approach is *Las Meninas* [*Maids of Honour*] painted by Velázquez in 1619 and the various interpretations by Picasso made in 1957 (Figure 42):



**Figure 42.** *Las Meninas* by Velázquez (left), interpreted by Picasso (right)

The mechanical copying or reproduction of works of art renders them consumable products that can be cloned and multiplied as many times as desired, but none of those copies will ever have the same value as the original. Yet, if we look at this issue from the product point of view, its value resides in the fact that it can be manufactured in millions, fostering an economy of scale whilst keeping the same quality in all the copies. Mass production is one of

the main pillars of modern society and, although artistry is still part of it, it is usually only of importance at the beginning of an industrial process - the designing stage - which also requires the intellect and skills of other craftsmen in order to fuel the mass production, adding to the cost-effective nature of the product.

The actual creation and design of video games can be related to the 'art' dimension described above, as is borne out by the fact that they have been recognised since 2006 by BAFTA. This is because video games require the same talent for storytelling found in literature, the cinematic realisation of filmmakers, and the craftsmanship involved in the manufacture of toys. Owing to a decision made by game developers and publishers, translation and localisation have, until recently, been placed firmly in the post-production stage of the process, together with packaging. This is because there seems to be no doubt that making the product usable by speakers of other languages is purely practical (Bartelt-Krantz 2011). In this approach, however, translation seems to involve the simplistic task of the word-pairing typical of glossaries, valid perhaps for the translation of basic menus, but totally unsuitable for the translation of narration and dialogue in video games, in which a similar level of creativity is required as for literature or films.

Picasso's version of *Las Meninas* is, in fact, an excellent illustration of the process of translation, represented in graphic terms. The re-processing of artistic creations cannot produce sameness, and when it does it is considered to be plagiarism, because it is directly linked to the cultural and personal interpretation of the mediator, in this particular case, the translator, who works in a given time and within a given culture and society. Benjamin (1923: 80) analyses this idea, stating that:



Fidelity in the translation of individual words can almost never fully reproduce the meaning they have in the original. For sense in its poetic significance is not limited to meaning but derives from the connotations conveyed by the word chosen to express it. We say of words that they have emotional connotations. A literal rendering of the syntax completely demolishes the theory of reproduction of meaning and is a direct threat to comprehensibility.

Yet somehow ‘sameness’ is what is often expected of translation, whether the original text is of an artistic or merely pragmatic nature. Seen from this perspective, it can be argued that the only justification for the commercialisation of a product like a car or a video game is to generate revenue by appealing to buyers, so that, in order to cater for the specific likes and needs of a different country, substantial modifications to the actual design and functionality of the product, are commonplace, even expected. One of the reasons for this attitude may be found in the fact that commodities do not have an author in the traditional sense, but rather rely on shared-authorship because the only relevant matter is the product itself and its appeal to buyers.

However, the works of art/product and the single/shared authorship dichotomies are not, in themselves, enough to differentiate entertainment software from other audiovisual entertainment products, such as television series or quiz shows. The third characteristic that sets video games apart is an emphasis on a customisable experience as opposed to the unchangeable one of books and films: the tailoring of the game product to what is desired by a given player. It is not only that each player has a different perception and experience of the game, as with a book or a film, but that the game offers a self-adaptable, virtual world that responds to the actions of the players, adapting to their decisions. For example, during a first playthrough, the player might decide to enter a locked room by talking to the guard in front of it; in the second playthrough, by killing the guard and picking the lock and, in the third, by casting a spell on the guard to make him sleep and using the key found in his secret pocket.

The fact that interactivity is part of the very essence of video games means that a basic game design can also accommodate technical, cultural and linguistic transformation in order to bring the product closer to the local taste and expectations of the territory of release. According to this principle, almost everything in a video game is open to change in order to meet the needs of specific territories if a potential increase in sales is at stake. In other words, games may be played differently and look (slightly) different depending on the country where they are purchased. Amateur game localisation and romhacking<sup>70</sup> practices (Muñoz-Sánchez 2008) have not yet had a direct impact on commercial translations of video games, but they do convey a clear message to publishers to the effect that gamers care enough about the translation process and think that playability can be improved in their own languages if more care is taken. These issues are explored further in the following sections, but the size and power of player communities, that is to say the buyers of the product, must be taken into account in order to understand why the translation of these complex, multitextual products deserves special attention from the industry itself, as well as from academics.

#### **4.2- The multitextual reality of a complex product**

The quantity and variety of the translatable assets generated by each video game may come as a surprise to people who are unacquainted with these products. Whether in combination with the cinema or the book industries, or on their own, many video games will require the translation of thousands, or even hundreds of thousands of words, including, for example, manuals, game dialogue and technical and legal documentation. The workload for translation agencies increases exponentially depending on the number of languages into which a game

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<sup>70</sup> Romhacking is described by Muñoz-Sánchez (2008) as a process in which game fans and hackers get together with the aim of cracking and modifying games belonging to older generations with the intention of localising them, or improving them in any way they see fit, for the benefit of their particular locale or community.

will be translated, as well as on the number of platforms for which it is developed (PC, Mac, PS3, PSP, Xbox 360, Nintendo DS, Nintendo Wii, iPhone and Android phones, for example),<sup>71</sup> since they all have different hardware and software specifications. The linguistic and cultural translation of a game can be a highly creative undertaking that adds to the complexities of merely functional and technical adaptations (Fernández Costales 2012). In addition, translators in this field are usually asked to expand their horizons and act as expert terminologists and copywriters when dealing with the different brand-specific glossaries concerning the trademarked, copyrighted and legal texts of the project.

Linguistic assets will be utilised in a variety of ways at different times throughout the creation, development, and launch of the game. They can be found in different file formats, which makes working with them challenging for translators as they need to own and familiarise themselves with many different software programs, and sometimes they even have to visit the premises because the right software is only available in-house (see Section 4.6). The following paragraphs concern details of the most common linguistic assets to accompany a video game, whether in the box itself or in the associated web services and materials:

- The game itself, which is made up of a variety of texts in need of translation, encoded in a variety of formats depending on what the text is going to be used for. These include packaging and manual documentation (usually produced with software applications such as *Word* or *Pagemaker*); installer programs (designed with proprietary tools in XML or binary code); ‘Readme’ files and end user agreements (encoded in the standard text file .txt format); user interface and pop-up help captions (often designed with proprietary

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<sup>71</sup> The different gaming platforms can be broadly grouped into two categories: desktop devices (Personal Computers, PlayStation 2 and 3, Xbox and Xbox 360, Nintendo GameCube and Nintendo Wii), and portable devices (PlayStation Portable, Nintendo’s GameBoy Advance, Nintendo Dual-Screen, mobile phones, and Personal Digital Assistants).

tools in XML or binary code); audio files (encoded in .wav, .mp3 or a unique proprietary format) and video files (encoded in .avi, .mov, .mp4, or with more restricted proprietary tools).

- The official website of the game, which will normally use HTML or Java Script. Many video games websites use content management programs, which may be productive tools when regular updates are necessary.
- Promotional articles and merchandising in general, which can be distributed in analogue, electronic or paper formats, such as television commercials, interactive banners, and game magazines.
- Game patches: these small downloadable programs fix existing bugs missed in the testing process when, owing to time constraints, they could not be fixed for Gold release date.
- Game updates: periodical downloadable modular augmentation of game chapters, map-packs, features, storylines, and characters.

With this volume of texts appearing in such a considerable variety of components, workflows need to be planned carefully and well in advance, so that nothing is forgotten in the translation process and consistency in terminology and style are maintained throughout the entire video game. Streamlined workflows become even more important when the information needs to be released simultaneously in more than a dozen languages in different countries around the world (see Chapter 5).

The following paragraphs include a comprehensive catalogue concerning the translatable assets in video games. These can be found accompanying the release of most video games and all of them have their own textual characteristics and communicative purpose. These texts are created separately and stored in different areas of the game code and in different

formats, depending not only on their purpose and on how they are meant to be used by the player, but also on how they are integrated into the computer application: the virtual machine that enables the interactivity enjoyed by the users. Although there is no official list of localisation assets - indeed the relative youth of the game industry has meant that it does not even have a standardised list of game assets at all (Carter 2004), - localisation producers and managers (Maxwell-Chandler and O'Malley-Deming 2012: 267) typically seem to organise the translatable files they deal with into five game asset categories: (1) text, including all the text displayed in-game such as narration, tutorials, installer strings, help files, and error messages; (2) voice-over and cinematics; (3) art, including game logo and in-game language embedded textures; (4) localisation, which refers to branding and technical glossaries to maintain the company image and products across language versions, and (5) *box and docs*, which refers to the packaging and manual.

The translation of all these assets, an important part of the entire localisation process, although not the only one, requires a translator who is able to deal with both the rigors of terminology and the fresh and subtle literary nuances of in-game dialogue (Bernal-Merino 2008c). As mentioned earlier, there are many texts that accompany a game, even if buyers do not make full use of them, or are not even aware of their relevance and how they are connected with the game at all. The concept of text types discussed by Sager (1997: 30), and based upon a text typology proposal put forward by Reiss (1981: 126), has proved to be particularly useful in this debate, especially owing to the fact that the author draws attention to the fact that text variety is not confined to one particular language or culture. Of additional significance is her emphasis on the importance of this knowledge to translators, so that they are able to ensure the functional equivalence of the texts in different languages:

I meanwhile define text variety as super-individual acts of speech or writing, which are linked to recurrent actions of communications and in which particular patterns of language and structure have developed because of their recurrence in similar communicative constellations. The phenomenon of text variety is not confined to one language. The various kinds of text variety are partly not confined to one language or one culture, but the habits of textualization, the patterns of language and structure often differ from one another to a considerable extent. Hence, the establishment of the text variety is of decisive importance for the translator, so that he may not endanger the functional equivalence of the TL text by naively adopting SL conventions.

In this sense, the text types generated for a video game can be grouped into seven main categories, as initially suggested by Bernal-Merino (2006 and 2007c) and Vela-Valido (2011): (1) narrative: heard or displayed, it carries the information about the game world and its characters; (2) oral/dialogic: heard or displayed, it represents the transcription of characters speaking to themselves or others in the game world; (3) technical: displayed or printed, containing detailed information about the software and hardware required to enjoy the game; (4) functional: displayed as part of the menus and enabling players to choose between different game options; (5) didactic: displayed, printed or heard, to train players to use the game application; (6) promotional: printed or displayed to encourage users to buy more products, and (7) legal: advising buyers of their rights and duties as owners of the game product. These assets are organised in Table 8 (below), according to the text types with which they comply:

Text type		Narrative	Oral/dialogic	Technical	Functional	Didactic	Promotional	Legal
Game asset	<b>In-game text:</b> UI, system messages, game installers	Y	Y	Y	Y	Y	Y	Y
	<b>Voice-over and Cinematics:</b> audio and video scripts	Y	Y	-	Y	Y	-	-
	<b>Art:</b> game logo, in-game texture embedded words	-	-	-	Y	-	Y	-
	<b>Glossaries and TMs</b>	-	-	Y	-	-	-	Y
	<b>Packaging and promotion:</b> box, manual, EULA, guarantee, 'Readme', official website	-	-	Y	-	-	Y	Y





Table 8. Game assets related to their text type

The following paragraphs refer to each one of the files that make up the game asset groups mentioned above, relating them to the text types with which they comply, and analysing their role in order to highlight their characteristics and illustrate the different writing skills required of translators.

#### *4.2.1- In-game text*

In-game text refers to the text strings found in: the User Interface, the operating system messages, the game installer.

##### User Interface (UI)

The user interface (UI) is also often referred to as the menu. This is made up of short text labels that trigger specific computer behaviours. This is a functional text type that can take the form of a reader-friendly version such as ‘play’, or of a more aseptic computer command such as ‘IP override’ for the network settings options. The UI is used to control the hardware preferences as well as the many aspects of gameplay. As with utility software (Esselink 2000: 26), video games make use of very detailed and often complex menu options with which to control the different features of the game, such as level of difficulty, graphic display selection and controller sensitivity. Figure 43 from the ‘Controls’ page of the UI of *Batman: Arkham City*, shows two of the main challenges encountered when localising UIs: available space and terminology. The labels describing the control functions in Spanish are often longer than in English, for example: “Detective Mode / Hold to Scan ” becomes *Modo Detective / Mantener para escanear *, and “ Run / Double Tap to Evade” becomes  *Correr / Doble toque para esquivar*. Thanks to the fact that this UI was designed with plenty of

available space, the Spanish labels fit without any problem, despite being visually longer. The terminological appropriateness and accuracy is also illustrated here by “🎯 Cape Stun” which has been translated as *Aturdir* and not *Aturdir con capa*, so Spanish players would not know by reading the Spanish UI that the cape is used to do the ‘stunning’. Finally, this example is also illustrative of a translation issue which concerns orthotypography and formatting consistency in terms of capitalisation. In the English UI all nouns and verbs are capitalised, even when used in explicative phrases such as “Double Tap to Evade”, but this is not the case for the equivalent Spanish phrase *Doble toque para esquivar*, although the Spanish version does capitalise *Toque para Disparo Rápido de Batarang*, making the Spanish UI inconsistent in its use of capitalisation.



Figure 43. UI localisation

Unfortunately, the text found in menus is presented to translators in tables or lengthy spreadsheets which, together with the fact that the game is not actually available for them to contextualise, means that a reasonably simple translation task is turned into an error-prone guesswork exercise. This part of the translation of video games can prove very problematic due to the brevity and condensation of some of the concepts, the random order in which they appear on the spreadsheets, and the lack of a WYSIWYG translation work environment. The space available in menus, pop-up windows, and hint captions is at a premium and redesigning



these windows is rarely an option because it impinges on engineering time. Translators have, therefore, to come up with solutions that contain a number of characters comparable to that of the original label. A less frequently used option involves a reduction in the font size, but this affects the legibility of the text displayed. The margin recommended by experienced localisers when translating from English is to allow for a + 30 per cent increase for Roman-alphabet based languages, and to reduce the length of the original text by 50 per cent when translating into languages which use ideograms (Maxwell-Chandler 2005: 9).

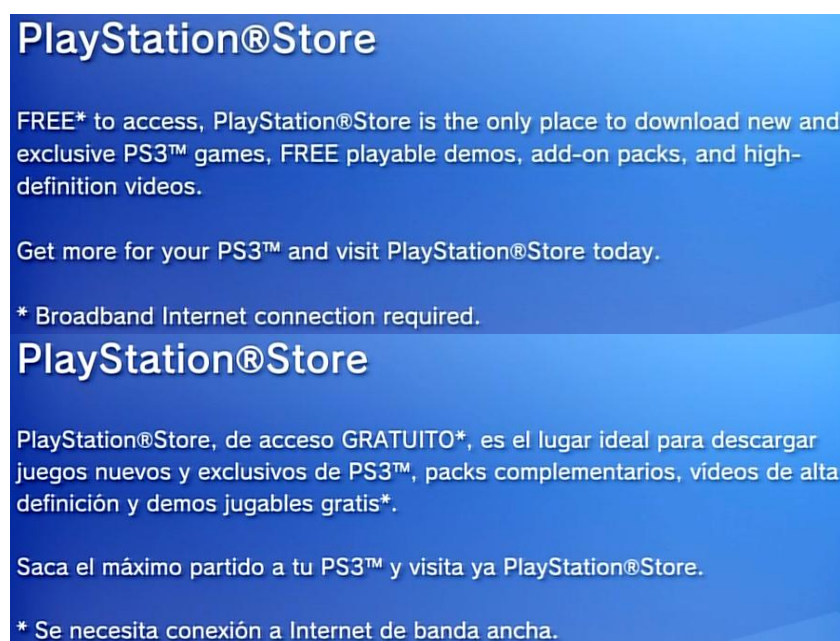
The UI text needs to be short, clear, and precise in terms of the information displayed, because its main purpose is to facilitate play without interrupting immersion or breaking the suspension of disbelief. Icons are often used instead of words in UIs, since the former are, generally speaking, more universally understood, and sometimes the solution involves the use of graphic textures with embedded text, which, of course, requires extra time for localisation into other languages. Besides having to find counterparts which respect the informative and functional nature of the original text, an ingenuity which conforms with the spirit of the game world itself is a valuable asset for translators of game texts. Figure 44 is an example from *Viva Piñata* showing the store where players can buy their gardening supplies. The humour in the name of the store ‘Costolot’, a phonetic reference to ‘costs a lot’, may not be very obvious if translated from a spreadsheet with no contextual image or information. ‘Costolot’ was not translated in the Spanish version of the game.



Figure 44. Witty text as part of the UI

## System messages

Whether a computer or a console is being used as the video game platform, system messages contain technical information in the form of official error reporting messages which have been approved by platform manufacturers such as, Microsoft, Nintendo and Sony Computer Entertainment, as well as promotional information that the game publishers, the console manufacturers or any of the stakeholders wish to promote. As with the translation of documentation, these messages contain official terminology and trademarks that do not allow for translation errors or variations; these are illustrated in Figure 45, below:



**Figure 45.** System error message for PS3

The content and wording of these messages have to follow style, formatting and terminology guidelines within each language and across all localised versions. No variation is permitted unless it has been formally validated by the platform holders. In the example shown above, ‘PlayStation®Store’ and ‘PS3™’ must remain unaltered across all languages. There is an official version for each system message, and it is compiled and translated by means of a spreadsheet which often breaks the natural order in which system dialogue exchanges are

sequenced, decontextualizing its meaning and introducing uncertainty in the translation process. More recently, some companies have started to work with translation memory tools, which can make style, terminological consistency, and system version updating more efficient, although there is still some way to go before the natural order of the dialogue flux becomes clear to translators. Maintaining the official terminology of each device and company is the main concern when translating these texts, but there is an added difficulty when operating systems are updated within the same hardware generation and glossaries or TMs have not been forward to translation agencies or have not been kept in line with the new versions of the documentation.

### Game installers

These are short programs that transfer the game files into the user's hardware in an organised and precise manner, creating the right paths to enable the game to run smoothly on the gaming platform in question. Some commercially available installers may already come with localised versions for many languages, but if game publishers are targeting new markets for which the installers have not been translated, then new languages have to be included. Some developers may create their own game installer, such as Microsoft for Xbox 306 (Figure 46, below) which, unlike the off-the-shelf version, makes Microsoft responsible for its localisation into all the required languages. As in the previous two sections, the text to be translated in game installer applications contains technical information and system dialogue strings that have been approved by platform manufacturers and must always be expressed and displayed in the same manner. These texts are short and syntactically simple, but it is precisely this succinctness coupled with the need for specific terminology that makes the task difficult for translators. The problem is exacerbated by the need to work from the ubiquitous and context-less spreadsheet.



Figure 46. Game installer for MS Xbox 360

#### 4.2.2- Voice-over and cinematics

All issues involved with the translation of strings for audio files and video sequences are discussed in this section.

##### Text for voice-over

All audio texts recorded for video games, which are referred to as voice-over, come in three degrees of complexity, or in the language of game localisation producers, three different prices:

(1) Lip-synchronisation, known as lip-synching, is found in trailers, introductory cinematics, and game-engine animations. It is the most costly and time-consuming type of voice-over because the synchronisation of facial movement is required across localised versions. Whether animations (rendered in-game by the engine when playing), or video clips (pre-rendered and ready for playing when triggered by the player) are involved, these files tend to be high quality sequences, in imitation of cinema standards and, therefore, requiring articulatory accuracy to fit in with the images, both in the original and in the translation.

(2) Dubbing, also found in cinematics and in-game cut scenes, but where only the total duration has to be matched since the characters' mouths are not visible. The duration of the translated audio file is the most relevant aspect of this option. It has to be matched as closely as possible to the original, so that the amount of data storage allocated to each language is kept within the capacity of the game discs.

(3) Voice-over, audio-only files used in different parts of the game where the speakers' faces are not visible meaning that the localised audio files can be longer or shorter than the original. They can easily be substituted by the localised ones. Ambient dialogue and random inarticulate sounds uttered by unimportant characters and creatures in the game are included in these files.

These are related to dubbing practices commonly used in cinema and television. Chaume (2004: 72-3) writes about the three synchronies needed in dubbing: phonetic synchrony, kinetic synchrony and isochrony, which involve achieving an equivalent duration of ST and TT lines uttered by the characters on the screen.

Voice-over text is, therefore, made up of all the audio scripts (Maxwell-Chandler and O'Malley-Deming 2012: 10), including dialogue and narration monologue, and these are presented to translators on excel spreadsheets. As explained in Section 3.2.3.2, the revoicing of video games is rather different from the television and cinema industries. The information contained in these files is organised in various columns (Table 9 below). When the original script has been prepared for revoicing in the translation, rather than subtitled, there will be information for all the professionals involved in the revoicing process, such as the name of the character, the cue or actual text that needs to be translated, the context to which the utterance belongs, the inflection used by the character, the location or place where the

exchange is taking place, the area within that location, the effect given to the sound file, and the name of the file. If the original strings have been extracted directly from the game code, instead a dialogue list (Díaz Cintas 2001b), only columns 1, 2 and 8 in the table below are likely to be included on the spreadsheet sent to translators (Chandler 2006a), with the obvious risk of not providing enough contextual information for a successful transfer:

1	2	3	4	5	6	7	8
Character	Cue	Context	Inflection	Location	Area	Effect	Filename
Guinevere	Oh, hell no.	She knows that she and Lancelot are so busted.	Mumbling	Throne Room, Camelot	1.2	None	M01-a02-gue01
King Arthur	Yeah. No, I'm sure there's a great explanation. Go ahead, I'm listening.	He's ready to beat somebody down, looks like it's going to be Lancelot.	Sarcastic	Throne Room, Camelot	1.2	None	M01-a02-art03

**Table 9.** Spreadsheet used in the translation of voice-over scripts

The dubbing of video files tends to present the most difficulties, especially when lip-synching is required in close ups where the mouths of the characters can be seen, in which case bilabial (b, p, m) and fricative consonants (f, v), as well as open and closed vowels will have to match the original video animation, as in cinema and television productions (see Section 3.2.3.2), so that the illusion is maintained. Nonetheless, depending on the type of game, accurate lip synchronisation might not be required even in the case of close-ups, because the characters may be wearing masks or because of the cartoon style of the graphics (see Figure 62).

The translation of audio-only files, or of text that will be voiced over instead of dubbed, tends to allow for less complicated translation and adjustment, because the target text does not have to match the articulatory movements of the original, and space and time constraints are less stringent.

In a similar fashion to characters appearing in films, game characters often display a colourful array of registers, accents, and idiosyncrasies that contribute to rounding their

personalities and making them unique: a stylistic device that is really no different from the emphasis on oral discourse found in stage plays and films (Bernal-Merino 2008c). These features have to be accurately translated and dubbed in order to convey all the different nuances in the target text. Of course, in addition to translating the dialogue exchanges, translators may have to provide relevant information for the sound engineers about the filters they may use, the actors, the performance or the expected inflexion. They may need to liaise with the localisation engineers concerning the location of a particular file and its trigger within the game code and inform the dubbing directors concerning the manner in which each utterance is connected to the storyline and the characters in the game, as can be seen in Table 9, above.

The image below (Figure 47) from the video game *The Witcher 2*, based on the popular novels by the Polish writer, Andrzej Sapkowski, is a good example of characterisation based on the idiosyncratic use of language.



Figure 47. Dialogue compatible with character and game-world

The original Polish and the English and Spanish versions are used as an illustration of the way in which translators deal with the idiosyncratic use of language in games.:

Original Polish: *Ludź widzi trolla i do zabijania się bierze. Zabiliby. Na pewno.*”

[Backtranslation: “Humans troll see and to kill intends. Surely kill troll they would.”]

English version: “Humies troll see, to kill humies itchy. Would kill troll, sure.”

Spanish version: *Trol ve humanos, ganas de matarlos. Ellos matarían a trol, seguro.*

[Backtranslation: “Troll sees humans, feels like killing them. They’d kill troll, surely.”]

All three versions incorporate altered syntax and paratactical constructions, as well as creativity in the use of some nouns such as *Ludź* and *Humies*. The Spanish version seems to be the least imaginative; it is almost syntactically correct and it does not play with the lexis since *humanos* is the standard form. These strategies are not very different from those elaborated in Chapter 3 and illustrated in Table 4, in which translations of non-standard language are shown and Figure 2, in which unconventional spelling is used to enhance characterisation’.

Apart from the dialogue exchanges that take place between the characters, the game may also include other types of utterance to fulfil different roles. Most games feature characters, who talk to themselves in lengthy monologues; to each other, allowing players to listen in; or as a response to the players’ actions. Although some of these characters may have little relevance to the main plot, their inclusion contributes to the immersion of the players in the virtual world by creating a credible and enjoyable experience. As in stage plays and films, accomplished creations manage to break through the fourth wall (Bell 2008), the imaginary boundary between fiction and reality, so that the spectators empathise with the characters. This is not the full extent of the situation, as video gaming includes players in the action itself. The fourth wall is broken, and a third space is created in-between the game machine



and the user, creating a reality beyond what is achieved in contemporary theatrical performances (Stevenson 1995). The game players become the protagonists, occupying centre stage with the spotlights turned on them.

Linearity is crucial to storytelling and it is therefore essential for the translator to know how the story develops. However, when handling the voice-over scripts for video games, the narrative linearity of each dialogue is not always easy to follow because of the many paths that interactive conversations can generate, as is shown in Figure 48, below, which is taken from Christou *et al.* (2011: 44), where the authors explain the very complex and lengthy localisation of *Mass Effect 2*.

The image shown below is displayed at the top the dialogue tree window, in other words, the script where all the utterances of each character and all the different paths the conversation may follow, depending on players' choices, appear in the correct order. The window at the bottom left allows for a sentence by sentence control, where writers, engineers and managers can edit the text and the scripts (or computer behaviours) it triggers and record and listen to the voice-over files. The bottom part of this window gives the word and the letter count, and it has tick-boxes to indicate the need for translation and voice-over. A small window at the bottom centre of the image allows for the type of comments that voice-over actors and directors would find useful. Finally, the window at the bottom right contains general comments on each of the conversation pathways, in this case, the highlighted dialogue option follows the 'paragon path' embodying the archetypical hero, as opposed to the aggressive or egotistical paths, which affects the subsequent events, options and dialogue exchanges in the games.

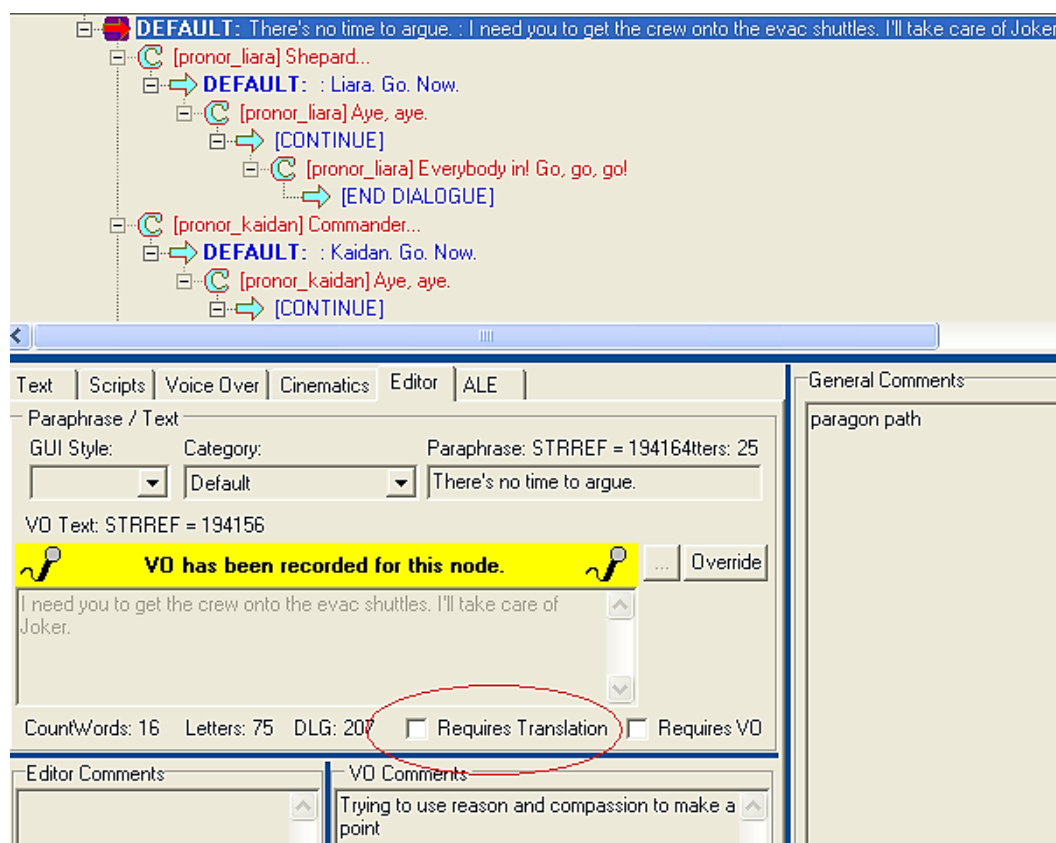


Figure 48. Interactive dialogue makes translation and revoicing more complex

Most companies are much less prepared than Bioware to deal with the localisation of audio files, and they continue extracting translatable strings directly from the game code into Microsoft Excel files, rather than preparing detailed dialogue lists as it is standard practice in the film industry (Díaz Cintas 2001). As seen in Table 9 above, the chronological development of the sequence in the dialogue may be contextualised and clarified on spreadsheets through the actual filename, by using compound alphanumeric filenames, such as “M01-a02-gue01” or “M01-a02-art03” which can be very puzzling unless instructions are provided. However, the logic behind the filenames and the numerical or alphabetical way in which computers organise the content of a spreadsheet conflict with the narrative pathways of the game composed by the scriptwriters. It is no surprise, therefore, that coherence and cohesion can be seriously compromised by this way of working. Without the right sequence of events and a clear order in which dialogue exchanges take place, translations are bound to

be wrong, with errors, for example, in who and how games address non-playing characters, meaning that words with a deictic function lose their antecedents, whether endophoric or exophoric. Additionally, games risk ending up misleading players in their immediate goals and overarching game quests. In contrast, in dubbing for television and cinema the natural continuity of the programme is maintained in the dialogue list provided for translators to enable them to follow the logic in the way the dialogue exchanges have been interwoven. Video game translators have no dialogue list or script, only a spreadsheet with the text arranged in hundreds of cells.

As explained in Section 3.2.3.2 of Chapter 3, once the translation has been carried out, the dialogue writers for dubbing (who are sometimes also the translators) divide and number the script in takes, depending on the number of characters taking part in the conversation and the number of lines they have to revoice (Chaume 2004b). When it comes to the actual recording, many studios prefer to work with all the dubbing actors taking part in a given scene at the same time, in an attempt to encourage communication between them and to enhance the credibility of their performance. This is not the usual process as far as video game dubbing is concerned and many “studios won’t use sequential order to record but rather proceed by characters, one after the other” (Le Dour 2007: online). In many cases, actors may only receive their lines, as opposed to the whole script, which can make their work unnecessarily difficult due to the lack of context.

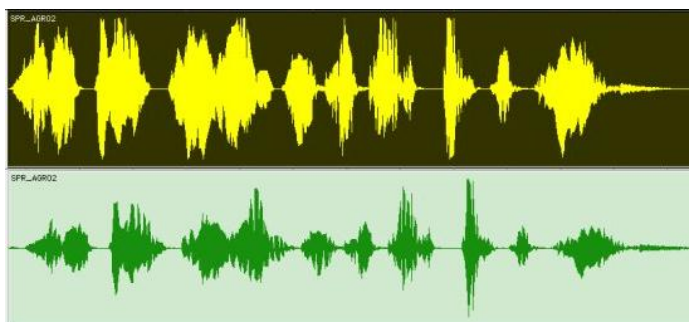
Concerning lip-synching, there is a wide spectrum of different needs in the case of games. This ranges from what could be described as ‘rough dubbing’, consisting in a basic open and closed mouth shot without much articulation (Figure 49, left) seen in *LEGO Indiana Jones: The Original Adventure*, to an almost life-like lip movement such as appears in *Heavy Rain*,

which is described by the developers as the perfect combination between gaming and cinema (Figure 49, right):



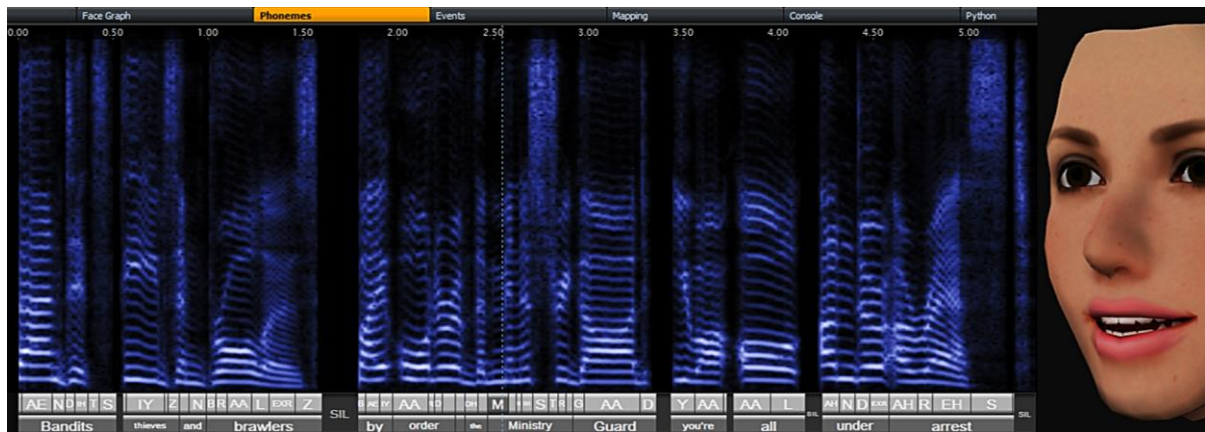
**Figure 49.** Different lip-synching requirements in video games

Video game audio engineers have come up with some practical solutions to compensate for the time and money constraints experienced by the first games to have received audio localisation. In many cases, when videos are not available to the translators (for the wide variety of reasons explored in Chapter 5) but revoicing is required, the recording of the target text is adjusted *a posteriori* rather than asking translators to work with pre-spotted documents, where the times are included. As opposed to the latter approach, more common in dubbing for the television and cinema, the audio engineers of video games match the translation given to them to the length of, and gaps in, the clip, guided by a graphical representation of the sound wave. Figure 50 shows the original English recording in yellow and the translated performance in green (Le Dour 2007: online):



**Figure 50.** Audio synchronisation through the graphical representation of sound waves

Clear evidence of the movement within the video game industry to match the translation quality current in the film industry and to conquer part of the traditional audiovisual market can be seen in the development of software applications such as FaceFX with which facial animations are matched to a combination of text strings and their audio files.<sup>72</sup> Figure 51 below shows FaceFX, one of the tools widely available in the market, where the sentence “Bandits, thieves and brawlers: by order of the Ministry Guard, you’re all under arrest” is analysed by breaking it down into its constituent phonemes. As the screen capture shows, the text has been matched against the voice sound wave frequency analysis and the automatic facial animation natural to the pronunciation of each of those letters and phonemes:



**Figure 51.** The automation of lip-synchronisation for games

This technology has been used in leading games, such as *Max Payne 3*, *Elder Scrolls V: Skyrim*, *Gears of War 3*, *Assassins Creed: Revelations*, *Battlefield*, *Call of Duty*, and it is being increasingly adopted when adding sound to both the original and the localised versions since it is able to batch-process thousands of audio files, making lip-synchronisation automatic. It has been heralded by some (Barnes 2012) as a likely cost-effective option for localisation managers, who have to deal with costly and time-consuming multilingual projects, because the sound wave analysis is language-agnostic, which means that it

<sup>72</sup> Complete video examples can be found in <http://facefx.com/content/english-un-declaration-human-rights>

recognises phonemes and assigns to each of them the corresponding articulatory movements in the 3-D character model producing those sounds.

Despite the progress that has been made with regard to automatic lip-synching technology, it could still be said that the process of voice-over in games could benefit from some of the practices followed in the audiovisual translation industry. Something resembling a dialogue list used in film dubbing would elicit better performances than it does if the information is arranged on a spreadsheet. Such an approach would save both time and money in the rehearsing, revision and recording of the dialogue exchanges.

#### Text for subtitling

As discussed in Chapter 3, video game subtitles do not have very much in common with subtitles for television or cinema. They are not usually given any special or systematic thought in the video games industry beyond fitting the words on the screen to the overall visual design of the game. This can be seen in Figure 52, below, from *Mass Effect*. This is a science fiction action role-playing game in which the positioning of the subtitles is very flexible and they can appear both at the top and at the bottom of the screen, or within the images themselves. The font type departs from the standard Times or Arial in different sizes, to embrace completely new and unique designs more in line with the look and feel of the game story, although potentially affecting the legibility of the text. In the example given below, the font is bluish and modern, and there are two lines with up to 105 characters per line, more than double the number usually recommended for cinema and television subtitles (D'Ydewalle *et al* 1987; Díaz-Cintas 2001; Neves 2005).



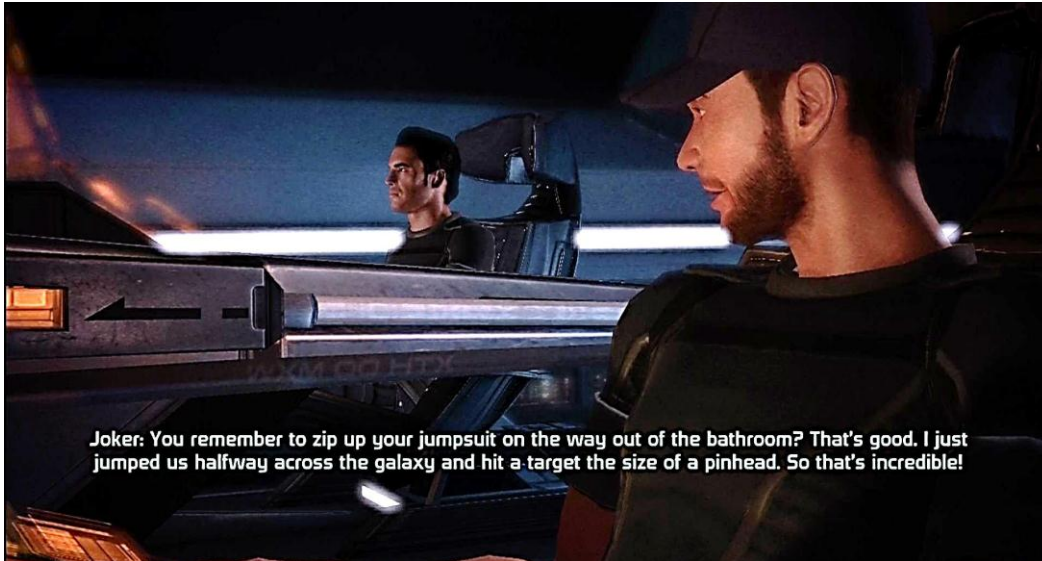


Figure 52. High number of characters per line in video game subtitles

The subtitles used in video games do not seem to follow strict guidelines as far as positioning, layout or time considerations are concerned. Concerning the positioning, as we have seen, game dialogue may appear in different areas of the screen rather than being restricted to a place at the bottom of the screen, as is usual in the subtitling of audiovisual media. This approach has the effect of turning the screen into something more like a comic-book vignette than a traditional audiovisual product, (illustrated in Figure 53, below, from *Dragon Age II*):



Figure 53. Speech bubbles used in games

Regarding the number of lines, for instance, there might be one long line or five shorter lines per subtitle without much apparent logic in the line breaks. The font type and size of the text sometimes vary within the same game, presumably in an attempt to enhance the aesthetic complementarity between text and image, and some subtitles may contain text in a big font followed by another subtitle written in a smaller font. Subtitles often stay on screen until the next character speaks, and line breaks follow no apparent syntactical logic. Even games developed by the same company or distributed by the same publisher lack a consistent approach to subtitling. Regarding the actual content, subtitles tend often to follow the *verbatim* written rendition of the voices (dialogue and narration) that can be heard in the audio track. There is no text condensation as is the case with interlingual subtitling in films (see Section 3.2.3.1).

The text used in the subtitles created for video game cut scenes (pre-rendered videos) and cinematics (in-game engine animations) can sometimes be hard-coded, which means that it is actually mixed with the program command strings that create everything in the game; this makes its retrieval, edition, translation, and reintegration a rather time-consuming task, both cryptic and prone to error. Fortunately, this is occurring less and less as regards the translation process and, nowadays, most developers have their own internal semi-automatic programs (not available for public use or scrutiny) which extract translatable strings for subtitles into spreadsheets, a procedure which has the benefit of making the text very easy to edit and to reintegrate in the target version. In this approach, information concerning the context to which the subtitle belongs is lacking and translators are, necessarily, left to their own devices.



As regards the temporal dimension of subtitling in games, the subtitles are only roughly synchronised with the soundtrack when compared with the practice usually followed for cinema, television and DVDs. They may disappear from screen too early or stay on screen until the next subtitle comes in, which tends to coincide with the turn of the next character to speak. The so-called ‘6-second rule’ applied in standard subtitling, whereby a two-line subtitle of some eighty characters remains on screen for a maximum of six seconds to allow for the comfortable reading of the text (Díaz-Cintas and Remael 2007: 26), is not followed in the case of subtitling for video games. The result is that, especially when the actor’s delivery is fast, there is not enough time to read the subtitles that appear on screen at speeds exceeding 200 words per minute (wpm) or twenty characters per second (cps), figures that exceed what would be considered a comfortable reading speed in the subtitling industry, which usually ranges from between 160 to 180 wpm or 15 to 17 cps. There are, in fact, no real conventions or parameters that are applied systematically beyond what programmers consider appropriate for any particular scene in the game. This lack of real consideration for an appropriate reading speed for the subtitles is exacerbated when the translation process involves languages that are more long-winded than the source (such as English when compared to Spanish), because all language versions follow a master template where subtitle timing is programmed into the game code following the original, which often means that they are displayed for too little time for players to read them comfortably while playing.

To add to the problems, subtitle display often changes depending on the screen resolution used by the player. Indeed, the font may actually appear bigger or smaller, and occupy a different percentage of the screen as is shown in the screenshot below from *The Lord of the Rings: The Fellowship of the Ring* (Figure 54), where the same subtitle can take two or three lines depending on the graphic settings enabled by the computer hardware or chosen by the

players. When subtitles are translated, the readability may be compromised when languages that are more long-winded than English (such as German) are involved, or those in which diacritics are employed (such as Spanish), or those which use ideograms (such as Japanese). Rather than adhering to syntactical criteria, line breaks follow spatial considerations, measured in pixels. The example given below (Figure 54) contains the sentence in Spanish: “Los Anillos mágicos, como tú los llamas, fueron forjados por los Elfos. Pero creo que este Anillo fue hecho por otro... Dámelo.” In low screen resolution, this game allows for a maximum of sixty characters per line which means that ‘por’ is separated from the noun it accompanies ‘los Elfos’. In high screen resolution, the first line allows for 120 characters which means that, in many cases, the second subtitle is comparatively short, in this case only seven characters. This type of discrepancy in the length of subtitle lines, occurring due to changes made to layout settings, is always discouraged in television and cinema (Ivarsson and Carroll 1998a; Díaz-Cintas 2001; Karamitroglou 2003). This is because more reading time is required and the result is, aesthetically speaking, unsatisfactory. The spatial aspect of subtitles has, indeed, to be considered, but their communicative function, essential in the creation of the game experience, can best be achieved when syntactical and semantic criteria are adhered to.



Figure 54. Same text, different display of subtitles

High definition television sets and new graphics cards enhance the picture, though, unfortunately, they create more pixels per inch, which means that, in order to achieve a higher resolution, an image is made up of smaller dots, a fact which does not necessarily correspond with better legibility in terms of the subtitles. In practice, higher graphics settings often mean that the onscreen text takes up less space. This occurs, not only because proportional rather than the monospaced lettering typical of teletext subtitling is used, but because the pixels making up the image are closer together. Whilst this technical advance has had a great impact on professional cinema and television subtitling practices, allowing for a more rational use of the screen space available for the translation (Ivarsson and Carroll 1998), there is also the risk of worsening the legibility if the right font size is not chosen, as can be seen in Figure 55, below, from *Batman: Arkham Asylum*:



Figure 55. Poor legibility due to the white background and the small size font of the subtitles

Sometimes, the text displayed in a video game to indicate interaction between characters, system messages and gameplay hints is part of the whole game design and must conform to the overall aesthetic concept. There is no specific font type, size, colour, or standard way of signalling who the speaker is, as there is in subtitling for the deaf and the hard-of-hearing (Neves, 2005). The use of character labels in video game subtitling is a growing trend in lengthy story-based games, because of the number of characters with whom players must interact and because publishers want to encourage the deaf and the hard-of-hearing community to become gamers. Individual games are characterised by different methods of conveying this kind of information. The following example in Figure 56 illustrates this point. It comes from the medieval fantasy role-playing game, *Elder Scrolls IV: Oblivion*, in which the names of the characters, Varnado in this case, are displayed at the bottom right-hand side corner of the screen, below the subtitles, sharing the same colour (white). In this instance, there is a relatively large number of lines, which is very different from what is normally done

in subtitling for television or cinema. There are up five centre-justified lines of forty five characters for the dialogue with an additional line for the name of the speaker.



Figure 56. Identification of characters in video games

Although the wealth of possible options from which to select a style of subtitle can be justified from the point of view of graphic design, the variety of choice is questionable in terms of readability and legibility, which should, in fact, constitute the two guiding principles for subtitling. As described by Mueller (2001: 146), the former “may include changing time codes, additional condensing or even pointing out nuances of meaning (from visual cues) which the subtitler may have missed”, whereas the latter is determined by aspects such as the “visibility of the titles, the colour, the size and the type of characters” (Dewolf 2001: 179).

Some of the text presented on screen in video games differs from the text used in the subtitles used in audiovisual products, which tend to relate to the translation of dialogue, whereas in video games, the purpose of the text is to enhance interactivity and, as such, resembles the text which is used in the menus of any software application. Figure 57, below, shows a



screenshot from *Mass Effect* displaying what appears to be a subtitle reflecting Joker's words, but followed by a set of four possible responses from which the player must choose in order to continue the dialogue (and contributing to the overall autobiographical and cinematic experience offered by game). However, these interactive lines cannot be considered to be subtitles as such, even though they share the same informative function and turn the aural into visual. Rather, they become a new hybrid by fulfilling the communication act of a dialogue exchange whilst including UI characteristics, which have long been in use in utility software and website applications. An appropriate term by which to refer to them would be 'interactive subtitles' to account for their informative value, as well as their interactive function, allowing players to shape the progress and outcome of the game adventure.



Figure 57. Interactive subtitles

As with all the other characteristics associated with subtitles used in television and cinema, colours do not have a standardised role in video game subtitling. In games, a colour is rarely assigned the purpose of character identification as the user interface usually contains information relating, not only to the story, but to the progress of the players, indicating their statistics and scores, so that colours are needed to differentiate one type of information from another. Figure 58, below, contains an example taken from *Diablo III*, in which a light yellow font is used for all character utterances (far left); white indicates treasures found in the quest (centre); purple indicates magic items (centre); grey indicates items of low value (centre, right); a capitalised green font is used for information about player skills (centre, top), and a

bigger, cream coloured font is used for information regarding the experience and bonus points achieved with each new task completed (centre, bottom).



Figure 58. Use of colour in order to differentiate types of information

As explained in Section 3.2.3.1, despite all the idiosyncrasies highlighted in these pages concerning the nature and function of the subtitles used in video games – displaced positioning, varied use of fonts types and sizes, mix of colours, increased number of lines and indication of characters - the generic term ‘subtitle’ continues to be widely used in the game industry to refer to these very diverse types of text. A rival term might be ‘caption’, but this is mostly used in the US and Japan to refer to intralingual subtitling for the deaf and hard-of-hearing community. It may well be that the time has come for the use of both terms, ‘subtitle’ and ‘caption’, to be reconsidered in view of these new practices and usages encountered in video games, but for the purposes of this research subtitling remains the preferred term because of its widespread use.

#### 4.2.3- Art

Artwork with words can be part of the packaging and merchandising, the UI, and the graphic textures of maps that appear in the game. A multi-layered graphic file format is needed in order to be able to edit the text neatly without altering the original art style. This can be achieved with image editing programs that can seamlessly apply multiple layers to an image. One of the layers may contain the graphic art used in the game, while other layers will be created for texts, such as the title in Figure 59, below, from the main menu screen of *The Lord of the Rings: The Fellowship of the Ring*. In this example, the letter ‘r’ in ‘lord’ and ‘rings’ was modified to create a circular shape evoking a ring, while in the Spanish version, the equivalent effect was achieved in the words *señor* and *anillos* modifying the ‘r’ and the ‘a’.

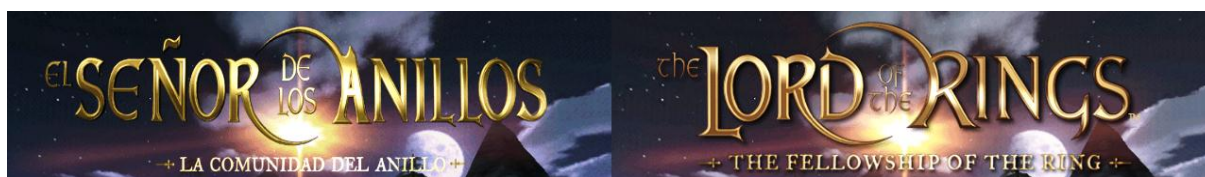


Figure 59. Localisation of linguistic graphic art in logos

This procedure does not apply only to game logos; graphic-embedded text contributing to making the game world both credible and enjoyable may appear anywhere in a game, regardless of the genre, and it certainly requires translation in order to keep players engrossed in the adventure and not to alienate them with texts in languages that are not required by the story. Immersion can be further enhanced by quality 3D animations, inspired voice acting, and appropriate sound effects and music, but there can be little doubt that most of the credibility of each localised version depends on the quality of the target text, as in the example given below from the pirate school found in *Escape from Monkey Island* (See figure 60):





Figure 60. Localisation of linguistic graphic art in game textures

In this example everything has been translated, even the name of the teacher which is changed from ‘Miss Rivers’ to *Srta. Ríos*, whereas the drawing, writing, and colours of words embedded in the graphics have been retained in the Spanish version, replicating the style of the original exactly. The only text that creates a problem is the sign ‘Learning is Good!’ because it has been translated as *¡El Aprendizaje es Bueno!* which can barely be read during play because of the space constraints of the graphics in which the words are embedded. The fact that translators work from spreadsheets, which is almost always the case, with no access to the actual graphics or to the moment in the gameplay where these graphic-embedded words can be seen, makes it more difficult to produce the ideal translation. In this case, for example, with a knowledge of the available space in the image, *¡Aprender es Bueno!* would have seemed a better translation since it is shorter than the official translation by six letters. Some constraints remain undetected until the localisation process is finalised for gold-copy and international release.

#### 4.2.4 Glossaries and TMs

Although traditional bilingual glossaries are still being used by translators, particularly for the translation of the more obscure aspects of medical and engineering research, new glossaries

have been developed, becoming powerful databases capable of automated searches and the translation of specific terms. Some modern glossaries and terminology databases (TMs) used in games include all kinds of multimedia information, as is seen in Figure 61 (below) from the localisation of *Resident Evil 5*, helping the translator to make informed decisions based on the game lore and to maintain consistency throughout the game. The cross-referenced, multilingual capabilities and the rationalised use of space in the UI of the TM can also help with the checking and simultaneous updating of all the language versions for technical and trademarked terms, as well as ensuring consistency in spelling, game feature labels and character names, as is illustrated in Figure 61 (below):

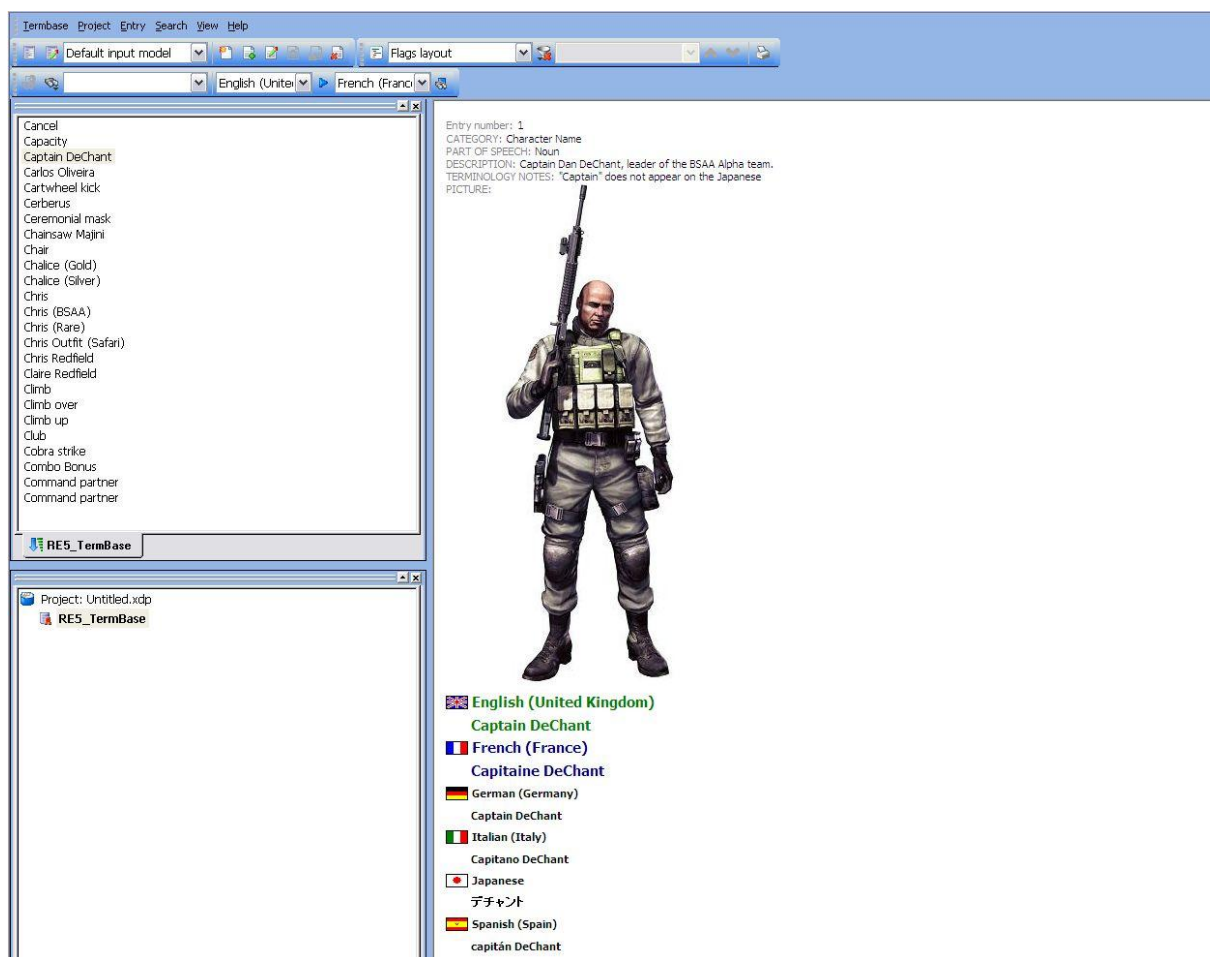


Figure 61. Multimedia terminology database

Localisation companies working on a PlayStation title benefit from having an official terminology list, which is compiled and updated internally by a dedicated team. Boerger, Senior Manager of Product Information Design and Development at Sony, highlighted (Boerger 2010) that terminology databases (TDs) used in conjunction with translation management tools provide a solid foundation from which the platform conventions so important in game localisation projects can be referenced, tracked and updated. However, even with a good TD there are still many challenges, which include linguistic variation (gender and case), space constraints, branding requirements (capitalisation), duplications, abbreviations and acronyms (ibid.). The team at Sony Computer Entertainment (SCE) decided that the consistency of the localisation required for all SCE products was on such a scale that it had to be tackled from three angles. These included the employment of specialised staff, the design of a dedicated terminology related tool, and the ultimate refinement of the process (ibid.). Boerger's team was not just referring to the linguistic pairing of terms used by SCE in their manuals, but to all the instances in which any SCE related terms, logo or image appeared on their products, that is, in print, on screen, on the hardware and on boxing and promotional material. Their database had to include the familiar terminological information, as well as icons such as the PlayStation logo, information concerning official colours, and relief description depending on the hardware on which they were meant to be displayed.

Terminology management databases are explored further in Section 5.9 where the various tools used by the localisation industry are discussed.

#### 4.2.5- Packaging and promotion

There is a mixture of text types in evidence on the game boxes. One of the main differences between them lies in the space provided, which is limited not only by the physical size of the box, but also by the inclusion of images pertaining to the game, company logos, age rating labelling, and technical hardware and software requirements. The game box often includes an alluring promotional text, using an exhortative second person pronoun and the imperative form of the verb, as shown in Figure 62 below, from the back cover of *Mass Effect* where, for example, the original US English text “Customize your character and embark on an epic adventure in an immersive open-ended storyline” becomes in the French version “Personnalisez votre héros et plongez dans une aventure passionnante aux multiples issues”. Age rating and copyright notices are also revised in accordance with the cultural and legal framework of a particular country, as is seen in the bottom part of the back covers shown below. All these correspondences are marked by directional green arrows. An important piece of information for players of localised versions, in this case French speakers, is that the manual, UI, and audio are in French, as highlighted with a yellow oval in Figure 62:



Figure 62 Example of the localisation of the back covers of video games

One of the main aims of this type of text is to set the product clearly within a given genre and brand, as part of a strategy to attract potential buyers. It is therefore a highly promotional text, interwoven with essential technical jargon about the hardware requirements of the game, as well as legal copyright notices and age rating warnings clearly displayed for parents and children to see. This text type, which is so often found on the packaging of the video games, can also be found on the official website, in promotional articles, and in some parts of the manual.

### Manual

Although it may also contain some engaging creative writing, partly promotional and partly literary, most sections of the manual (also called the instruction manual) would normally consist of didactic texts containing simple instructions so that players can focus on enjoying



the game rather than on deciphering the information. The main objective of these texts is to explain to players how to play, irrespective of their knowledge of technology and video game culture. For this reason, they have to be written in such a way that their content is straightforward and welcoming enough to enable both experts and newcomers to discover and enjoy the intricacies of the game. This is even more important because levels of difficulty are adjusted to suit the skill of the player, so that games can be played on easy, normal and difficult settings. This enables players to improve at their own pace rather than becoming so frustrated by the game that they then abandon it.

Texts of this didactic nature can sometimes be reutilised for the online help section of the UI, as well as appearing as context-specific pop-up windows and system dialogues the aim of which is to remind players about basic story information and game mechanics, as in the example given below (Figure 63), from the English and Spanish manuals of *Viva Piñata*:

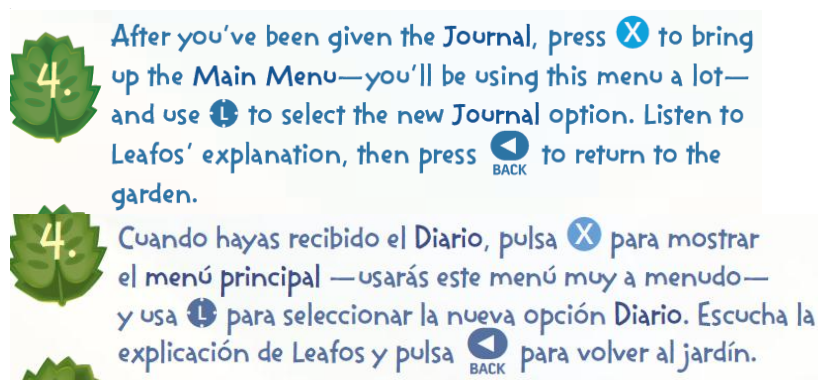


Figure 63. Didactic text type found in game manuals

Manuals are part of the official documentation with which games have to comply, so they often include technical texts with information concerning the appropriate hardware and software specifications needed for the application to run successfully, as well as sections on after-sales customer services and online connectivity. Even when simplified for users of all ages, they are often rich in technical jargon and trademarked terminology to which special attention needs to be paid because it is an important part of the platform compliance approval

process and the amendment of any errors or mistakes in the translation will be time-consuming and might also have costly legal implications. Many companies send their glossaries in spreadsheet format to translators, but many have already incorporated TM tools with terminology extraction, management, and updating, such as Trados' TermBase application. Translators are expected to use the tools and to flag up any discrepancies. Even professionals can easily mix up the naming conventions of each of the three main gaming platforms, for example: 'thumbstick®' (for Xbox) is not to be confused with 'analog stick®' (for PlayStation) or 'control stick®' (for Nintendo), although for most users all three of them look and feel very much the same when playing. It is not only the technical terminology used, but also the concepts talked about and the rather formal syntactic construction of the sentences themselves that set these texts apart from any other text in the game. The following example shows an example from the technical section of the manual of *Halo*, which is rich in specialist jargon: "Connection issues are typically caused by one or more ports being blocked by a firewall, router, or even your Internet Service Provider to help maintain security".

EULA and guarantee files

The End User License Agreement (EULA) and guarantee files are the main legal documents shipped with every single game. They need to be acknowledged and accepted by the player when installing or initiating the game for the first time, and they are often printed out in the manual, as well as being stored separately in the main game folder in highly compatible file formats. The text type utilised here is of a legal nature as can be seen in Table 10 from the copyright notice of the game *Viva Piñata*:

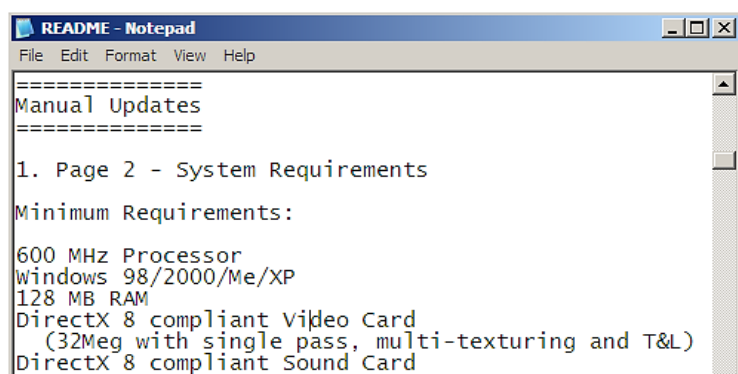
<p>Unauthorized copying, reverse engineering, transmission, public performance, rental, pay for play, or circumvention of copy protection is strictly prohibited. © &amp; p 2006 Microsoft Corporation. All rights reserved.</p>	<p>Queda totalmente prohibido realizar cualquier acto no autorizado de copia, ingeniería inversa, transmisión, comunicación pública, alquiler, pago por jugar o elusión de la protección contra la copia. © &amp; p 2006 Microsoft Corporation. Todos los derechos reservados.</p>
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**Table 10.** Legal text type found in game documentation

The syntax and the terminology employed in such texts tends to be very formal, as can be expected from legal documents (Mayoral 2003), and to follow law enforcement contract legislation appropriate for each country in which the game is legally distributed. Legal texts are normally drafted by the right teams or a management professional with the appropriate legislative knowledge and responsibility to validate the final, original version. The translation of this kind of register requires a very specific type of writing and a knowledge of legal jargon and phraseology (Bestué-Salinas 2009) that does not come easily to non-specialists.

### 'ReadMe' file

This '.txt' file is usually the last document to be created in the game development process and is mostly found in versions of the game run on PCs. Its objective is to inform users of all the last-minute adjustments as well as to advise on how to make sure that the product runs smoothly on a home PC. This is because developers and publishers are aware of the possible incompatibilities between home PCs, which are due to their being highly customisable, as opposed to game consoles the hardware of which is static. This file is also designed to inform players about possible mistakes and typing errors occurring in the printed material, such as in the manual and packaging, and were noticed too late to be corrected in the hard copies before the release of the video game. 'ReadMe' files are written in a rather technical and direct style, as illustrated in Figure 64:



**Figure 64.** Technical text type used for 'ReadMe' files



They can also offer direct instructions on how to install a new patch, to fix minor problems particular to a given type of hardware, or to adjust software for optimum game performance. 'Readme' files also provide advice on peripheral compatibility to ensure the best gaming experience possible.

### Official websites

The texts used on official websites tend to be a combination of a promotional text type and a technical one containing details such as minimum system requirements and the like.<sup>73</sup> Most of the information offered on the official website is similar to the one that is shipped with the game, usually included in the manual and the packaging. Nonetheless, websites tend to include additional information such as previews and reviews of the product, notice boards, forums, customer support details, downloadable files to fix specific problems, and expansion packs with new chapters and language versions, as well as screenshots, gameplay clips of the actual video game, developer interviews, merchandising, and even links to external fan blogs. The websites of the most popular games tend to be very busy, and language-specific community managers may be employed to learn about the likes and dislikes of players, with a view to improving future versions of the game.<sup>74</sup>

The coexistence of so many different text types in video games requires the specific training and preparation of a new type of translator, with rather a different professional profile (see Chapter 6).

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<sup>73</sup> See for example, [www.rockstargames.com/maxpayne3](http://www.rockstargames.com/maxpayne3) or [www.tombraider.com](http://www.tombraider.com)

<sup>74</sup> See for example <http://community.clubpenguin.com> and <http://eu.battle.net/wow/en/community>

### **4.3- In a class of its own**

As explained in the previous section, in addition to the characteristics centred on game assets and text types, there are three differentiating factors that set the translation of video games apart from that of other products. Although they have been briefly mentioned previously, they are so essential and unique to video games that it is worth discussing each one separately. The three factors are: story-building interactivity, the fragmentation of the source text, and the translation of variables.

#### *4.3.1- Story-building interactivity*

One of the most important characteristics of video games is the way in which they engage with the users, immersing them in a virtual reality where the incredible is made not only possible, but also controllable. This gives players a feeling of empowerment because they know they can choose their own line of action and ultimately beat the game (Wardrip-Fruin and Harrigan 2004). As with any other software product, this is partly due to the functionality of the virtual machine although a considerable part of the immersion and the empowerment originates from the way in which language is used. In an attempt to heighten the feeling of engagement, for instance, video games address the player directly in the second person, initiating a relationship with users, which differs from some other media (Svanæs 1999). Three different styles of writing are used for this interaction so as to position players in three different roles, which are:

- 1- As a client of the developer and the publishing companies. These texts are normally written with an input from marketing departments and they are pitched so as to attract customers to the product. They are used for packaging, promotional articles,

websites, advertisements and radio and television commercials, as seen in Section 4.2.6.

- 2- As a legal owner and responsible user. This type of content and writing style can be found in the installer program, the EULA, and the 'Readme' files. These texts notify buyers of their legal rights and duties, at the same time informing them how to use the product responsibly and how to get the best out of the experience without damaging their health. The text type used here pivots between legal and technical, as highlighted in Section 4.2.6.
- 3- As the protagonist and champion of the challenge ahead. This particular text type is probably what ultimately convinces players to buy the products, as it is responsible for selling the promise of an immersion in a virtual world where they can live out extraordinary stories. Normally, players become more immersed in the game through these texts and it is through their quality and tone that an engaging and memorable experience is created. Excerpts from these texts can sometimes be found on the packaging, in the manual, and on the website, but most of it is accessible only while playing (or in-game), for example through video introductions, interactive dialogue and linking cut-scenes.

The advent of software ushered in a different relationship between consumers and products, changing a situation where consumers are idealised and often remain in the background, to a situation where they are addressed directly through the video gaming experience. In a broad sense, interactivity has always been a part of human culture: humans interact with each other, with the environment, with the works of art and with machines they create, but it has only been possible to experience interactivity to the full now that computers, machines that can store, retrieve and process data, have increased their processing power more than a thousand

times (Crawford 2004). In video games, this enormous processing potential is used in order to generate 3-D worlds in real-time, play music and sound effects on a 5:1 system, and reproduce dialogue options with game characters so as to enhance immersion. Computers can be programmed to display specific information as players advance through the virtual game world, meeting NPCs and creating illusory conversations. Players can choose what they want to say, thus influencing the conversations which follow. Game designers, scriptwriters and programmers work together to create a dialogic mechanic so that the characters in the story behave naturally according to their literary persona depending on what players decide to say, as is seen above in Figure 58. When all these possible conversation paths have to be translated, there are only two options: a spreadsheet document with hundreds of lines organised in a way that does not respect the logic of the story (See Tables 8 and 9 above), or a proprietary tool such as Bioware (shown above in Figure 60), that offers helpful metadata and an online ‘questions to the developer’ query system, but is rarely available for translators and is, in fact, a tool the operation of which involves a steep learning curve (Warden 2008). All this means that the translation of all the possible conversation paths into multiple languages poses two different, but equally relevant challenges for translators:

- Notional challenge: the way people address each other in different languages and cultures may differ depending, for example, on age, professional profile, level of kinship and gender. This does not necessarily mean that some languages cannot differentiate between these modes of address, but simply that they may do it through other means, and this is relevant to the understanding of the story and its game world.
- Linguistic challenge: the way these modes of address manifest in each language may differ in terms of grammatical rules. The typical problem when translating the English ‘you’ into Spanish is deciding if it is a polite (*usted* singular and *ustedes* plural) or a

familiar (*tú* singular and *vosotros/vosotras* plural) mode of address. When translating into Japanese, as explained by Lau (2012), there are four possibilities: respectful-distant (*meshiagarimasu*), respectful-familiar (*meshiagaru*), distant-rude (*taberu*), familiar-rude (*kuu*).

Of course, these issues exist in other media, such as novels, comics and films, but the problem is compounded by the degree of interactivity required, not only in terms of mere mechanics but also in terms of storytelling and plot immersion. The text and narrative have to acknowledge the player, as well as his/her actions and dialogue responses. For many years, video game developers would decide on a prototypical player, often a boy teenager, and write the text accordingly. This approach proved to be inappropriate once interactive entertainment started attracting a more varied fandom, including male and female players, young and old. In order to capitalise on the greater financial opportunities thus available, the industry experienced greater challenges in terms of writing and translating. For most of the 20<sup>th</sup> century, the *modus operandi* was to write and translate all the sentences referring to the player both as male and female, and with both the polite and the familiar modes of address; a rather lengthy, expensive and time-consuming approach. Thanks to the development of computational linguistics (Roark Sproat 2004), some professionals, with a knowledge of both computing and translation, realised that grammar rules could be programmed so that one single sentence would automatically produce all the necessary variations. This breakthrough helped to increase the interactive possibilities offered to the players and meant the introduction and development of localised macros for game translation, that is, single computer instructions which stand for a whole sequence of operations. Based on the variable concept (see Section 4.2.3) found in mathematics, physics and computer programming, and working with an element the value of which is unknown, video games writers can write in

variables that are replaced automatically (or ‘on-the-fly’ as it is often referred to in computer programming) by the game engine. For example, the string “You take the \$ITEM\$!” can be used for any of the hundreds of items likely to appear in the game, simply by picking it up from the items table (Heimburg 2003: online), so that the string could become “You take the sword!”, “You take the gold!” or “You take the sack of flour!” However the system was initially still too simple to be able to account for the basic grammatical and morphological changes found in natural languages, so macros received a linguistic makeover in order to enable greater immersion and dialogic interactivity, a point that is further explained in Section 4.2.3, below.

Encoding interactive conversation into the source code requires the breaking up of the texts that make up the dialogue into shorter, independently named strings, so that the game engine can track and parse them correctly, coming up with sentences that create the illusion of direct interaction with the characters and their virtual reality. What this means in practical terms for translators is that the text that conjures up the game world, and all the stories within it, is presented to them in a fragmented form, so that they have to adapt to the organisation and input procedures of the virtual machine and, as a consequence, lose out on most of the contextual information, which is actually the most valuable source for them after the string itself. This point is further explored in the next section.

#### *4.3.2- The fragmentation of interactive text*

For most of translation history, the written word reigned the page unchallenged by any other source of information, and text were an inevitably linear exposition of content. With the

proliferation of audiovisual technologies in the second half of the twentieth century, translators either had to learn to work from written scripts without access to the images present in the audiovisual product itself, or they had to cope with (poor) copies of the actual audiovisual programme and no script at all. The challenge translators faced was that they had to produce a final written text that did not conflict with the overall audiovisual filmic product. Having to translate text without taking into consideration the semiotic context of the product risks affecting the act of communication adversely (Cutting 2002: 1-14) because isolated linguistic items tend to have multiple possible meanings and, hence, give rise to an unnecessary ambiguity which slows down the translation process. However regrettable, this approach to translation is still current, although, on the positive side, language professionals can still count on receiving the actual text to be translated in its natural order, in the same way in which it is going to be received by the user.

As already explained, (see Section 3.2.4.), software localisation can impede the task performed by interlingual communication professionals by introducing an additional issue, that of fragmentation. Pym (2011: 2) argues that “technology [...] disrupts linearity”, referring to the way in which we read websites. This statement, however, can be easily extended to include the field of software, which is understood as a multitextual medium, not only in the way information is accessed, but also in the way it is created and translated. According to the same author, this development tends to hide translation as, “this peculiarly technological movement is not especially away from the text as such, but away from linearity. The more technology, the less easy it is to make decisions in terms of linearity, and the less we tend to see translation as communicating between people” (ibid.: 4). Stripping the text from its inherent linearity does not constitute much of a problem as far as the functionality of the software is concerned because of the practical and pertinent nature of these texts. For the

storytelling part of entertainment software, however, the implications can be both serious and far-reaching.

In video games things are triggered through the players' choices or actions. In fact, this relative freedom to resolve situations in the way and at the pace chosen by the players is part of the appeal of the games. It does not mean that there is no story or that games have a random and chaotic sequence of events, but rather that the unravelling of the story is dependent on the individual choices and performance of the player. In order to achieve this expected interactivity, linguistic fragmentation becomes a permanent feature of the texts characteristic of entertainment software, since it is the underlying structure provided by the game code that makes interactivity possible, creating the illusion that it is the players who influence the virtual storyline. This particular feature of entertainment software products has great influence on the way scripts are written, as Chandler (2005c: online), an experienced game writer, explains:

Oddly enough, an accounting spreadsheet can be a writer's most effective tool. I use Excel to keep track of my dialogue, as do many writers. It's particularly useful when preparing "active format" dialogue (any dialogue taking place in-game, where multiple variables can make it a challenge to keep track of all possible dialogue threads).

Everything in a video game has to be programmed through the game code, which is basically an artificial language used to give instructions to the computer. Programming languages are constantly being optimised to produce the best results with a minimum of commands, but still, virtual worlds have to be created or rather programmed into existence, as nothing 'is' there, and this applies to language, its display and its meaning as well. Figure 65, below, shows an example from the tutorials<sup>75</sup> accompanying the Garage Games engines

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<sup>75</sup> Unfortunately, the game code is heavily protected with encryption protocols and could not be sourced.



(www.garagegames.com), illustrating how even a simple UI requires thousands of lines of code to tell the hardware what and when to do things and these are often rather confusing for the translator. Figure 65 shows a few lines of code used to create the UI for a game in the middle of other lines of code used to control various behaviours and settings. A more exhaustive list can be found in Annex 3 (from www.garagegames.com). It should be noted here that Figure 65 is just a brief example used to illustrate game code and how working with it could be problematic for both translators and engineers. Words appearing as part of the UI have been highlighted in green. The indicator “[...]” has been necessary in order to shorten the sample, since the original source code for the game takes hundreds of pages:

```
[...]
// OrbitObject mode requires an object to orbit
// %client is the LocalClientConnection
%client.camera.setOrbitObject(%this.player,
mDegToRad(60) @ " 0 0", 0, 30, 30);
[...]
singleton GuiControlProfile (InvList)
{
    opaque = true;
    fontType      = "Arial";
    fontSize      = 16;
    fillColor     = "150 150 158"; //selection color
    fontColor     = "255 255 255";
    justify       = "left";
};
[...]
function inventoryGui::btn2()
{
    lblInvTitle.setValue("SPELLS");
    lstInventory.clearItems();
    for(%i = 0;%i < 5;%i++)
    {
        lstInventory.addItem( $aInv[ $SPELLS,%i
]);
    }
}
[...]
$FOOD      = 0;
$SPELLS   = 1;
$WEAPON    = 2;
$ARMOUR    = 3;
[...]
$aInv[$SPELLS,0] = "Fall From Grace";
$aInv[$SPELLS,1] = "Ice Call";
$aInv[$SPELLS,2] = "Water Wish";
$aInv[$SPELLS,3] = "Fire Storm";
$aInv[$SPELLS,4] = "Healing Heart";
[...]
ConsoleFunction(echo, void, 2, 0, "echo(text [, ... ])")
{
    U32 len = 0;
    S32 i;
    for(i = 1; i < argc; i++)
        len += dStrlen(argv[i]);

    char *ret = Con::getReturnBuffer(len + 1);
    ret[0] = 0;
```



```
for(i = 1; i < argc; i++)
    dStrcat(ret, argv[i]);

Con::printf("%s", ret);
ret[0] = 0;
}
[...]
```

**Figure 65.** Coding for a UI

It is not impossible for the untrained eye to understand programming languages, but it is certainly very different from reading a novel, a screenplay or a set of subtitles. Game source code is too cryptic for game scriptwriters, so engineers have to create tools for scriptwriters in order allow for storytelling. The logic of the story is secondary to the way in which everything contained in the game is programmed, including: display, graphics, sounds, music, simulated physics, character behaviours and their utterances. If translators are given access to thousands of lines of programming language such as those shown in Figure 65, which was the case when game localisation began in the 1980s, the task of translation task is slowed down considerably and many functionally problems are accidentally created because of the game code changes inadvertently made by translators.

This affects the tasks of both writers and translators because they have to adapt to the logic of the computer so that the game machine works in the way it is supposed to. This is the reason why localisation engineers extract all the linguistic assets from the game and present them to translators in a format that is useful for all the parties involved in the team, which primarily includes the localisation, the programming, and the quality assurance departments. The preferred format used to present this type of material is the spreadsheet (Chandler 2005c: online) because it is a simple, rational structure that can be reduced to numerical values: the true language of machine code. Informative texts and characters' dialogue are presented in columns, a fragmented, but easy and effective in which everybody involved in the project is able to locate specific details. By allocating a separate line and column to each piece of

information (Table 11 below), the whole team is able to work with a more comprehensible source, and programmers can then automatically and safely insert the relevant strings back into the game code, avoiding the potential creation of errors in the source code by non-engineers:

Line	Resource file ID	Original string	Spanish version	US English Revision	Spanish revision
108	VO_vmiss5.wav	Oh, so close	Huy, casi.	Oh, so close.	Uy, casi.
109	VO_vmiss6.wav	Almost had it	Casi te sale.	You almost had it.	Lo tenías casi.
110	VO_vmiss7.wav	Don't give up	No te rindas.	Don't give up.	No te rindas.

**Table 11.** Sample of game script translation

Prioritising functional over linguistic needs may, at first glance, appear to be mistaken, particularly from a translator's point of view, but whilst players are able compensate for some shortcomings in terms of communication for example, computers are unable to counteract the coding mistakes which will ultimately cause the game to crash.

Owing to the fact that thousands of strings in thousands of files are used in the development of video games, clear naming conventions need to be followed and the files need to be correctly compiled and referenced for localisation purposes: a complex process which has to mirror all those strings, files and folders into each of the languages of the project. Tables normally have a column for the resource file ID/name, one for the original string, and another one for the version (Table 10 above), but in each project the naming and organisation of assets may be different. As we have seen in Chapter 3, Table 6, these tables also include a column in which the localisation engineer is able to add extra information to help voice actors, translators, and other professionals. Although this may be of little consolation for those having to deal with thousands of lines and multiple columns, this procedure is considerably better than the method used in the last two decades of the 20<sup>th</sup> century, where

the text requiring translation was directly written into the game code (as illustrated in Figure 65 above), creating a complicated situation for both translators and engineers who were forced to puzzle over thousands of game source code lines. Translation memory applications have helped somewhat with the consistency of terminology, but visual localisation tools such as *Catalyst* or *Passolo* are still unable to offer much assistance in video game localisation.

Tables are, no doubt, the ideal tools to order data that respond well to numeric organisation, but not to tell the stories, which are central to the game. They are somewhat more useful for non-linear storytelling because they enable the storage and retrieval of information by the game engine, but it is the translator who has to adapt to the tool and build a visual picture of characters, places and events, so as to be able to tell the story to the target audience in the same, engaging manner as the source narrative.

Even when all the possible precautions have been taken and files have been organised following an intuitive naming convention, translating games from spreadsheets can be confusing and time consuming. Some of the information contained in each cell might not need to be translated because it is a variable part of the game code, although this may not be immediately apparent. As a rule, any text preceded by the ‘\$’ sign, between curved brackets (Figure 65 above) or square brackets (Table 12 below) is part of the game code and, as such, it is out of bounds for translators.

US English	Spanish
NEW_STRING1=Play [Title]	NEW_STRING1=Jugar a [Title]
NEW_STRING2=Uninstall [Title]	NEW_STRING2=Desinstalar [Title]
NEW_STRING3=Red Storm on the Web	NEW_STRING3=Red Storm en la Red
NEW_STRING4=[Title] requires DirectX 8 to run\nDo you wish to install DirectX 8 now?	NEW_STRING4=[Title] Necesita DirectX 8 para funcionar\n¿Quiere instalar DirectX 8 ahora?
NEW_STRING5=Install DirectX 8	NEW_STRING5=Instalar DirectX 8
NEW_STRING6=[Title] requires DirectX 8	NEW_STRING6=[Title] Necesita DirectX 8

**Table 12.** Installing engine with text embedded in code

In the latter example, the text '[Title]' will automatically be replaced by the name of the product, which may be undecided, changed several times during development or require a different font. Table 9 also shows other words that appear before an equal sign (NEW\_STRING4=), none of which are to be altered in any way either. Line 4 shows a command between 'run' and 'Do' with no spaces in between (run\nDo). This '\n' command simply tells the game engine to display the subsequent sentence in the line below, and it is important because it controls the position of text on the screen, directing the players' attention to essential information. In some cases, this can be a question of design or personal preference on the part of the engineer, but in others it may mean that the text might otherwise overrun the space available and go beyond the safe area, or bleed out of its textbox with the risk that players will not be able to read the information. Similarly, blank spaces have to be left in exactly the same place, even when found in places that make no linguistic or syntactical sense.

Some of the problems likely to arise from inadvertently modifying out-of-bounds command strings can be partially solved by using visual localisation tools such as SDL's *Passolo* (Figure 66 below) or Alchemy's *Catalyst* because the code is either hidden or non-editable, and they present everything in a WYSIWYG environment, allowing translators to see and edit the linguistic component that needs to be translated and the text box where it is embedded in the right graphical context as it will appear in the final product:

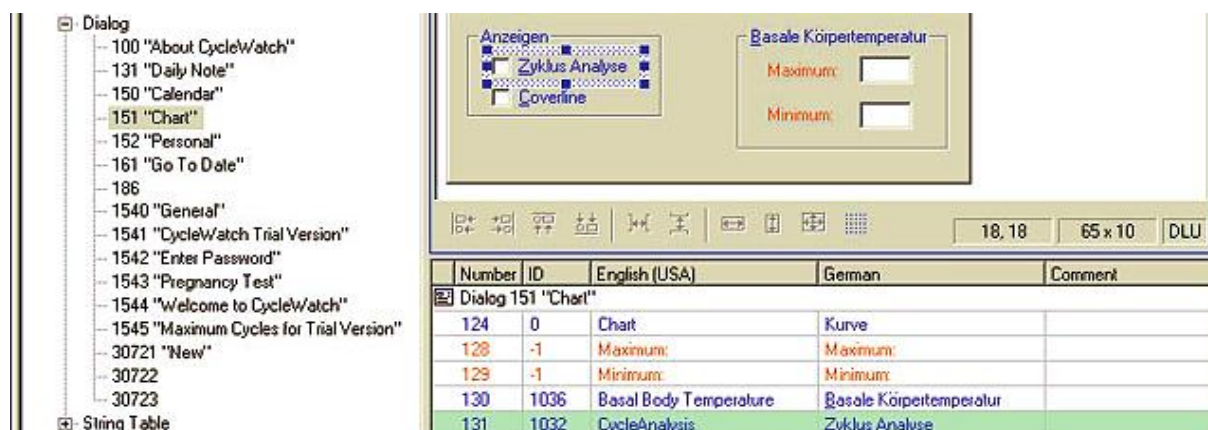


Figure 66. SDL Passolo, a visual localisation tool

These tools are, however, designed primarily for the translation of utility software and they can rarely be used for entertainment software because games do not follow the same coding practices. Some developers create their own in-house tools but, since the game industry does not adhere to any particular file format, let alone a standard, every game project is unique with regard to its programming.<sup>76</sup> The reality is that translators have to accept what they receive, however complex or disorganised it may seem.

The following section deals with the third aspect that sets video games and their translation apart from other professional practices. The need for a player-driven story-building that enhances immersion and the diverse linguistic variables that need to be taken into account for a successful localisation are discussed.

<sup>76</sup> The game localisation industry and its processes are elaborated in Chapter 5, as are some of the new strategies and tools which have been designed to improve the non-linearity and version tracking which are currently characteristic of game localisation.

### *4.3.3-The translation of linguistic variables*

There are various ways in which textual cohesion can be established. Pronouns (he, them, hers) and deictics (this, those) are used in a similar way once their value has been established by the context in which the communication takes place (Halliday and Hasan 1976). These are naturally occurring linguistic devices common to all languages owing to the fact that they create an efficient way in which to build-up information without repeating what has already been stated, and they are of equal importance in translation (Guillemin-Flescher 1993). Textual cohesion is challenged in the translation of video games because of the need to leave deictic items referring to players and their actions as unknown, and computer engineers use variables in order to do this. A variable is an incognitum, the exact value (or meaning) of which is unspecified, although the range of possible meanings usually is (OED: online). Variables are commonly used in mathematics, physics, propositional logic, computing, and statistics in order to calculate values from the numerical information available. In games, variables can stand for a number for points or coins gained, as well as for a word such as ‘elf’, ‘stupid’, or ‘northerner’. As has already been pointed out, this is directly relevant to the interactivity in games because it allows players to choose a wide number of attributes for their characters such as: name, gender, profession, nationality, and religion. For this approach to work successfully, a text for translation, which addresses users, will need to be linguistically unfinished so that the game can allude to those characteristics as players select them, as will be explained in the following paragraphs.

Variables are used in many complex ways in order to trigger players’ suspension of disbelief but it is not easy for programmers to devise strategies to take into account the various syntactical and morphological rules of their mother tongue, let alone those of the many

different languages into which the game will be translated. The most common variable, and the easiest to explain, relates to the player's name. For example, the winning message after the completion of a part of the game normally states: '/n player1 /n wins !'.<sup>77</sup> The string between the '/n' markers is the variable (player1), which the program will substitute depending on the particular choice made. When playing an original video game in English, and in the case of a player named 'Miguel', the phrase displayed on the computer screen would read 'Miguel wins !'. The Spanish equivalent would be: '¡ /n player1 /n ha ganado !' [/n player1 /n has won !], so the phrase displayed by the computer would read '¡ Miguel ha ganado !'.

Several issues come to the fore. As is usual when translating from English into Spanish, the translation is longer than the original text which could pose a problem depending on the number of characters allowed for in the message window. The opening exclamation mark, mandatory in Spanish, needs to be incorporated into the final text and the tense of the verb has to be changed from the present to the present perfect in order to make it sound more natural and to coincide with what Spanish players would say in a similar context. This example shows how the easiest variable that corresponds perfectly with English grammatical rules might prove not to be as straightforward when it is transferred into another language.

In games, variables may be used when dealing with substantives which, when they function as the subject of the sentence, influence the conjugation of the verb as well as any other words that need to agree with them. If the game code does not take into account the grammar of the languages covered by the project, many mistakes will occur. Although mistakes are often attributed to translators, they may actually derive from the difficulties encountered by

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<sup>77</sup> Please note that conventions in orthotypography are often ignored in video games in order to have visually impressive text. This is why there is a space between 'wins' and the exclamation mark.



computers when having to deal with the complex and varying grammar of natural languages (Heimburg 2003: online), and this can happen even when they have been programmed correctly. Strategy games, for instance, allow players to choose among different nations that they may want to conquer. When someone attacks the player, a message says: ‘/n nameofnation /n is attacking you !’. Names of nations change widely from one language to another: they may carry an article or not; they can be singular or plural; or they can be masculine, feminine or neuter. Therefore, translators not only have to take care concerning the syntax of the sentence and the possible relocation of the variable, but they also need to be aware of how these variable formulae may trigger potential morphology changes affecting each linguistic item. The previous formula could generate the Spanish sentence ‘¡ Francia te está atacando !’ [France is attacking you!], but it could also produce the ungrammatical ‘¡ Los Países Bajos te está atacando !’ [Netherlands is attacking you!] because, in Spanish, a plural subject requires a plural verb and the correct sentence should be ‘¡ Los Países Bajos te están atacando !’.

Whenever possible, programmers and designers opt for rephrasing to avoid grammatical hurdles. The above message, for example, could be rewritten in the passive voice as ‘You are being attacked by /n nameofnation /n !’ [Estás siendo atacado por /n nameofnation /n !], but this might not be an option for all target languages because of the different usage of the passive voice. There is also the danger that if the toponyms list from which the formula draws is a basic glossary containing equations such as ‘Netherlands = Países Bajos’ or ‘Brussels = Bruselas’, incorrect sentences may result because, in Spanish, some country names need an article when they appear as part of a sentence, but not when they are part of a list, or because some names are singular despite finishing in ‘-s’, exceptions that have to be programmed into computers if the formulae for translation depend on a relative degree of automation.

This type of linguistic issue has prompted the software industry to explore other more efficient and less expensive options in order to deal with translations, causing the concept of controlled language to be born (White 2000). A controlled language is obtained by restricting the grammar and vocabulary in order to reduce ambiguity and complexity (O'Brian 2003). Traditionally, controlled languages fall into two major types: those that improve readability for children or non-native speakers, and those that enable realisable computer processing such as in the case of automatic translation. This approach is supposed to facilitate automatic translation and speed up part of the process (Nyberg and Mitamura 2003: 245-81). However, it relies on the simplification of syntax and lexis and, while the use of controlled language may benefit the production and translation of utility software, it is certainly less appropriate when dealing with entertainment products where creative language usually plays a greater role than in instructive or technical texts (Quah 2006). Arguably, video games could perhaps make use of controlled language for their instruction manuals and basic documentation, but not for narration and dialogue, because these types of text should be creative and varied if their ultimate goal is to heighten the enjoyment of the gaming experience.

Concatenated strings with several variables are sometimes used, pushing the boundaries of the capabilities of linguistic variables to their utmost. In the *Guitar Hero* series (Harmonix 2006-present), for instance, players are presented with feedback in the form of original newspaper headlines directly related to the number of points accumulated at a given stage of the game. After each concert challenge, the player is presented with the cover of a newspaper with headlines such as, for example, 'Outstanding show from Cyclone at the Garden!' (Figure 68 below). The coded string needed to generate this sentence has four variables:

‘<ADJ> <NOUN> from <BAND> at <VENUE>’.<sup>78</sup> The game code includes lists of variables where each ‘adjective’, ‘noun’, name of ‘band’, and name of ‘venue’ is allocated a linguistic value. The resulting headlines will then vary according to the quality of the player’s performance and, depending on the success level attained at the end of certain tasks, the headline will be phrased in the form of the rather neutral ‘Decent effort from Mongoozer2k at Rock City Theatre’ (Figure 67 left) or the hyperbolic ‘Outstanding show from Cyclone at the Garden’, (Figure 67 right):



Figure 67. Variables from *Guitar Hero* at work

This type of formula works relatively well for analytic languages such as English. However, this approach is prone to error when dealing with inflected languages such as Spanish, due to the degree of concordance required between the articles, pronouns, substantives, adjectives, and verbs in a sentence. In the examples cited above, the most problematic part relates to the adjective and noun combination at the beginning of the sentence. ‘Show’, ‘effort’, and ‘performance’ would normally be translated into Spanish as *espectáculo*, *esfuerzo*, and *actuación* respectively. However, *actuación* is feminine while the other two nouns are masculine, which means that the adjective will need to change from *único* to *única* in order to agree with the substantive. If the game code does not take these morphological and syntactical agreement rules into account, translators will need to limit their options to one

<sup>78</sup> Please note that conventions in orthotypography are often ignored in video game programming. The capitalisation found in this example represents the personal preference of the programmer, undertaken in order to make the variables stand out for the benefit of all those involved in the programming process.

gender and one number, which would result in an obviously unnatural discourse. The other option would be to resort to controlled language, reducing lexical variety and choosing terms which share only one gender, a solution which would not only be restrictive and semantically inappropriate, but also inadequate from the point of view of the game experience intended by the game designers.

Of course, game programmers do not need to know the grammatical intricacies of all the languages into which the game is to be translated, but the whole process would benefit from an initial awareness of the various complexities related to working with natural languages and their inclusion in the game code. When discussing the use of variables in video games, Heimburg (2006: 136) notes that “people don't even notice when the grammar is good, but they certainly notice when the grammar is bad”. Indeed, many players are able to detect an incorrect use of language in the text of a (translated) game, and sloppy localisation bugs can result in a negative impression of the game. This, in turn, can hinder the sales and even loyalty to the brand, leaving many potential buyers inclined to make their purchases in second-hand game shops, or even prompting them to acquire a copy on the black market (Díaz-Montón 2011).

One of the latest developments in this particular area has been the design of grammar engines for MMORPGs. According to Mitchell (2007), a grammar engine is an adaptive translation system that can process nouns and adjectives modifying their number and gender; conjugate verbs; assign correct articles, pronouns, and prepositions and keep track of which characters are speaking and listening at all times. Game writers and designers employ metadata tags in their writing in order to direct the grammar engine to the value of these linguistic variables

regarding the gender or profession of a player, enabling the game to adapt to that player and his/her choices. This will be explained in the following paragraphs.

In any grammatically correct sentence, subject and object pronouns are closely interlinked, and a successful grammar engine must be able to deal with these relationships in order to guarantee grammatical consistency in the target language. To achieve this goal, grammar engines work with macros, single computer instructions that stand for a sequence of operations, for all the deictic information referring to players and their choices. The example provided below illustrates how grammar engines deal with the translation of sentences where the third person singular can be used as a subject (he, she, it) and as an object pronoun (him, her).

*Subject pronoun macro for third person singular: #he()*

This macro generates ‘he’, ‘she’ (or even ‘it’ although rarely), depending on the gender of the character the player has chosen. In the string:

‘Don’t wait for [\*player\*] because #he([\*player\*]) is away’

#he([\*player\*]) will yield ‘he’ if the player is masculine, ‘she’ if the player is feminine, and ‘it’ if the player is neuter. Thus, if the player is ‘Miguel’ the grammar engine will produce ‘Don’t wait for Miguel because he is away’, and if the player is ‘Mary’ it will generate ‘Don’t wait for Mary because she is away’.

Object pronoun macro for third person singular: #him()

This macro generates ‘him’, ‘her’ or ‘it’ depending on the gender of the noun to which it refers. Therefore, ‘Don’t wait for #him([\*player\*]) because #he([\*player\*]) is away’ would generate: ‘Don’t wait for him because he is away’, ‘Don’t wait for her because she is away’, and ‘Don’t wait for it because it is away’, depending on whether the [\*player\*] is Miguel, Mary or a robot guard for example. Figure 68, below, shows some in-game examples from *Free Realms* of how these macros generate completely natural sentences (underlined in green) once the grammar engine has been fed with the right information for each variable for each character. This means that companies do not have to translate all the various options every single time because the localisation grammar engine can render the correct sentence.

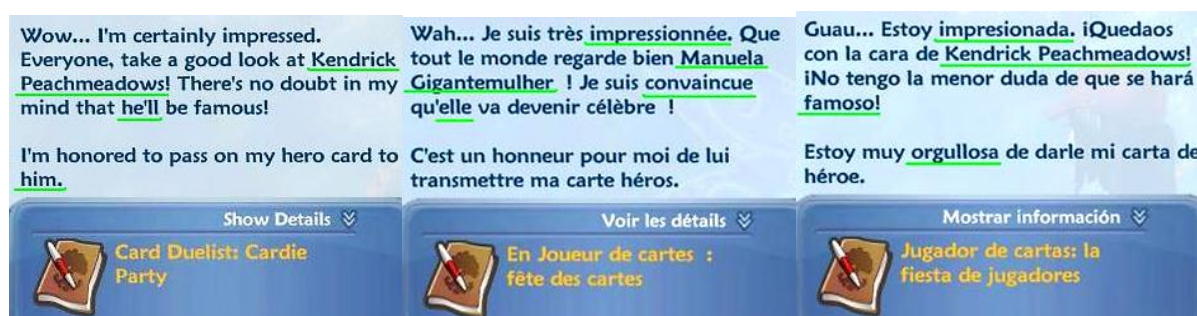


Figure 68. Grammar engine taking care of pronouns

The pronoun and gender macros that allow the grammar engine to render complex sentences, such as the ones in Figure 66, are embedded in the actual dialogue text, and writers and translators need to learn how to deal with them. The following are the US English, French and Spanish sentences and macros that make the game deal with grammar automatically on-the-fly:

-UEnglish: Wow... I'm certainly impressed. Everyone, take a good look at [\*player\*]! There's no doubt in my mind that #he([\*player\*])'ll be famous!  
<BR><BR>I'm honored to pass on my hero card to #him([\*player\*]).

-French: Wah... Je suis très #ms('impressionné')#fs('impressionnée'). Que tout le monde regarde bien [\*player\*] ! Je suis #ms('convaincu')#fs('convaincue') qu'#il([\*player\*]) va devenir célèbre ! <BR><BR>C'est un honneur pour moi de lui transmettre ma carte héros.

-Spanish: Guau... Estoy #ms('impresionado')#fs('impresionada'). ¡Quedaos con la cara de [\*player\*]! ¡No tengo la menor duda de que se hará #mp('famoso')#fp('famosa')!<BR><BR>Estoy muy #ms('orgulloso')#fs('orgullosa') de darle mi carta de héroe.

Grammar engine rules and formulae are not the most intuitive option or layout used to present the material that needs to be translated, but in terms of speeding up the process by enabling the automation of interactive dialogue, and of reducing the translation bill for multilingual localisation projects, they seem to be a valid solution for the fast-paced video game industry. It, therefore, comes as no surprise that the idea came from developer companies responsible for creating standalone or online role-playing games, such as Sony Online Entertainment, Square Enix, Blizzard and the like, because of the sheer amount of text with which they have to deal and because they are aware that much of the players' immersion in the virtual world depends on their being addressed as individuals. Grammar engines are still in their infancy but, over the coming years, there will no doubt be a considerable

improvement in the way they interpret grammatical logic as well as in the practical way in which writers and translators will be able to interact with them.

#### 4.3.4- *The localisation of voice commands and gestures*

The latest generation of game consoles has pushed previous technology even further by including voice and motion recognition, enabling players to interact with video games by speaking commands into a microphone and making gestures while holding the game controllers or moving in front of the console cameras.<sup>79</sup> The translation of games such as *SingStar Dance* (Figure 49 below) and *Dance Central*, a game where players have to move their arms and legs following onscreen prompts, effectively using their bodies as controllers, has presented a new challenge for localisation managers and agencies because of the constant use of movements that could be considered rude in other cultures (Thompson *et al.* 2011). *SingStar Dance*<sup>80</sup> is a game designed for Sony's PlayStation Move which builds on the success of *SingStar*, its flagship casual gaming series, by introducing the PlayStation Move to the game, allowing up to two people to sing while up to two others dance while holding the PS3 Move controller. The game uses advanced voice recognition technology, together with pitch and rhythm, comparing the players' performances to that of the original artist of the song. *Kinectimals* (Figure 49 below), a game where children interact with virtual mascots by simply speaking and gesturing, requires a similar treatment in order to guarantee a smooth operation in the requisite languages. This is not only so for the content of the 'trigger' words spoken, acting as the pressing of the control button I, but also for the possible utterances from the different players (young and old, male and female), which prove to be particularly

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<sup>79</sup> Represented by Nintendo Wii™ ([www.nintendo.com/wii](http://www.nintendo.com/wii)), Kinect® Xbox 360 ([www.kinect-xbox-360.co.uk](http://www.kinect-xbox-360.co.uk)) and PlayStation®Move (<http://uk.playstation.com/ps3system>).

<sup>80</sup> See <http://uk.playstation.com/singstardance>.



problematic in the case of children's voices due to the laws concerning childhood labour (Brown 2011: online).<sup>81</sup> This is because the voice recognition software must include sample voice packages for each of the locales, allowing for some leeway in order to deal with the accents and pitch relevant to each language involved in the release of the game in question (Thompson *et al.* 2011). This broke new ground at the time because previous voice recognition software had mostly been designed for working adults in the US and the UK.

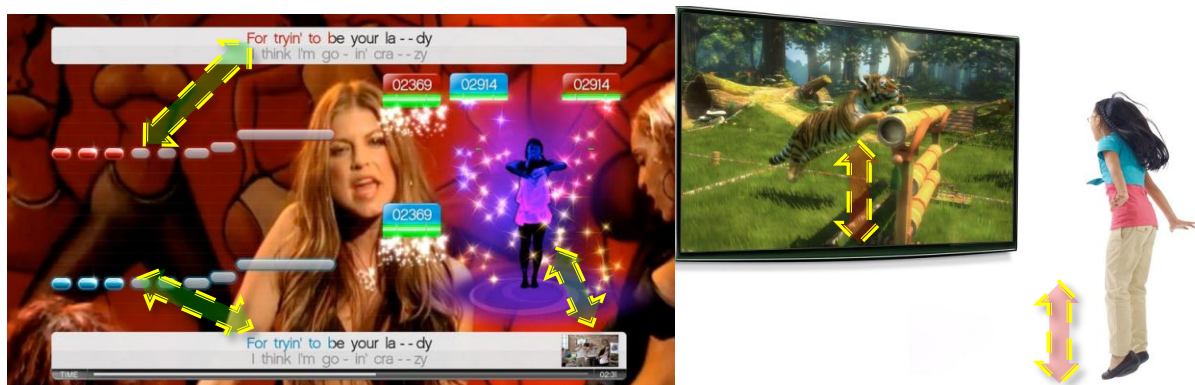


Figure 69. Voice and gestures used as controllers

Although voice commands and gestures have only recently come into the arena for video gaming, it is clear that the localisation of games utilising this technology will generate a lot of research concerning translation in the coming years, research which will explore the multichannel nature of communication (written language, spoken language and body language), how it is brought into a ludic multimedia interactive experience, and what it means to localise all these communicative elements for other countries.

The first four chapters of this research have focused mainly on the linguistic aspects of the translation of the texts found in video games. Game localisation as an industrial process will be explored in Chapter 5 because of its inevitable impact on translators' working conditions,

<sup>81</sup> See: [www.edge-online.com/news/gdc-2011-localising-kinect](http://www.edge-online.com/news/gdc-2011-localising-kinect).

in terms of the way source and target texts are written, translated and proofread, and in the final quality of the product delivered to players.

## Chapter 5

### The Industrial Process of Game Localisation

Common Sense Advisory, one of the most popular localisation market research companies, reported in 2010 that: “the global market for language services stood at US\$26 billion” (Kelly and Stewart 2010: online), with everybody in the industry agreeing that the current trend in respect of a growing market is set to continue for many years to come, and that the market will become truly global. As translation implies both linguistic and cultural change, it cannot be denied that related language services have always involved an appropriation of what has proved to be useful and valuable for one foreign community and its language, with the aim of transposing it to fit a different context where it can contribute to financial gain. Indeed, a study of the business environment occupied by the translation profession is *de rigueur* if we are fully to understand the motivations, errors and challenges that translators face in their daily routine. In this chapter, current game localisation practices are outlined, with an emphasis on the industry, which caters to the needs of the market. A great part of the information found in this chapter has been sourced from presentations by professionals at international industry conferences where proceedings are rarely published but slides tend to be available for attendees, another indication of the long road ahead for this new area of knowledge. Although the professional practice aspects of localisation here described are

treated primarily from an academic perspective in Translation Studies, it is important not to forget that commercial tensions exist so that they can be given due consideration when any tentative solutions are proposed. An examination of the industry from both perspectives would, therefore, involve a valuable feedback of ideas from that industry to academia and back, with the intention of contributing to an improvement in standards. It is not the place of academia to cater blindfold to the industry, but researchers should bear these processes in mind when discussing their work and findings.

One of the main challenges facing game localisation companies is the provision of a service to cover all the possible needs of game developers and publishers so that they can sell their products outside the country of development successfully: from the translation of all in-game written dialogue to system instructions and interactive menus; from product manuals to health warnings and legal notices; from game and community websites to voice talent casting and studio recording; from linguistic testing and locale-specific geocultural revision to platform compliance and age rating boards guidance. The game localisation industry functions within a highly pressurised environment, governed by critical release dates (typically the beginning of each holiday season), and the drawbacks of a creative industry whose developer teams are mostly focused on their own national markets. These aspects demand reappraisal when foreign markets are targeted for the purposes of export. The challenges facing the wider localisation industry are summarised by Esselink (2006: 29) in these terms:

So the question remains, what have we learned over the past 20 years of localization and do the lessons that we have learned still apply to today's new realities of content localization? It almost seems like two worlds are now colliding: software localization with a strong focus on technical skills and technical complexity for translators on the one hand, and content on the other. With the Internet increasingly merging platform and content, the localization industry

will have to rapidly adapt its processes, quality standards and resourcing approach to these new requirements.

Although some games require little in terms of localisation because of their low word count and the absence of voiceovers, mainstream games have gradually grown in terms of their word count, which can range from thirty thousand to five hundred thousand (and even more than a million in the case of some MMO RPGs), as well as the fact that there is a growing tendency to include more voiceover and lip-synch work. The quick turnaround requirements are sometimes handicapped by defective source material. The reasons for this are multifarious and they all contribute to slowing down the translation process unnecessarily: the original language version is, in itself, incomplete or inconsistent, the translatable assets are stored with mixed and confusing naming conventions for asset files, or in a variety of formats that involve further processing. As well as storyline consistency, there is a particular focus on brand consistency, since clients (game developers and publishers) want their image, trademarks and copyright terms to be represented exactly as they intended in all language versions, which in practical terms means that localisation companies often have to review and improve the quality of the original in order to avoid error in the corresponding multiple language versions involved in each localisation project. Regular source file fixes and last-minute updates, together with ever tighter deadlines, seem to conspire against the achievement of optimum quality by the completion date of the project in question.

In order to address all these challenges and alleviate possible problems, game localisation providers are speeding up the professionalisation of their entire workforce. Whereas, a decade ago, it was common to find game translators and testers with no formal higher education in

language, translation or localisation, recent developments in terms of the academic provision of language and translation studies degrees (including at postgraduate level) have raised the standards for professional video game translation and testing, guaranteeing a high level of language proficiency, as well as a genuine interest in the localisation of multimedia interactive entertainment software, ranging from university students to translation professionals. A highly qualified workforce, together with better tools and cooperative strategies for team-working via web-enabled applications, is now increasing the speed and quality of game localisation, an industry that has grown enormously, although rather haphazardly, over the past decades. The following pages detail the origins and development of game localisation, a series of events fundamental to the understanding of the current state of affairs and to the planning of any strategies intended to overcome today's challenges.

### **5.1- The development of game localisation as an industry**

Although the processes used in the game localisation industry are still being improved and it is too early for a definitive retrospective account, an all-encompassing look at its origins and evolution over the past decades may serve to elucidate the role it has played in the advent of video games as contenders for a place within the audiovisual entertainment industry. This retrospective revision can be divided into periods which contribute to our understanding of the demanding initial challenges, and the many considerable adjustments, that have had to take place in game programming and project management, in order to turn products tailored to local use only into products with an ability to attract an increasing number of consumers in

different countries around the globe: in other words, the need for the industry to come up with products capable of adapting to another nation's cultural conception of fun, socio-cultural values, entertainment expectations and legal systems. The following paragraphs constitute an introduction to the different stages involved in the continuous progression that has placed the video game industry on a metaphorical pedestal with a revenue of \$18.6 billion, ahead of recorded music with \$5.6 billion and cinemas with \$10.6 as far as income generation is concerned (Miller and Washington 2011: online).<sup>82</sup>

Given the existence of many preconceptions within the industry, which have had to be dispelled in almost every aspect of game development and publishing in order to increase non-national sales, the necessary changes have taken almost thirty years to implement. As might be expected, these adjustments emerged as a reaction to market trends and in response to the demands of foreign consumers. On occasions, the trigger for these changes has been of an indirect nature, such as the growth of grey<sup>83</sup> (unintended but legal international trade) sales and black (illegal international trade) markets. In terms of the development of video games as consumer products, four perceptible stages have taken place over the four decades since their inception, and these will be examined in the paragraphs below.

### *5.1.1. 1970s: The birth of digital entertainment*

Based on the success of mechanical and electromagnetic entertainment machines found at funfairs (such as foosball, pachinko and pinball) and on the potential released by the technology behind the pioneering *Spacewar* (1961, Figure 70, left), some US visionary developers started creating the first video games for the national market. Initially they were

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<sup>82</sup> See [www.rc.edu/wp-content/uploads/2011/07/2012-Ent.-Media\\_Adv-Mkt-Resrch-Handbook.pdf](http://www.rc.edu/wp-content/uploads/2011/07/2012-Ent.-Media_Adv-Mkt-Resrch-Handbook.pdf).

<sup>83</sup> The grey market, also known as parallel market, refers to the trade of products by unintended intermediaries and in unintended places as planned by manufacturers.

only found in amusement arcades and fair grounds, alongside the merry-go-round and the ferris wheel. Some of the most popular video games found in arcades were *Computer Space* from 1971 (Figure 70, middle) and *Pong* from 1972 (Figure 70, right). The first digital games were almost purely mechanical, i.e. simple and intuitive gameplay with very little in the form of instructions, storylines, graphics, sound or music.



Figure 70. *Spacewar*, *Computer Space* and *Pong*

The novelty of the technology, and the sometimes steep learning curve necessary to beat the game, meant that these coin-operated machines became profitable very rapidly. Such was their popularity that similar technology was quickly developed for home entertainment, and a great variety of desktop consoles appeared on the market, such as those shown in Figure 71 below - from left to right: Magnavox Odyssey (1972), Atari Pong (1975), Coleco Telstar Arcade (1977), Philips Videopac G7000 Europe (1978) to name but a few (Kent 2002, Zackariasson and Wilson 2012).



Figure 71. Early game consoles



It is also worth remembering that these game consoles evolved at the same time as a considerable number of client computer terminals such as the Lear-Siegler ADM-5 (Figure 71 below, left) with no actual autonomy, and the first personal computers such as the Apple II Home Computer (Figure 72 below, right), as well as a variety of utility software applications to aid office work. They all contributed to the partial automation of work and play activities, which turned digital technology into a more accessible tool and, perhaps more importantly, into a commodity accessible to the population in general (Campbell-Kelly and Aspray 2004).



**Figure 72.** Early computers

Japanese creative and entrepreneurial minds swiftly realised the potential of these products and, by the end of the decade, they were the first in the world to join the US in the entertainment software industry, specialising in arcade games. Their overriding strategy was to make all their games immediately available to the enormous US market. Some of the most popular Japanese creations of that decade were *Space Invaders* (1978) and *Galaxian* (1979) (Figure 73 below).

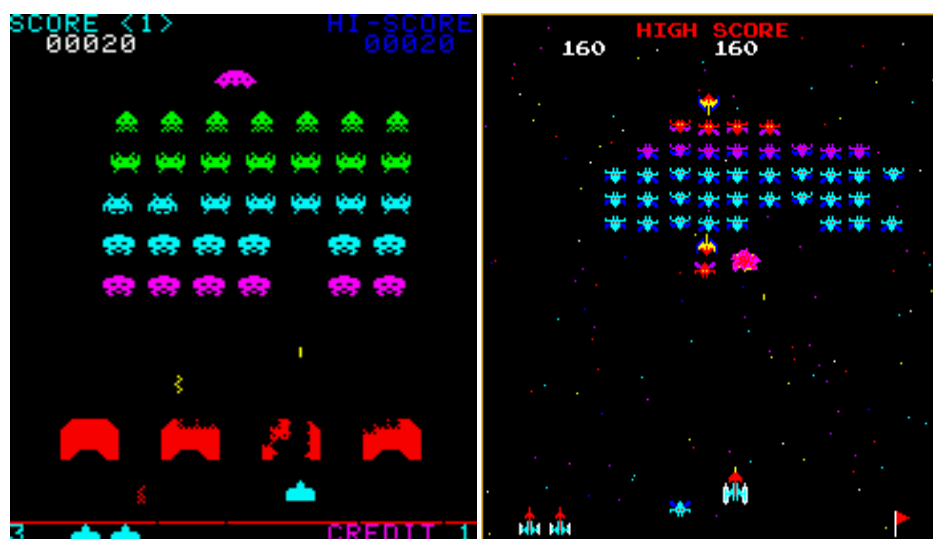


Figure 73. Space Invaders (1978) and Galaxian (1979)

During the 1970s, games would normally be shipped in their original versions to the few foreign markets that were ready for this type of entertainment, and trade took place mainly in English between the US, Japan and the United Kingdom. Priorities included establishing a brand and catering to the more immediate markets and, although we cannot really talk about a game localisation industry at this point, there was an incipient awareness as to how minor adjustments could be made to help boost sales abroad. Most video games relied on intuitive gameplay and simple instructions, so there was little text to be read and, indeed, to be translated. The direct introduction of English terms such as ‘arcade’, ‘joystick’, ‘score’ and ‘game over’ into most languages (CREA: online) without a necessity for translation took place during this early period. As illustrated in Figure 73 above, the informative user interface strings ‘1up’, ‘High Score’, ‘Character/Nickname’, and ‘10pts’ are all in English in both the Japanese and the US versions. Seen from the viewpoint of the US developers and publishers there was little need for localisation, due to the small size of foreign markets at that point and to the high status enjoyed by everything North American and/or in English. This was not the case for developers in Asia. Among other reasons, computer programming, a North American invention, was in its infancy and only the Roman-based English alphabet

could be used for coding, or easily displayed, which in effect meant that even Japanese games would normally rely on US English and had only a few, if any, Japanese characters. Commercially speaking, Japanese developers and publishers always saw the US as constituting the best place for business expansion as well as for the growth of their ROI (return on investment). In this sense, it could, therefore, be said that it was the Japanese who were the first to think of localisation, if only out of sheer necessity.

One of the earliest examples of game localisation is the still internationally popular *Pac-Man* (Figure 74 below), brought to the US market in 1980. The original Japanese name was initially transliterated into English as ‘Puck Man’ [from パックマン], a creation inspired by the Japanese onomatopoeic ‘/paku paku taberu/’, a phrase normally used to indicate that someone is eating greedily, in imitation of a fish-like opening and closing of the mouth (Bernal-Merino 2011: 13). The initial transliteration into English Roman characters sounded to Japanese ears like ‘/pakkuman/’, but when localising the product for the US, marketers decided that ‘Puck’ was far too close to the coarse four letter word and decided to go for a similar but less troublesome spelling, ‘Pac’. The final solution, ‘Pac-Man’, proved successful in every sense and, unintentionally, it created perhaps the first game localisation gem, encapsulating one of the principles of good practice in localisation, i.e. respect for the language and the culture of the players of each importing country.



Figure 74. *Puck Man* Japanese original (left) and *Pac-Man* US version (right)

As mentioned previously, Japanese script was never displayed in the original version. As the game was developed in the very early years of the game industry (and even of the software industry) the only solution was to program it in English, displaying only the Roman characters utilised in English writing, since Japanese characters could not be easily shown for technical reasons. The only possibility was to treat them as images which had the inherent problem of using too much of the little memory available. This situation was not satisfactorily resolved until the first version of Unicode, “a character coding system designed to support the worldwide interchange, processing, and display of the written texts of the diverse languages and technical disciplines of the modern world” (Unicode: online),<sup>84</sup> was implemented in 1991.<sup>85</sup> In the US version of *Pac-Man*, the four ghosts had their names and nicknames slightly tweaked. Instead of opting for a direct transliteration or a dry, dictionary translation of the Japanese original, Midway, the US publisher, decided to give a certain American touch to the game in order to make it more appealing to US players. All the characters had both a proper name and a nickname describing the ghost’s behaviour or

<sup>84</sup> See <http://unicode.org/standard/standard.html>.

<sup>85</sup> See official Unicode website: [www.unicode.org/history/publicationdates.html](http://www.unicode.org/history/publicationdates.html).

colour. The North American version adopted a didactic and humorous approach, using euphonic and catchy names, as shown in Figure 74 above and explained in Table 13 below:

Japanese Name	US Name	Japanese Nickname	US Nickname
Oikake (追いかけ) ≈ chaser	Shadow	Akabei (赤ベイ) ≈ red guy	Blinky
Machibuse (待ち伏せ) ≈ ambusher	Speedy	Pinky (ピンキー) ≈ pink guy	Pinky
Kimagure (気まぐれ) ≈ fickle	Bashful	Aosuke (青助) ≈ blue guy	Inky
Otoboke (お惚け) ≈ stupid	Pokey	Guzuta (愚図た) ≈ slow guy	Clyde

**Table 13.** Translation in English of *Pac-Man*'s characters

This rather ‘creative’ way of dealing with the translation of video games for foreign markets is completely in line with the essence of games as customisable entertainment, to which changes can be made in an attempt to boost their sales. In addition, it corresponds to the establishment of budding global markets, where all products are regarded as commodities requiring individual attention in order to reach new consumers in other countries successfully. GALA, the Globalization and Localization Association ([www.gala-global.org](http://www.gala-global.org)) marks the 1970s as the start of the software localisation industry. As with game development, or even more so, localisation was at that time in its infancy, with all translations carried out in-house, if at all, by a team member with some knowledge of another language. In any case, popular titles, such as *Asteroids* published in 1979 (Figure 75 below) and one of the most successful coin-operated arcade games, had only a few isolated words such as “COIN” and “PLAY” to inform players about the basic functionality of the arcade game, so no translation work was deemed necessary.

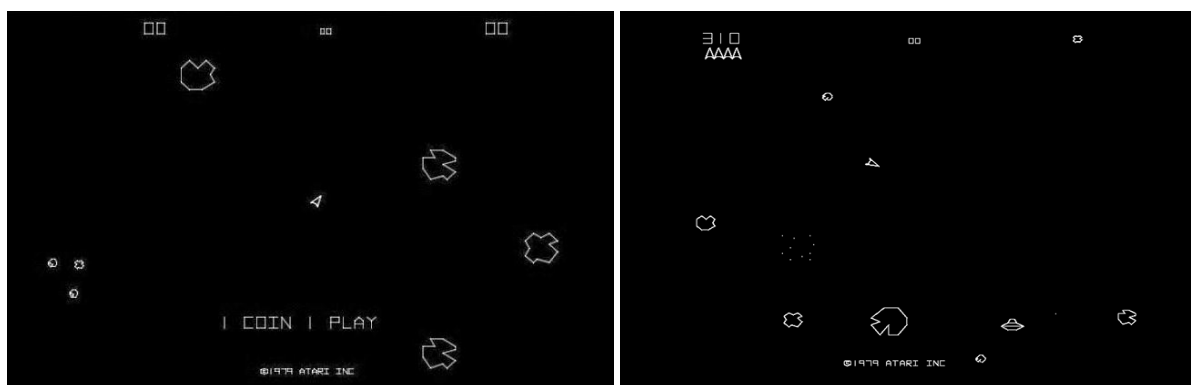


Figure 75. Early video games had a small amount of text

According to Newman (2004), the most common business structure at the time involved a small developer team which would often self-publish or set itself up in partnership with a small publishing company that would take care of any distribution needs, including localisation. The characteristics of this period can be summarised in Graph 1, below:

**1970s Small video game developer/publishing companies**

- Game companies comprise university students and computer hobbyists.
- National distribution mostly.
- No localisation done by default.
- Some Japanese into English localisation.
- Low wordcount.
- No voiceovers.

Graph 1. Early video game companies and localisation

### 5.1.2. 1980s: Establishment of the game industry

Although, according to the Gamespot (Lee 2001: online)<sup>86</sup> portal, there was a sales setback in the 1982-84 period, partly due to lack of creativity but also to a somewhat clumsy repetition of ideas and gameplay mechanics, by the end of the decade the interactive entertainment

<sup>86</sup> See [http://uk.gamespot.com/gamespot/features/video/hov/p2\\_01.html](http://uk.gamespot.com/gamespot/features/video/hov/p2_01.html).

software industry was back in the black and making considerable profits. Quality is considered to have been substantially increased, aided in the first instance by the expansion of the home console and the establishment of companies such as Atari, Sega, Nintendo, Apple, Mattel, Amstrad, Sinclair, Commodore (Patterson and Elston 2008: online).<sup>87</sup> This decade also saw the beginning of the portable console war between Nintendo's Game Boy and Atari's Linx, superseding Mattel's and Coleco's handheld devices, thanks to their innovative exchangeable (not pre-installed and fixed) cartouche games (Newman 2004: 124).

Some of the most internationally appreciated games of that time include: *Ms. Pac-Man*, *Tetris*, *Bubble Dobble*, *The Legend of Zelda*, and *Sim City*. Many of them, such as *Super Mario Bros.* (Figure 76, left), were distributed with packaging and documentation translated from English into German, French, Spanish, Italian and Dutch, although the in-game text, i.e. the user interface and instructions, remained in English. This basic level of translation is often referred to as "box and docs" (Maxwell-Chandler and O'Malley-Deming 2012: 10) and although it could be seen as misleading to buyers who might automatically assume that the game was in their language, this was common practice in the manufacturing of all kinds of product. It was the first step towards localisation after decades in which all packaging and documentation was in the language of the country of origin. Spain, like some other European countries, entered the video game market with original and quality products, but the lack of localisation into English meant that their success in the international arena was rather limited and mainly targeted the home market. One of the best examples of that decade produced in Spain was *La abadía del crimen*, created in 1987 (Figure 76 right). So successful was it nationally that it was also later distributed in Europe, thanks to the popularity of its source, Umberto Eco's novel *The Name of the Rose*, although, in fact, the game was never translated.

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<sup>87</sup> See [www.gamesradar.com/f/consoles-of-the-80s/a-200806189420522063](http://www.gamesradar.com/f/consoles-of-the-80s/a-200806189420522063).





Figure 76. English and German box of *Super Mario Bros.* and screenshots of *La abadía del crimen* in Spanish

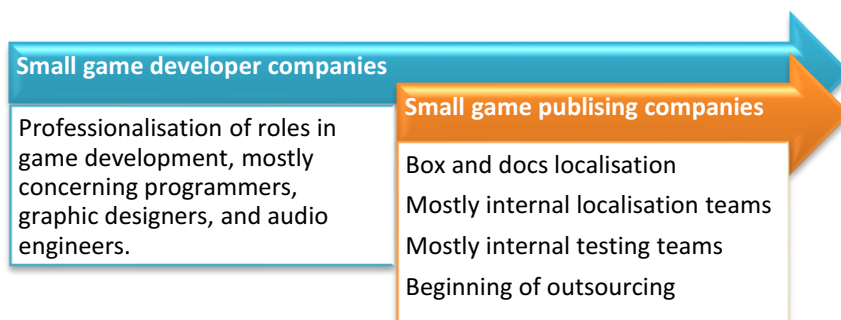
The translation of packaging and documentation became standard practice among those publishers who understood that this small investment could easily increase their revenues simply by making their product slightly more accessible to foreign consumers. In the beginning, their efforts were mainly targeted at the dominant languages in Western Europe, giving rise in the industry to the acronym ‘E-FIGS’, which stands for ‘English, French, Italian, German, and Spanish’. This approach quickly became the *de facto* minimum localisation standard (Bernal-Merino 2011b). Besides the obviously larger potential offered by the most populous countries in Europe, some other reasons justifying the early prioritisation of these languages are directly related to the maturity of their national markets in terms of the numbers of computer users, availability *per capita* income, demand for new forms of entertainment and growth potential (Newman 2004). Some translations were either done in-house or organised directly by the developing team with the help of freelance translators and bilingual players. There were still no game localisation specialists as such and



the software localisation industry itself was in its early infancy. Its evolution in these early stages is aptly summarised by The Globalization and Localization Association (n.d.: online):

The industry that is now dubbed localization got its start in the late 1970s. At that time translators who had often been working independently or in academia began to form companies that could offer more professional language services. These developing language service providers (LSPs) quickly expanded to offer much more than just translation. They became experts in project management, receiving original content from the publisher, translating it through professionally trained translators with subject matter expertise. They also managed the entire process, working with translators, editors, and proof-readers. They soon expanded to offer design and publishing services for the translated content as well.

Thanks to the fact that digital technology had become cheaper and to the popularity of all sorts of software applications, solutions based on computer technology flourished during the 1980s, easing the way for the naturalisation of interactive entertainment. Video game professionals started to become more specialised, consequently contributing to an increase in quality and marketability owing to the routine inclusion of localisation in the post-production stage of the game development process. This period could be summarised in Graph 2, below:



**Graph 2.** Early specialisation of developer and publishing companies, and their relation to localisation

### 5.1.3. 1990s: *The fight for the markets*

The 1990s saw a shift from minimal *box and docs* translation to what is often called “partial localisation” (Maxwell-Chandler 2005: 14) for most big titles, where the UI (user interface) would be translated, but subtitles accompanying spoken dialogue would only sometimes be provided. Despite the downside of the ‘missing’ translation of some dialogue, this proved to be a welcome improvement from the viewpoint of foreign players. Games were becoming more sophisticated; in other words, they contained richer storylines, required more rules of play and control schemes that could no longer be guessed as easily as with the arcade games of the 1970s, and their translation was now a *sine qua non*. During the nineties, non-English speakers were less dependent on their dictionaries and often unrevised manuals for comprehension, and they were able to follow the game story more closely, having been given the chance to become more immersed in the game experience and for longer. The provision of subtitles in some of the games also opened multimedia interactive entertainment up to a small but budding deaf and hard-of-hearing gamer community, initially in the US. As discussed by Mangiron (2011), this approach had the virtue of making the game more accessible and enjoyable for many more players, effectively enlarging national and international player communities. Progress on the accessibility front has been relatively slow, but there are now groups of professionals such as the accessibility SIG (Special Interest group), part of the International Game Developers Association (<http://igda-gasig.org/about-game-accessibility>), who are working towards raising awareness and developing new models to ensure game usability.

Although players were appreciative of these improvements, the localisation of audio files remained an obvious sticking point. As the recording of voiceovers for each language version is by far the most expensive and time-consuming part of any game localisation project (Maxwell-Chandler 2005), it was reserved for the titles that were expected to become undisputed best-sellers and would recoup the initial investment. The decision to translate all the dialogue exchanges in the game is mostly taken by the marketing department, a process that is often referred to as ‘full localisation’. The localisation of all audio files was the first move towards treating international players in the same way as local ones, a step that, as Sioli *et al.* (2007) argue, could be said to have established the game localisation industry as a necessary partner to the game industry. If video games were to be considered a worthy form of entertainment able to compete with products such as books, music and films, they obviously had to deliver comparable levels of service to consumers. One of the advantages of interactive media is the fact that it can be programmed to offer different information and a different gaming experience to players in different countries, at a comparatively low level of investment. As customisation is part of the very nature of computer technology, as well as constituting the very essence of entertainment software, most game designers are fully aware that, by allowing for minor changes, such as variations in control schemes, presentation, avatars and levels of difficulty, different ways of using and enjoying their products can be made available to players. From the localisation point of view, this new approach was very timely, as the language of play was starting to be seen as another game feature that could be tweaked in various ways in order to enlarge the international gamer community.

During the 1990s, language-based interaction through dialogue was developed in certain games, a mode which differed from previous types, which were based on simple graphics and puzzles), proving beyond any doubt the positive role that localisation would play in the

global arena through the translation of hundreds of dialogue exchanges. The first instalment of *Baldur's Gate* (developed by Bioware and published by Interplay in 1998), a very popular fantasy role-playing game, was one of the earliest ones to be fully translated and dubbed into Spanish. It was especially meaningful from the localisation point of view because, like most RPGs, it contained thousands of translatable strings stored in different files and formats. The strings were part of the manual, item descriptions, in-game history books, magic parchments, a complex user interface, maps (Figure 77, below), and several hundred voiceover files that had to be recorded for each of the language versions in which the game was commercialised.



Figure 77. *Baldur's Gate* map in English and Spanish

The 1990s saw the beginning of systematic linguistic play-testing after translations had been imported back into the game code (Section 5.6) in a process similar to the one used in functionality and gameplay testing, but which was now more refined to include logging and correcting linguistic bugs. It also saw the formation of industry associations such as UKIE (previously ELSPA) in the UK, the ESA (Entertainment Software Association) in the US, both of them founded in 1994, and aDeSe (Asociación Española de Distribuidores y Editores de Software de Entretenimiento) in Spain, in 1997. These associations contributed to the protection of the game industry from piracy and, in addition, outlined internal codes of

conduct and promoted the creation of independent age rating boards for video games, so as to improve the image of their products with improved information being available to consumers through clearly displayed labels (Section 5.3). The experience of the BBFC in the film industry in the UK constituted a model and contributed to the formulation of one of the first rating systems for video games with the ESRB following in the US in 1994, and the PEGI representing the Eurozone in 2003.

By the end of the nineties, according to the Entertainment Software Association of North America, revenues in the games industry had almost trebled and, although there was some internal market growth in the US, more than half of it came from the efforts put into localisation for overseas markets (ESA 2006). This trend continued during the following decade. This decade can be summarised in Graph 3, below:



**Graph 3.** Professionalisation of developer and publishing companies, and emergence of game localisation companies

#### 5.1.4. 2000s: The professionalisation of game localisation

As more and more countries joined the information technology and Internet revolution, the number of players around the globe grew significantly. This meant that, potentially, many

more copies of the same video game product could be sold by being distributed in these entertainment-hungry, developing economies, if only the right localisation steps were taken. Due to the fact that video games tend to have rather a short life span (Newman 2004) even when immensely successful (the average video game has between ten and twenty hours of gameplay), the best way forward for game publishers was the simultaneous shipment (sim-ship) of all the language versions, capitalising on the momentum built up by a single international marketing campaign, and minimising the risk of grey imports and piracy. In practical terms, the significance for translation agencies and language professionals is that most games are unfinished (i.e. not playable) when localisation starts, which can, of course, have manifold implications for the workflow.

The sim-ship model represented the beginning of a whole host of necessary changes in video game development, localisation and publishing, adjustments that are still taking place in some inexperienced or conservative companies around the world. Global revenues for the game market reached around \$20 billion dollars by the end of the 20<sup>th</sup> century (Merrel 2011). Barely twenty years later, business analysts, such as PriceWaterhouseCoopers, had valued the interactive entertainment industry at around \$50 billion (PriceWaterhouseCoopers 2008). This estimate was easily reached despite the financial world recession. Although it could be argued that the investment put into localising in more languages lessens profits, it is clear that a sizable part of the unit sales would not exist if it were not for localisation. According to Jaime Giné, the vice-president of international development services at Electronic Arts, between 35 and 70 per cent of the return of new titles, and between 80 per cent to 100 per cent for re-releases, can be attributed to localised versions and not to those sold in the country in which they were developed (in Giné 2009).

One localisation strategy to which publishers have resorted in order to attract buyers in international markets is the use of local celebrities, as we have seen in Chapter 2. A very popular sports game such as *FIFA '12* features footballers Wayne Rooney and Jack Wilshere on its UK cover and Gerard Piqué and Xabi Alonso on the Spanish one. Another marketing strategy used to attract gamers in foreign lands is tweaking the gameplay, so for example *Grand Turismo 5*, a top racing game, requires quicker reflexes in the US version than in the Japanese, because Japan favours a friendlier group playing style as opposed to the individual mastery of driving skills. Sometimes, even a simple reinterpretation can increase market visibility and penetration. Figure 78 below shows the cover from *Ratchet and Clank* for which publishers chose a tough warrior computer-rendering of the characters in the game for the US cover, but a manga-style image of the same characters in order to appeal to Japanese players.



Figure 78. American and Japanese game covers

Perhaps, one of the most significant changes to localisation (and the game industry in general) was the dramatic success of games in the online arena, particularly of Massively Multiplayer Online (MMO) games, which occurred at the end of the 20th century. Players found that interacting online with real people (first locally, but quickly, internationally) was

often more fun and more unpredictable than playing against the artificial intelligence (AI) provided by the computer. MMOs have certainly broadened the market (Newman 2004) and dispelled the seclusion argument often put forward by detractors of video games. People were now being given the opportunity of playing games together as a means of sharing a leisure activity.

In the early stages, Local Area Network (LAN) gaming parties had served to test the technology for several years, but it proved to be both limited and cumbersome as it relied on players physically moving their computers into an agreed location and making all the necessary connections each time they wanted to play. Game applications were adapted and optimised to accommodate the narrow data-flow of telephone technology internet connections where the whole content would reside in each of the computers and only the orders for the interaction would need to travel through the telephone cable. *Ultima Online*, one of the first MMOs, proved to be immensely popular with thousands of players as early as 1997. However, the undisputed king in this particular genre is *World of Warcraft*, which by 2008 had already attracted eleven million subscribers (Gray 2008: online), and twelve million by December 2010 (Blizzard 2010). Of course, one of the immediate benefits to developers and publishers of the ‘massive’ approach is a bigger share of the revenue obtained from the SKUs (Software Kit Units) sold, since these do not depend on retailers in the way boxed games do, but on their own digital distribution structures with global reach and without intermediaries. The other great advantage of MMO network technology is, not only that it allows for thousands of players interacting concurrently and seamlessly in the virtual world, but also that game creators are able to collect very detailed information about the difficult and ‘buggy’ areas of the game as well as about the actual subscribers, including their game style, their most popular quests and stories, and of course, their preferred language of interaction for the interface and for the chat-room features built into the game. Until the advent of online



gaming, itemised market data analysis had been difficult to obtain for the entertainment software industry, especially when multiple distribution channels, countries, and languages were involved. Online playing services requiring some kind of registration, whether free (such as the PlayStation Network ) or fee paying (such as Xbox live or ArenaNet), yield precise information from the moment the account is created.

But the market exploitation strategies of MMOs are not a one-way process. Players can and do come together in order to ask for modifications to the games or even the inclusion of new features. So, for example, if there is a widespread demand for a particular language, publishers may decide to translate the game, motivated by their own internal data as well as by direct feedback from players. Figure 79 below shows a particularly graphic example of this ‘people power’ from the official public forum of an MMO title for children, *Club Penguin*, where, in June 2007, dozens of players united to ask for a Brazilian version for Brazilian players. A few months later, the game was officially available in Brazilian Portuguese. This shows, not only the relevance of the language of play for game users, but also the empowerment of players in order to guide publishers for the benefit of all involved.



Figure 79. Players asking for a Brazilian version of *Club Penguin*

It is impossible to find specific data with regard to the revenue made by companies as a result of having localised an MMO for a new locale, either because companies do not have reliable data collection procedures, or because they do not want to disclose details that may be of interest to their competitors. Since this type of information is not publicised even in professional conferences or forums, we are only able to hazard an educated guess that the income generated must be very profitable, based on the fact that companies continue to add new languages to their portfolios, opening new markets, and increasing the global presence and recognition of their brand in order to correspond with their expansion approximately in terms of the languages in which they offer their products.

The success of the interactive entertainment industry paved the way for companies, such as XLoc, Pink Noise, Babel Media, Binari Sonori, and Gameloc for example, to specialise in game localisation during the first decade of the new millennium, which is evidence of the constant volume of demand for their services over the years. For Sioli *et al.* (2007), this development has opened up the possibility of providing better services, including the localisation of complex audio files. Due to the fact that it is an acknowledged area of difficulty for game creators, not all games make use of voiceover for character dialogue. In fact, some games are often ‘designed-around’ it by offering basic text-bubbles without recorded voices even in the original, as in the cases of Triple A titles such as Nintendo’s *Mario Galaxy 2* (2009) or *Donkey Kong Country Returns* (2010). On other occasions, the use of audio is minimised by recording a voiceover for all characters in a non-existent language, where a human-like, but unintelligible, mumbling is maintained in all versions, such as in the *Sims* saga<sup>88</sup> and the *Little Big Planet* series. There is no real audio script necessary to communicate a plot and instructions are displayed in text boxes, this way the same general audio can be used in all the language versions giving the impression of a dialogue.

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<sup>88</sup> This strategy has been used so successfully in the *Sims* saga that they even named their language “Simlish”, so much so that singers are using it to record special versions of their songs (Wiseman 2007).

Nonetheless, and with few exceptions, full localisation is becoming standard in more languages for Triple A titles, despite the time and financial resources required. For many consumers, this is the minimum that may be expected from such highly-priced titles (Maxwell-Chandler and O'Malley-Deming, 2012). To a large extent, this can be seen as another way in which the industry is able to dispense with the low status, and even the stigma, that have dogged entertainment software from its inception, particularly as compared to other forms of entertainment such as films. The industry has developed substantially, and is now able to offer quality entertainment products on a par with those offered by the audiovisual industry, both in terms of actual content as well as language provision. Some games, such as *Heavy Rain*, *LA Noire*, *Batman: Arkham City*, and *Uncharted 3*, provide a cinematic experience comparable with the best blockbuster films. Others last for many more hours than a film,<sup>89</sup> and allow players to influence the story or relive it from a different viewpoint by taking different lines of action. Interactive entertainment allows for a more personalised experience and for many more hours of fun for players who want to explore a whole new range of possibilities. From the developer's point of view, they can be financially very profitable as they require little extra investment, since the basic game engine and adventure only needs to be created once. Full localisation into other languages allows brands to place themselves at the top of the leader boards in foreign markets, increasing their revenue, their international standing and visibility, and the loyalty of their customers.

Both the game industry, in general, and the localisation industry, in particular, needed to specialise further in order to be able to deliver the necessary volume of titles translated into as many languages and within such stark time constraints. Although the process started a few

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<sup>89</sup> Top action titles tend to offer between ten and twenty hours of gaming depending on the skill of the player. Top role playing games can be played for more than a hundred hours, thanks to the immensity of the virtual world and the dozens of sub-plots in which players can indulge.

years ago, developers and publishers are still streamlining their structures and processes, but the most experienced ones have an internationalisation strategy in order to facilitate the simultaneous localisation of the game into multiple languages. Most large language service vendors specialised in the management of projects both for text translation and the recording of localised audio. They formed part and parcel of a large constellation of smaller in-country localisation companies, freelance translators and recording studios. As a result of the increase in both quantity and quality, linguistic testing was outsourced to companies with the right technical set-up and linguistic proficiency in order to take care of the final in-game proofreading, something that takes place only a few weeks before worldwide release (Kuningas 2011). Testing companies are responsible for this work, employing large seasonal teams of functionality and linguistic testers. These teams are starting to consist of language or translation graduates who are also skilled players, rather than gamers with some language knowledge as was the case in the past. Graph 4, below, shows a snapshot of the way these industries are managing to collaborate and fine-tune their work in order to cater for growing entertainment-hungry markets:



**Graph 4.** Professionalisation of game localisation and linguistic testing companies

### *5.1.5. 2010: Deep localisation*

As full localisation slowly becomes standard practice for more languages in each project, a number of professionals in the language services and the game industry have started considering implementing what McKearney (2007) refers to as ‘deep’ (or ‘enhanced’) localisation. These two adjectives, which modify the generic term, are used to indicate an enhancement of the game in relation to consumer expectation in a given locale. In other words, any amendment that does not run counter to the game-world itself, and is capable of increasing the immersion of players through familiarity with gameplay features and specific story preferences can be reconsidered and adapted to cater successfully to a particular local market. It may seem that there is nothing novel in this approach, but whilst previous efforts had aimed at breaking into markets by simply eliminating language barriers, deep or enhanced localisation staves off competition from other top games also offering a fully translated content by presenting a product catering directly to local tastes and sensitivities in a systematised way. This aspect of localisation had, in fact, been considered before, but its implementation had been rather haphazard.

One of the defining aspects of this new approach is that it requires the integration of localisation within each content-creating department in the process of game development. As a result, input from more professionals is required in order to ascertain and advise on how the stories and the different socio-cultural features are perceived from the viewpoint of each of the importing countries. The move of the game localisation process from the postproduction stage at the very end of product development to the earliest creative stages constitutes a radical change requiring serious restructuring in most game companies as some of them had

become accustomed to disregarding the requirements of foreign markets, owing to the fact that localisation companies would undertake this part of the work at a later stage. This new strategy signals a shift, in which localisation becomes closely involved with video game creation, effectively producing a new version of the game incorporating the features and preferences of the countries where the game is to be distributed. In this sense, translators are also invited to take on a creative role in the process, alongside the author; a role that inevitably clashes with some of the traditionally accepted views of translation as a ‘true’ copy of the original. Linguistic creativity can be said to form an integral part of translation, an aspect that becomes more evident the more artistic texts are, as has already been pointed out by scholars in various fields, such as the translation of stage plays (Santoyo 1989), children’s literature (Lathey 2006), or advertising (Abad and Valdés 2004).

One of the most decisive factors determining this enhanced localisation approach, and perhaps the one that applies more directly in the case of video games, is that these products are conceived from the very beginning as consumer products, and not as canonical works of art, as are books or films (see Section 4.1). The underlying principle is that there is shared authorship and responsibility for the revenue the games are expected to generate. When localisation becomes an integral part permeating all stages in the development process of an entertainment software product, developers, publishers and localisers have to reimagine or remove some game elements that are unfavourable to, or could be misinterpreted by, the target culture. These might include aspects as simple as the addition of masculine and feminine genders as well as ethnicity to players’ avatars, such as in the *Mass Effect* series (2008-12), where users are able to choose any conceivable physical characteristic for their on-screen character. On other occasions, the strategy involves resorting to local brands and celebrities to which fans are accustomed and can easily relate, or even changing storylines and locations so as not to alienate consumers in particular locales. It is certainly a sensitive

way in which to approach the game and one that is discussed by Milder (2009) when analysing the modifications *Wolfenstein* underwent in order to please USK, the German age rating board. Localising characters, storylines or graphics can distort the original considerably. Localisation should not be perceived as a mandate to modify everything, but rather as an awareness of the sensitivities and preferences of other cultures. In this sense, it involves creative decisions and the game-worlds themselves often tend to establish their creative parameters by indicating what would be admissible and what would not. As has been highlighted by Giné (2009), one of the benefits for developers and publishers is that, with accurate knowledge of the global marketplace, country-specific downloadable packages (with languages, features, characters, stories, and audio tracks) can be created for older games with a view to a second release, thus lengthening the shelf life of the games and, consequently, their ultimate profitability.

Game localisation is a youthful, but well-established industry; its growth is set to continue, creating new job opportunities and professional specialisations. There is little doubt that enhanced localisation is the goal towards which the most experienced game developers and publishers are starting to work, because it guarantees consumer satisfaction and loyalty to a particular brand, an approach which, in turn, ultimately becomes more profitable. In order to achieve this, the internationalisation of game design is being streamlined so as to accommodate localisation into several languages (Maxwell-Chandler and O'Malley-Deming 2012: 4). It is perhaps to be expected that, as human society ventures deeper into an interconnected, well-informed, consumer-oriented marketplace, players from all over the world will expect to be catered for in a more comprehensive manner, and, in this respect, multimedia interactive entertainment products seem to exemplify perfect, seamless customisation in their design. However, in order to understand why it has taken so long for enhanced localisation to be considered, the way game development and localisation processes

have evolved together during the past few years for the benefit of all involved will be examined in the next section.

## 5.2- Game development and localisation

According to Maxwell-Chandler and O'Malley-Deming (2012), most video games need between eighteen and twenty-four months to be developed; top Triple A titles can take more than three years,<sup>90</sup> require the work of hundreds of professionals and the investment of up to thirty million dollars, a similar budget to a Hollywood blockbuster film. Games can be very complex products, integrating multilingual localisation for simultaneous international release augments that complexity, and can contribute negatively to what already constitutes a highly pressurised environment.

When localisation teams work with a finalised game, involving little time pressure, the process can be relatively simple, since a regular cycle is followed, including extracting game strings from the source code, translating and importing them back into an engine, casting and recording voiceover scripts when necessary, rebuilding and completing various testing rounds until most bugs have been fixed and an acceptable level of quality has been reached. This is one of the reasons why localisation has traditionally come at the post-production stage of game development, as an afterthought, in a similar fashion to the translation of other creative products, such as novels or films.

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<sup>90</sup> The record perhaps belongs to *GT 5* (2010), a title that took almost five years in the making, although *Duke Nukem Forever* (2011) has been dropped and taken up again several times over the past twelve years.



Unfortunately, the demanding global marketplace means that localisation often has to take place when the game is unfinished and, consequently, unavailable to translators who ideally require a copy in order to become acquainted with its writing style, its appearance and the general feel of the gaming experience. In accordance with the principles of good practice, during the early stages of game development, the localisation team should ideally liaise with the writing team in order to prepare a shared working schedule. This calendar should detail the milestones to be reached at each stage of the game development process in which translatable assets must be finalised and forwarded for localisation. Dates and deliverables are updated and readjusted regularly following ‘waterfall’ or ‘agile’ workflows (Bartelt-Krantz 2011: 86), signifying a chronological order in which whole sections have to be finished before others can be started, or a modular order where sections are independent from each other.

Respecting milestones and ‘locking down’ content for localisation effectively saves time and money. As has been mentioned by Warden and Christou (2010), the developers of *Mass Effect* avoided retranslation - a common phenomenon in game localisation due to the continual changes made by developers up until the very last weeks before release day - by waiting until the English voiceover recording had taken place, because, at this particular stage in the proceedings, the original script of the game had been finalised. This *modus operandi* also helps the integration and translation of subtitles in different languages, since this text (often verbatim) has to match the VO (Voice Over) recording. In-studio edits and changes can be detrimental. Fundamentally altering the original content at this late stage is not only time-consuming and expensive for the original version, it can also throw the whole localisation schedule off track, as any modification tends to affect the entire localisation chain, necessitating the retranslation and re-recording of the lines. It is for this reason that at Bioware, the company where Warden and Christou work, localisation follows the English

recordings, with a buffer time of one month, so that all translations can be completed, recorded and double-checked prior to audio localisation in all the other languages of the project.

Lebesnerais and Johnson (2008) suggest that entering the creative process early, educating development teams and outlining delivery dates from the beginning offer the greatest benefits for everybody involved, since it is these particular aspects which enable the type of communication that contributes to the ultimate refinement of strategies and makes game development localisation compatible with the internationalisation of the game design. It is certainly understandable that programmers and game designers underestimate the implications of not internationalising the source-code, since their best skills and undivided attention are usually focused on creating an immersive gaming experience. It is, therefore, the duty of the localisation team to guide them, raise awareness concerning the main issues, and offer suggestions, recommendations and strategies early on in the process. Many companies use internal ‘best practice’ documents coupled with ‘wikis’ to educate development team members concerning the most efficient ways in which to carry out localisation, so that the problems typical of it, such as hardcoded translatable strings, no implementation of Unicode, and art-embedded text are avoided, as we have seen in Section 4.2.3.

As Bartelt (2011) notes, localisation has evolved from its erstwhile position as a peripheral, subordinate service relegated to the very end of the production process to its current position as an important part of the pre-production stage of the project. From the point of view of localisation professionals, all language versions must be of a high standard since this is what the international fandom of players expects, as is often stated in official forums. The increase

of online game registration reward systems, together with better-itemised sales data per language, cross-referenced with investment figures and prior yearly results, have helped localisation heads to argue their case for making game development systematically localisation-friendly, since the necessity for this particular aspect of the game industry has been proven by an increase in the ROI from 30 to 70 per cent (Giné 2009). Triple A titles are no longer made for the North American or the Japanese markets, although they are still the biggest and most profitable. Most games are now developed with an international market in mind so that they are customised to suit every locale in which they are to be released. One of the advantages of this approach is that, once the game has been internationalised for one target language, new languages can easily be incorporated without the necessity for costly ‘retrofitting’ cycles, in other words, without having to come back and change or add assets that were not available at the time of manufacture. In addition to raising awareness among game developers concerning the localisation process, it is also essential that translation and localisation professionals should learn about the game development process itself so as to ensure their seamless integration.

### *5.2.1. Weaving localisation into the game development process*

Localisation-aware procedures have to be correctly integrated into the complex game development process in order to facilitate the production of the multiple language versions that have been projected; this is often referred to as the internationalisation of the game design or the game engine (Maxwell-Chandler and O’Malley-Deming 2012). According to

GALA,<sup>91</sup> the most recent understanding of localisation (l10n), as complementing internationalisation (i18n), originated as a marketing strategy used to reinterpret and adapt current translation activities in order to achieve globalisation (g11n). Contrary to the distribution practices for traditional manufacturing products, where companies may simply change the way they pitch the same product in other countries, the highly-competitive global marketplace requires the product itself either to be tailor-made or customisable by users in each importing country, creating in effect a multitude of slightly different products that are perceived to be the same.

Due to the variety of platforms and video games available nowadays, from a simple mobile phone game such as *Snake* to the cinematic experience of top-end consoles such as *Uncharted 3*, there is understandably no standard development model that can be applied to all video game projects. A general overview of the most common stages, however, may help the understanding of the game development process among translators. The following paragraphs both present and explain the ten most common stages in game development with the recommended localisation-friendly stages chronologically ordered in the manner suggested by localisation professionals such as Samora and Airey (2011).

- 1) Design document: The project content and specifications are outlined and decided upon, i.e. the core gameplay and innovative selling points are discussed and the concept art drafted, including the basic game mechanics storyboard, the engine and development tools to be used, the initial cost estimates, as well as the intended project calendar with the main milestones and release date. This document is often used as the basis for approval

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<sup>91</sup> See [www.gala-global.org/internationalization-overview](http://www.gala-global.org/internationalization-overview).

from publishers, from whom funding of part of the development, in the case of both internal and independent teams, has been requested. No localisation protocol is recommended at this stage.

- 2) Development of prototype: This is often regarded as the core phase of the project in which the main programming that differentiates it from similar products takes place. At this stage, the game is likely to be internally different from almost every other game, due to dissimilarities across developing companies, game genre, etc. The prototype can also be used for final approval when the publisher is not fully convinced of the viability of the product at the design stage. Although localisation does not need to be discussed in any degree of detail at this early stage, essential internationalisation steps are recommended, such as the integration of Unicode and the design of a generous or resizable UI interface.
- 3) Design of the pre-Alpha version (or first-playable): At this stage, the game is partially playable outside the development environment in which only the engineers have had access to it. Companies with an internal quality assurance team require their functionality and gameplay testers to go through the stages of the game-build in order to assess the playability and entertainment value of the game. Graphics and audio will only be partially implemented and the game will not be complete. The game is fully tested at this stage, due to the probable presence of major bugs. Localisation heads must highlight essential internationalisation issues, such as the UI display, possible iconography and storyline problems, and the need for the subtitling of cut scenes.
- 4) Design of the alpha version: Once all the parts of the project are starting to come together, a fully playable version is put together. Most assets of the game should have been implemented by this stage, and most functionality and behavioural aspects should also have been addressed, which should be sufficient so that internal testers can develop a real feel for the game and its entertainment value. There might still be some issues with

missing assets and some of the placeholders<sup>92</sup> for graphics and audio files will still be present. Functionality testing for major bugs is increased at this point. Those responsible for the localisation process need to verify that the engine is stable, with all the different writing systems in place, and are also in charge of finalising the project profile with nearly finished data for the localisation kits to be sent later to localisation companies, whether single language vendors (SLVs) or multiple language vendors (MLVs).

- 5) Design of the beta version: At this stage, all game assets are fully implemented, i.e. animations and textures, voiceovers, audio and music; and all behaviours, menus and events have been completed. From here onwards, the development team stops adding new features to the game and focuses on fixing any functionality and linguistic bugs that may still be present in the original version. Usually, only minor functionality bugs remain and beta-testers,<sup>93</sup> often internal, review every single menu, story thread and interactive situation within the game. Original voiceover has been recorded, script locked-down, and strings of text sent for translation to game localisation companies. These outsourced companies use ftp servers and online project management applications with query systems in order to stay in contact with the development team.
- 6) Localisation of the beta version: Locale-specific texts and recorded voiceover files are implemented and tested in-game by target language specialist testers who normally work in the localisation testing companies. They describe the bugs and follow up on them by means of a bug reporting application, a database in which all the mistakes spotted and the decisions made are registered. Any corrections can only be implemented in the game code by the programming team. Gameplay may also be recalibrated for some locales with

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<sup>92</sup> A placeholder is symbol in a mathematical or logical expression that may be replaced by the name of any element of a set, also used in video game programming for textures, voices, sound effects, etc.

<sup>93</sup> It is quite common for game developing companies to have an array of volunteer beta-testers. This mostly unpaid taskforce can be made up of game journalists, meticulous hard-core fans, and computing students. Depending on timelines and project milestones, testing services companies can be brought into the project as required.

regard to difficulty levels so that the experience is more or less challenging in accordance with the preferences of a particular locale. At this stage, all coding has been completed, unless a major bug or a serious localisation or culturalisation issue emerges later during the final testing cycles.

- 7) Release candidate: Full playthroughs are required so as to ensure that there are no game-crashing bugs (a.k.a. tech-hangs) requiring the game to be restarted or the hardware, rebooted. Any minor bugs spotted at this stage are likely to be left unresolved due to time constraints and to the fact that returning to the code at this stage may cause additional problems, requiring further testing that could jeopardise the release date. A game can have several builds with different characteristics at this stage, but a stable build which meets all first party requirements will now be chosen for later submission to platform holders. Only the original language of development is tested, usually English, but it is advisable to draw attention to any localisation issues, so as to demonstrate awareness concerning territorial sensitivities and preferences.
- 8) Age rating board approval: General project managers need to ascertain that age rating targets have been met, in line with project design documents, global marketing campaigns, regulations in the different countries where the game will be distributed, and platform holders' expectations specific to each country in which the game will be released. While questions to the rating boards (such as PEGI for the EU, ESRB for the US and CERO for Japan) can often be posed for guidance prior to completion, the submission of the final code intended for release is imperative. It is important to note that rating boards only assess the original version submitted to them on the understanding that all the others are exactly the same, or at least comparable. Although rating board classifications are voluntary schemes in most countries and they are not legally binding, recommendations tend to be followed by government officials who have the power to ban

titles outright, stopping their publication. For this reason, it is advisable for game developers and publishers to draw attention to any localisation issues, display responsible practices and carry out focus group surveys to make sure they are in line with requirements. This question is further explored in Section 5.4.

9) First party platform approval: Platform holders such as Microsoft for Xbox 360, Sony Computer Entertainment for PS3 and PS Vita, or Nintendo for Wii and 3DS reserve the right to ban the release of a game for their system if it does not comply with what was originally agreed in the project and has not been given the go-ahead at the prototype stage. They are also especially concerned with the correct use of their trademark and their copyrighted terminology, which must remain consistent across the whole product line in all the languages covered. After approval has been granted by the platform holder, the game can then proceed to the final stage.

10) Release approval: Once the final build of the game has been approved by the console manufacturers, all bugs are then closed and the game is ready for gold-copy (a.k.a. mastering) and mass distribution. In some cases, even after approval, playthroughs can continue in order to make sure that no serious problems remain and, in the event that any are found, patches are made for download directly from official sites. These patches will also need to be localised into the different target languages and tested. In some cases, individual language patches may also be made available asynchronously after release. Other material that may need to be localised at this stage will consist of any extra downloadable content (DLC) for the game. DLC packs reward players with extra content and fan bundles for a low, isolated payment or a monthly fee. DLC prolong the life of the games and maintain a constant dialogue with players through forums, a factor which ultimately contributes to improving the game. As distribution models shift from boxed products to downloadable ones, video games are slowly becoming episodic, in a similar

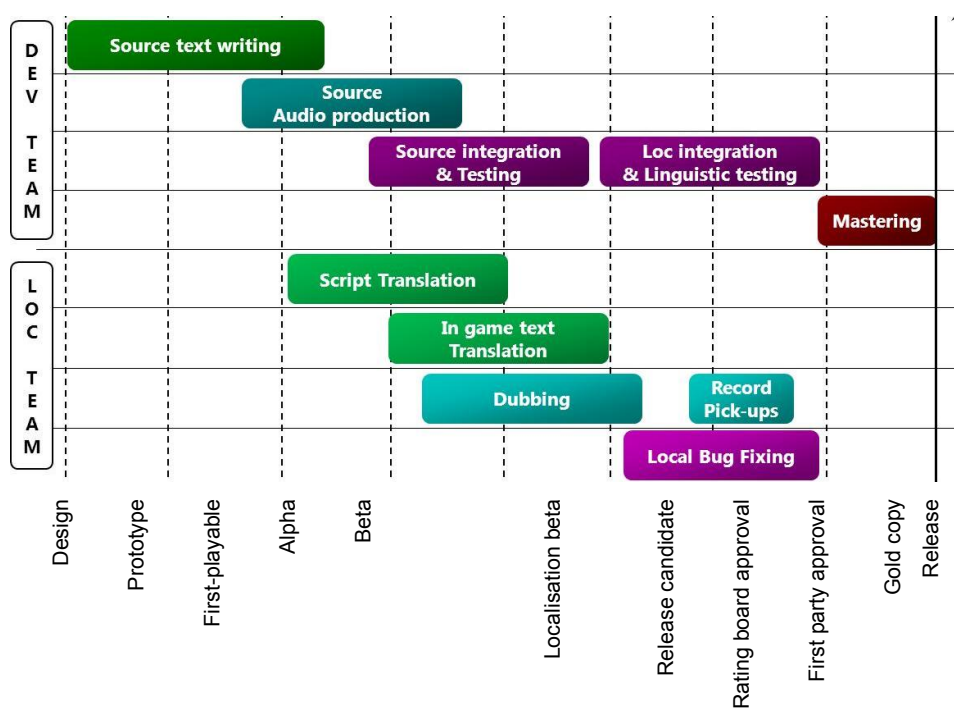


way to film sequels and prequels or television series, guaranteeing a welcome continuity of work for localisation companies. An added benefit is the fact that this episodic approach helps to reduce the escalation of work occurring before every holiday period.

After almost four decades, some common procedures have been put in place in the video game industry and the development processes have been refined, adding extra layers of complexity in an attempt to create a product that can be seen as a creative achievement. The changes have been so great that the industry has even gained the recognition of the British Association of Film and Television Awards (BAFTA), which started to celebrate the first Video Game BAFTA Award ceremony ([www.bafta.org/games](http://www.bafta.org/games)) in 2003. To date, translation does not feature in these accolades, just as in the film industry,<sup>94</sup> although it must be said that national leader boards count equally in all the games released, regardless of their country of origin. It probably belongs in a different context, but there is no denying that the game industry has gained international prominence thanks to the role played by translation, a role that only high quality localisation can sustain. While it is understandable that localisation was a postproduction afterthought in the 1970s, as most of the stages detailed in these pages did not exist at all, the adaption and optimisation of structures each time more languages are added to the project are clearly signs of good practice within the industry. In a move to make localisation a more recognised part of the development, some localisation experts have begun to advocate early involvement (McKearney 2007). Figure 80 below shows a proposal for the integration of game development and localisation by Ballista (2009), into which the milestones noted above have been included for further clarification:

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<sup>94</sup> Foreign language films started being considered in 1982 by BAFTA, but subtitling and dubbing are not recognised [www.bafta.org/awards-database.html](http://www.bafta.org/awards-database.html)



**Figure 80.** Integration of localisation in game development

The streamlining of working practices has been simplified by considering development and localisation processes side-by-side, rather than independently of each other, with the added benefit of many years of experience. Due to growing pressure from consumers, but also thanks to events such as the ‘Game Localization Round Table’<sup>95</sup> and the ‘Localization Summit’<sup>96</sup> that have helped to publicise sound practices and to encourage more partnerships among the professionals involved, the perception of localisation and language service providers has been radically altered over the past few years. Perhaps one of the essential factors to be changing in the entertainment industry is the fact that, although the brand may be singular, stakeholders are now realising that top quality localisation helps in terms of competition in a complex, global marketplace where it pays to observe national sensitivities.

<sup>95</sup> Part of the annual Localization World conference, the biggest international event dedicated to all aspects of software localisation.

<sup>96</sup> The most important game localisation event held annually at the Game Developers Conference (GDC), one of the most prestigious gatherings of companies and professionals in game development and publishing.

### 5.3- National sensitivities and age rating boards

While book publishing companies may organise their collections according to reading ability, their products adhere to no formal age rating system. Video game rating boards, such as PEGI (the Pan European Game Information) and BBFC (British Broadcast Film Council), although voluntary, are very well respected by game developers and publishers. Rating boards do not set out to be unnecessarily prudish or coercive, but to inform and warn about the possible harmful effects to consumers deemed too young or unprepared for the content of the game (Stevens 2010). The fact that video games are a multimedia interactive medium (players are seen to be directly responsible for almost everything that happens in the game world) has made authorities and communities around the world ponder the possible negative effects of this recreational activity. The main concerns include the desensitisation of players, especially of children, to violent behaviour, drug consumption, sexual discrimination and stereotyping, and the provocation of genuine fear as opposed to excitement (of the kind that transcends the game causing nightmares or paranoia). It is worth pointing out that, by the end of 2010, PEGI, the rating board catering for EU countries, was issuing almost 3,000 ratings per year and only 4 per cent of those were recommended for adults only (over eighteen); the majority 48 per cent were rated for three years and over, 10 per cent for ten years and over, 25 per cent for twelve years and over, and 13 per cent for sixteen years and over (Stevens 2010).

The ease with which audiovisual products are used means that any kind of content can be viewed by any member of society, regardless of their age, level of maturity or education. Interactive media is a new form of entertainment where passive viewing becomes proactive doing, literally turning players into the protagonists of the story they are watching with all

that being King Arthur, a mafia don, or Lara Croft involves. This is one of the reasons why developers and publishers both welcome and adhere to rating boards and the legal framework of each country to which they export.













There are several game age rating boards in the world, all of them independent from industry and politics, and although most governments reserve the ultimate right to ban the publication of any given game (even if it has been given an appropriate age rating), they are regarded as a worthy service that safeguards children by the prominent display of age rating categories on boxes and discs. Some of most widely acknowledged rating bodies are PEGI in the European Union, the BBFC in Britain, the ESRB (Entertainment Software Rating Board) in the United States, the USK (Unterhaltungssoftware Selbstkontrolle) in Germany, and Cero (the Computer Entertainment Rating Organization) in Japan. The rating criteria are similar in all of them, and they concern themselves mainly with the depiction of violence (gruesome as opposed to slapstick), the nature of the characters and stories (real as opposed to fantasy), and the use of coarse language (discriminatory, insulting). The main purpose of rating boards is to assess game content and to inform players (and their parents) about it by asking publishers to display standardised labels clearly to this effect. The age rating label is printed on the front and back covers of the game box (as is seen in Section 4.2.6), as well as in the manual and on the actual game disc or cartridge. The PEGI labelling is probably the most descriptive and user-friendly, thanks to its pictograms offering details about the actual content responsible for raising concerns and tilting the balance towards a particular age rating. Figure 81 shows the PEGI standardised pictograms indicating game content and used to accompany the numeric age rating label:



Figure 81. PEGI rating descriptive pictograms from the official PEGI website: www.pegi.info

Differences in national sensitivities may mean that rating boards rank games differently depending on the country in which they are going to be distributed. Game producers and general project managers, responsible for the original product, used to apply a uniform approach in this regard, wrongly assuming that concerns and taboos are the same in all cultures. It is often the responsibility of localisation managers to point out and avoid any possible conflicts within each language version. In many cases, translation agencies and freelancers can raise issues before the start of the final internal reviewing stage because they are more familiar with the particular local market to which they cater, but it is also common for publishers to employ consultants to review content before they send the game out for the official age rating (Edwards 2006, 2007). Localisation managers need to develop a multicultural sensitivity because, although broadly speaking all cultures express reservations about similar topics, they have different degrees of tolerance related to each issue and, more importantly, they have different age thresholds as can be appreciated when comparing national game rating systems side-by-side, as seen in Table 14 below:

	0-3	6+	7+	8+	10	12+	13+	14+	15+	16+	17+	18+
PEGI												
BBFC												
ESRB												
USK												
ACB												

CERO											
DJCTQ											

**Table 14.** The most commonly applied rating labels in the EU, UK, US, Germany, Australia, Japan, and Brazil

It is not uncommon to see boards recommending a different age rating for players depending on the country of release. In some instances, the contrast is so pronounced that it makes us question the accuracy and actual value of an age rating guidance for the content of a game. As a way of illustration, Figure 82 below shows the front covers and age ratings for *Mass Effect* displaying the labels for the UK, Brazil, Germany, the US and the EU countries. It was considered to be appropriate for the British, twelve years and over to play, whilst Brazilians had to be fourteen years and over; Germans had to be sixteen years and over; North Americans seventeen, and the wider European community over eighteen.



**Figure 82.** Contrasting age rating advice

The fact that different countries have different world views may seem self-evident to people with a multicultural outlook, but it is seen as the responsibility of the localisation teams to advise on all cultural concerns. The stakes regarding geocultural and geopolitical misunderstandings can certainly run high (Edwards 2007) but, with the right input from localisation specialists, controversial content and features can be reprogrammed or switched

on and off, depending on the sensitivities of each country. It is not only a question of the language or public image of companies, but a financial, legal, and even a political one are also included. Edwards is perhaps the most clear representative of, and prolific writer on, geopolitical and geocultural issues. She relates the story of how Microsoft was forced to recall *Kakuto Chojin* straight after the launch, due to the perceived misuse of Quranic chanting as part of the audio track accompanying this fighting game, resulting in the loss of millions of dollars for the software giant (Edwards 2006). Another very popular and experienced company, Capcom, had to defend itself against an accusation of racism after releasing *Resident Evil 5* in 2009 because critics resented the fact that this Africa-based, horror-fiction adventure only had 'black' zombies. The accusation was ludicrous because critics ignored the fact that, in all the previous games, most zombies were white so there was no racial bias, but Capcom decided to modify the ethnicity of some of the baddies to avoid further controversy or possible boycotts. A similar case involved *Tom Clancy's Ghost Recon Advanced: Warfighter 2*, which provoked a strong complaint from the Mexican state of Chihuahua because the rebels were portrayed as antagonists and the game stereotyped the cities of Chihuahua and Juárez as criminal centres (Edwards 2011). Edwards also explains how, in 1997, the Korean government complained directly to Microsoft, the global publisher of *Age of Empires II: Age of Kings*, because they did not agree with the game's interpretation of the historical conflict between Korea and Japan and the negative outcome for Korea featured in the game. *Grand Theft Auto: San Andreas* (2004), *Mass Effect* (2007) and *Heavy Rain* (2010) were all criticised in national news broadcasts because a certain series of player choices made while interacting with characters in the game could lead to romantic relationships where kissing, partial nudity or veiled sex are represented. While similar scenes and innuendos are often rated 'teen' on films, and mostly overlooked in literature, interactive products are judged more harshly due to the player involvement in the series of decisions

leading to the events represented. Countries such as Saudi Arabia banned their publication outright.

Stevens (2010) has highlighted the fact that, as a pan-European organisation, PEGI always tries to find a compromise that takes into account all national sensitivities that, from a foreigner's point of view, may seem inconsequential, for example: Greece sanctions gambling, the UK seems to focus on bad language, while Finland dislikes sporting violence, most southern European countries disapprove of sexual innuendo or nudity, and Germany condemns gruesome violence and censures Nazi references completely. A respect for national customs and an observation of cultural etiquette have always been a part of international commerce, but these have perhaps become more prominent owing to constant audiovisual broadcasting and the possibilities of interactive media in the Internet era. Games are interactive and modular by nature so that all features and game behaviours can be modified 'on-the-fly' by an intelligent game engine responsive to platform settings such as country, language and parental control. It could be said that the true original of the game is the one containing all the possibilities from which the different versions derive, depending on the country of release, so that the country of development may be understood as just another language version.

The benefit of bringing the localisation team into the early stages of the game development process, as advised by experts (Maxwell-Chandler and O'Malley Deming 2011), is that unlike static or closed media such as books and films, the product does not need to be manipulated (reduced or altered) by foreign agents outside the control of the original creators and copyright holders. National sensitivities and preferences can be designed into the game



engine thanks to the shared-authorship concept discussed in Section 4.1. In theory, the same disc can contain all the localisations of the game and, depending on the settings selected by the player (or parent), it would be able to offer the version considered appropriate for a particular locale. It is admittedly a time-consuming and difficult task that might result in the design and production stages being prolonged, but a faster and less problematic localisation would more than compensate for the time spent on it. Unwanted misunderstandings would also be avoided and a positive reception guaranteed, leading to the more widespread use of this practice among Triple A titles. Although age rating boards and national sensitivities might seem to fall outside the primarily linguistic domain of translation research and academia, it might seem reasonable to state that anything responsible for the miscommunication between cultures should be considered a legitimate object of study and a skill worth developing in professional translators, an issue which will be further explained and illustrated in Chapter 6.

Rating boards are, however, only one of the aspects to be considered. The decision-making process commonly followed when a new localisation project is commissioned is examined in the following section.

#### **5.4- The dilemma of localisation, of what and for whom**

Since localisation affects all the content in the game (and not only the written text), the process of extracting, arranging, translating, integrating and play-testing all the versions is a complex one in terms of organisation, knowledge, and creativity. Splitting localisation into

various levels is a necessary strategy used by game producers and managers in order to estimate the amount of money and time required for each language version, so that minor markets are likely to benefit only from the translation of manuals and packaging; medium-sized ones may qualify for translated menus with subtitles; while full dubbing will be enjoyed only by the most profitable markets (Maxwell-Chandler and O'Malley-Deming 2012). It is, of course, a question of deriving the maximum return for the minimum investment, so that these levels have grown organically so as to meet consumer demand in each country.

Basic documentation translation had evolved into partial localisation by the end of the 1990s. The following decade saw an expansion into full localisation for the most profitable languages. The E-FIGS localisation package was the default option for the big titles of the late 1980s and 1990s even if only partial localisation was offered; it was presumed that the most widely spoken European languages (including the largest populations around the world) would necessarily mean that there was a potentially enormous number of fans waiting to buy the product. This was true in the sense that those languages were spoken in countries where the middle classes were experiencing a growth in terms of spending power, such as Austria, Canada, France, Switzerland, Italy, Spain, and some Latin American countries. However, this assumption was partially dismissed during the first decade of the 21<sup>st</sup> century when more accurate sales data was available, and producers now decide on the level of localisation investment, based on constant direct information provided by game registration schemes, online game memberships and gaming networks. Publishers can now include or exclude different languages, dictating the level of localisation depending on the expected success of each project for each country and locale, and also on the data collected concerning piracy levels for that market. A good illustration is *Mass Effect 2* (published in 2010), a sci-fi role-playing game with a 444,000 word count and 35,000 lines of voiceover. It was fully localised

into French, German, Italian and Polish, while the Spanish that used to be included in the full localisation group, received only partial localisation (documentation, user interface and subtitles, but no voiceover) together with Czech, Hungarian and Russian (Warden and Christou 2010), because, despite the size of the Spanish speaking community worldwide, piracy levels there are among the highest.

Another assumption which is being revised is the preferred language variant for localisation; there is a push to differentiate between variants of the same language when player communities are large enough to justify the investment. In some cases, games are now being localised into Canadian French, Brazilian Portuguese and Latin-American Spanish, as well as into their customary European counterparts (Giné 2009). Indeed, the decision to localise into a particular language may be the direct result of a public online petition by fans, such as the example cited earlier concerning the Brazilian version of *Club Penguin* (Figure 79 above). Although the decision to localise is initially a financial issue, based on past experience and focusing on maximum returns, it is fairly common for languages that are not generating enough return, or actually losing money, to receive partial or full localisation as part of a proactive strategy to establish a stronger foothold for a brand that may become profitable in the near future (Wood and Ranyard 2009).

As we have already noted, some professionals are starting to speak of a level superior to full localisation, which is called ‘deep’ or ‘enhanced’ localisation (McKearney 2007). This new level aims to provide an additional creative service, based on a comprehensive cultural understanding focusing on the players’ experience in their chosen language and country of origin. The aim is, to “make the game feel like it was designed for any player that sits down

in front of it, regardless of their locale”. As Barnes (2012) explained in his GDC presentation. This quotation comes from the brief received by the Senior Manager of localisation at Blizzard Entertainment, William Barnes, when he was put in charge of the localisation of *Star Craft II: Wings of Liberty*, a sci-fi strategy game. In his presentation during the Localization Summit of 2012, he expressed his surprise and delight when he received these instructions, and proceeded to elaborate in detail what it ultimately meant, creating twelve arguably outstanding originals where all the content, text, graphics and audio were examined in detail, and even the merely decorative elements, including the dozens of street signs and billboards, were given the same quality treatment (Barnes 2012). Figure 83 below shows one of these billboards where even the telephone format has been localised to fit the practice common in the country of reception.



Figure 83. Localisation of decorative elements

In her presentation, given as part of the Game Localization Round Table, McKearney (2007) suggested different ways in which deep localisation might be achieved and noted that Bioware had already been working towards implementing deep localisation into its titles. The important point for McKearney (*ibid.*) is that:

You cannot have the one game which satisfies all. You need to create a new SKU or SKUs for each differing market place. Trying to make one game fit all usually ends in one or more

locales missing out. You have to keep your core audience happy and also cater to your newer markets.

Some of the ideas her localisation team were considering are not related to language as such; they include changes in ethnicity, hair styles, costumes and tattoos, which are available graphically for players to choose from when creating their avatars. There are other changes also worthy of inclusion such as: menu navigation, locale-specific advertising, variety in levelling up and game difficulty settings, locale-specific storylines, removal of content inappropriate for a locale, different interactive dialogue options, training levels so that actions may be replayed over and over, locale-specific monsters, culture-specific weapons and other miscellaneous items.

The localisation industry may apply the epithet 'deep' or 'enhanced' as a way of adding value to full localisation. A cynical interpretation might involve the accusation that some localisation companies are trying to sell as extra what should, in fact, be standard, reasoning that, if these so-called 'enhancements' create better understanding and enjoyment, they were lacking in the supposedly 'full localisation' level. This would be rather unfair, however. Business considerations are often very clear-cut because each step towards quality, however small, has to be underpinned by the money to fund it and the professionals to create it. From the point of view of consumers, some translation is better than none, partial localisation is often better than 'box and docs', and full localisation tends to make for a more immersive gaming experience. Players are unlikely to ignore a game completely because of poor localisation; what many are happy to do is to get together in gamer clubs in order to translate or amend in full features and content that they consider to have diminished their enjoyment.

This is what happened in Spain,<sup>97</sup> Germany<sup>98</sup> and Italy<sup>99</sup> after the release of the much awaited *Elder Scrolls IV: Oblivion* developed by Bethesda (Barresi 2008). In the three countries, communities of fans organised themselves in order to amend the many mistakes found in their localised versions, mistakes such as untranslated text, inconsistent terminology, gender and number agreement, and chaotic use of abbreviations to name but a few.

### **5.5- The game localisation kits**

In the past, the only source material with which the translator was provided was a document with a text that needed to be translated, because it was understood that all, or most, of the information required was included in the written word. With the advent of multichannel creations, such as illustrated books and films (seen Chapter 3), translators immediately realised that the text alone was insufficient to produce an appropriate quality rendition of the various communicative elements employed. Translation professionals catering for this new market demanded access to more information, or even to the full product in the form that it would ultimately be received by the public. As we have seen, video games consist of a myriad of assets that need to be localised and their translation cannot be managed in a manner similar to text-only products. They include a variety of different file formats all of which must be carefully programmed into the game code, archived, and prepared for the localisation process so that new language builds fit perfectly and do not create new functionality bugs. The collection of assets essential to rebuilding the game is compiled and stored in what is called a ‘full closing-kit’. It is also a source behind a variety of other kits put together for

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<sup>97</sup> Spanish fan localisation group, ClanDLan [www.clandlan.net](http://www.clandlan.net)

<sup>98</sup> German fan localisation group, Tamriel Almanach  
[www.scharesoft.de/joomla/almanach/index.php/Hauptseite/Projekte](http://www.scharesoft.de/joomla/almanach/index.php/Hauptseite/Projekte)

<sup>99</sup> Italian fan localisation group, The Forges of Tales [www.oblivion.medusaworks.net](http://www.oblivion.medusaworks.net)

different professionals involved in the process. Additionally, “these archived assets can be used to create specialized versions of the game for Original Equipment Manufacturers (OEM), which can be preinstalled on computers or bundled with other hardware, such as video cards.” (Maxwell-Chandler 2005a: 263).

The ‘localisation kit’ is, thus, a selection of assets included in the full closing-kit of the project. It only contains those files that are absolutely necessary for, and likely to need, translating. If game developers have implemented a localisation friendly approach, the localisation kit does not need to include much source-code, just the text, graphic and audio localisable assets with hyperlinks (code addresses) to the relevant files (Maxwell-Chandler 2005a: 264). When the language vendor is responsible for implementing the whole process, this kit can include the source-code to enable them to build, test, debug and rebuild the game until localisation has reached the desired quality.

Vendors often need to divide the kit further into ‘translation kits’ for both their in-house and their freelance translators containing essential information about the game, the files they need to work on and instructions concerning how to deal with specific technical and stylistic issues, word count and schedule of delivery. Experienced project managers may also include glossaries and TMs in their translation kits. The availability of different kits helps by making electronic delivery lighter and by avoiding the unnecessary disclosure of information and source-code,<sup>100</sup> although all the professionals involved in the localisation process are asked to sign an NDA (non-disclosure agreement) with the vendor, the publisher or the developer. Giné (2009) pointed out in his keynote at the Localization Summit that, although leaks are not rare in the game industry, none of the leaks that EA has had to face have come from the localisation team, meaning that the overzealous approach that withholds valuable information

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<sup>100</sup> The type of coding information that developers consider key to their innovation, and the kind of spoilers that marketing teams want to protect so that unwarranted leaks do not detract from their acclaim before release day.

from translators is so far unjustified, costing companies time and money because the lack of precise information restricts their decision-making.

Ideally, and according to game localisation vendors around the world, a full localisation kit should contain a comprehensive list of documents and assets, as already introduced in Section 4.2. Wittner (2007) specifies three main categories: build components, product feature information and product components, although Maxwell-Chandler's (2005a: 267) four-way categorisation in "assets, documentation, tools and code" seems slightly clearer because it includes all the assets. An amalgamated list of the elements that an ideal localisation kit might include, compiled from the best of both types, is detailed below.

1. Assets: These are the actual files that need to be translated:
  - a. Full check list of localisable assets.
  - b. Text files and string length restrictions, if any, which include: in-game language assets, help files, installer strings, error messages, checklist of localisable text assets.
  - c. Voiceover and audio file duration restrictions: original recordings, script, casting notes, technical recording specifications, master voiceover sheet checklist.
  - d. Art assets: layered art files, localisable graphics-embedded text and logos, and art assets checklist.
  - e. Cinematics: all pre-rendered videos in the game, video codecs and players, uncompressed localisable cinematics, multi-track audio files, final sound mix settings, checklist.
  - f. Previous localisation resources: game glossaries, spreadsheets, TMs, screenshots showing dialogue and text, audio and video files.



- g. *Box and docs*: game manuals, official naming conventions for each platform, all packaging, game screenshots, promotional articles, checklist.
- 2. Game documentation refers to all documents that are somehow technical and conceptual:
  - a. Table of contents for the localisation kit.
  - b. Design documents: gameplay mechanics, UI flow chart, cheat codes (a.k.a. debugging codes), walkthroughs, test plans, automated test scripts.
  - c. Technical guidelines: localisation build instructions, software specifications, hardware specifications, instructions for tools.
  - d. International keyboard implementation for PCs and MACs.
  - e. Peripherals, required and supported.
  - f. Implementation recommendations for hardcoded and concatenated strings.
  - g. Implementation recommendations for hardcoded and concatenated audio.
  - h. Product information: general game information, developer and publisher contact information.
  - i. Pseudo-translation results, list of known functionality bugs.
- 3. Software tools or applications necessary to fully test the game and relevant technical documentation:
  - a. Any plugins to third-party editing tools required to access files.
  - b. Proprietary tools for specific file formats.
  - c. Game-specific text editors.
  - d. Availability of extended character support.
  - e. File naming conventions.
  - f. String ID rationale.
  - g. Multiplayer functionality.

- h. Localisation integration tools.
  - i. Compatibility information on proprietary formats.
  - j. Portable build environment to other machines.
4. Code, entire game code and other applications to fully test the game from also from the viewpoint of the novice user:
- a. Original English master.
  - b. Game engine debug mode.
  - c. Source-code tools.
  - d. ‘Autorun’ and ‘installer’ applications with build instructions.

Due to the fact that there are many thousands of different files and folders, it is absolutely critical that naming conventions are consciously planned and observed throughout the project by all parties involved (Kuningas 2011). The creative and hectic environment of game development may sometimes seem to go against this rationalising principle, but this is no longer the ‘garage’ industry it was in the 1970s. Lead programmers decide upon and push for the implementation of a particular naming convention criterion for all game files. Dedicated localisation engineers, responsible for the extraction and reintegration of translatable assets, can in turn suggest the clearest, most appropriate way of renaming each string for each language and even each locale with the same language. The names of graphics with embedded text can be systematised with a modular name tag such as the following one from a game that cannot be named for legal reasons: Sign\_esES\_042068, Sign\_esMX\_042068, Sign\_frFR\_042068, Sign\_frCA\_042068, Sign\_itIT\_042068, Sign\_chTW\_042068, Sign\_chCH\_042068, Sign\_plPL\_042068, Sign\_ptPT\_042068, Sign\_ptBR\_042068, Sign\_deDE\_042068. In this example, the first element (‘Sign’) determines the type of graphic; the middle element (esES) follow a widely accepted codification system and

correspond to the initials of the language in small letters ('es', español [Spanish]) and of the country in capital letters ('ES', España [Spain]; MX, Mexico); and the final one a six digit number ('042068'), where the first three digits ('042') refer to the quadrant in the game map, and the second three digits ('068') refer to the order in the list of signs that appear in that particular area. This naming approach can be seen as an illustration of the manner in which rigorous terminology management applies to folders and to all the different asset files that they contain. Another example of this, concerning this time the audio files from *Guitar Hero*, is presented below in Table 15 in which three of the possible phrases that praise the good performance of the player are listed:

VO LocFile No ID	Original VO file name	English source	Spanish translation
92	VO_vgood6.wav	You're gettin' it.	Lo vas pillando.
93	VO_vgood7.wav	That's the way.	Así se hace.
94	VO_vgood8.wav	Sounds good!	¡Suena bien!

**Table 15.** Naming conventions for game strings and voiceover files

Localisation agencies are really appreciative of the implementation of this type of practice because it is much easier to find the information they need, but even more so when they are also commissioned to rebuild several language versions from the template that is the original, while seamlessly maintaining the same top quality experience for players in other countries. Vendors are often expected to populate and update localisation kit files and send them back to be stored with all the other language versions in the archive of the publisher and, sometimes, the developer, depending on who pays for the localisation process, in case there are game patches and/or sequels (Wittner 2007). The final full closing-kit should contain all the languages, as well as a post-mortem report detailing, for future reference, what went well with the project and what could conceivably be improved.

## 5.6- QA: Linguistic play-testing

The pronounced growth of the entertainment software market during the past few years has meant that companies devoted to play-testing were needed in order to develop the expertise and speed that would allow for the simultaneous proofreading of different language builds relating to a game. These providers tend to group themselves under the ‘QA’ (quality assurance) label and, although they may sometimes cater for the audiovisual and digital devices sector, more of them are becoming fully employed by the video game industry. Companies such as Testronic Laboratories<sup>101</sup> or Babel Media<sup>102</sup> strive to offer an end-to-end localisation service that can be broken into a variety of tasks considered relevant in order to enhance the gaming experience of players, regardless of their locale. Table 16 below summarises the way in which companies pack their services to clients:

<u>Localisation Services</u>	<u>QA Services</u>
Editing revision of source text	Linguistic testing
Text translation into X languages	Platform compliance
Voiceover script translation and recording	PC cross-compatibility testing
Desktop publishing revision and translation	Multiplayer and online testing
Linguistic compliance revision of original	MMOG performance optimisation
Style compliance revision of original	New player usability and experience
Brand compliance of franchised releases	Software functionality testing
Game experience culturalisation	Website functionality testing

**Table 16.** Common localisation and QA services.

Linguistic play-testing is responsible for correcting spelling, grammar, punctuation and style (traditional proofreading), as well as the amendment of errors connected with the very nature

<sup>101</sup> Official website at [www.testroniclabs.com](http://www.testroniclabs.com)

<sup>102</sup> Official website at [www.babelmedia.com](http://www.babelmedia.com)

of the digital medium such as overlapping strings, text-box clippings, text bleeding, character length restriction,<sup>103</sup> text alignment, text-image alignment, item correspondence, translation and implementation of placeholders (Samora and Airey 2011). Broadly speaking, the tasks carried out in localisation QA testing can be grouped into four stages:

- a- Preping is carried out by a QA technician or the QA lead and consists in setting up the computer or console with the right specifications and formatting in order to play-test the game and check the linguistic and translation quality of the target language.
- b- Bug finding is carried out by QA testers and it includes tasks such as play-testing the game, checking all the text in the target language, making sure that there is exact correspondence between text, image and audio, guaranteeing consistency in mode of address (*tú/usted, du/sie, tu/vous*) and writing style, and checking for any string overlapping, window clippings or screen bleedings.
- c- Bug reporting is carried out by QA testers and it requires entering bugs into a database with full and precise instructions for its reproduction since it is not always possible for testers to make direct changes to the source code due to lack of permission or to the established processes in content management applications.
- d- Bug regression is conducted by QA testers or QA coordinators. A final check is carried out by recreating each reported bug encountered during the previous phase on a more recent game-build. The person responsible for this task closes fixed bugs and adds comments on recurrent bugs or on bugs that have been introduced as a result of any wrong modification introduced by engineers.

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<sup>103</sup> As mentioned in previous chapters, the nature of interactive software dictates that most elements appearing as one item onscreen are actually made up of several parts stored by the source code in different parts of the programme so that interactivity can be fully articulated. This way of working creates errors that are only noticed during play-testing since translators do not have a WYSYG environment in which to test their final version.

As seen in the section describing ‘kits’ (Section 5.5), there are many different elements that are required for an optimum testing cycle, such as: game design documents, reference files, terminology databases, walkthrough guides, game world maps, and debugging codes. There are many types of hardware and tools needed in order to carry out all these tasks, including: debug-enable consoles (provided by platform manufacturers); game builders (allows for the extraction of strings into files and the integration of localised files into a fully functional game-build); bug reports (spreadsheet or database); online text editors (for teleworking); regular report sheets (by testers) and systematic testing progress reports (by coordinators). The following paragraphs explain the most common steps followed in the bug-fixing cycle in order to clarify how the nature of software products sometimes complicates the rather simple task of proofreading, because of its function as a single element in an interactive act of creation.

Every bug whether it is of linguistic nature or not, has to be exhaustively reported since it can rarely be corrected and checked in its right game environment either by translators or testers (Kuningas 2001). The reason for this is that game-code is very sensitive<sup>104</sup> and it needs to be protected from accidental additions or deletions. Only computer engineers have direct access to, and full responsibility for, the integrity of the code and its correct running. This can often make the linguistic play-testing, reporting, and fixing processes longer than the actual translation of the assets: unfortunately, this currently seems to be unavoidable due to the lack of appropriate tools. Most game engines cannot instantly compile<sup>105</sup> corrected assets into new playable builds, which may be the ideal time-saving solution. Utility software and website

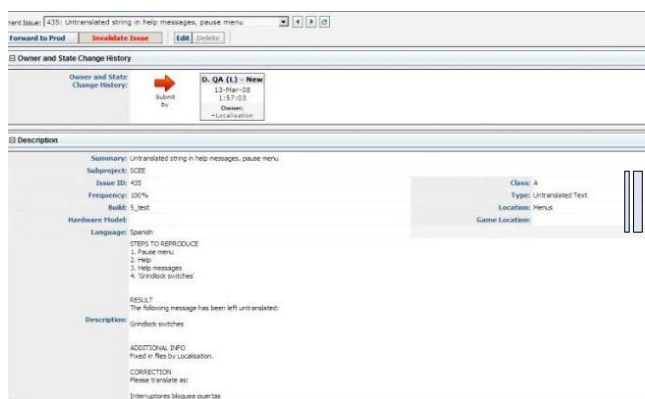
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<sup>104</sup> In the sense that mistakes in human languages are almost always compensated by contextual information, while mistakes in computer languages can make the whole application freeze or shut down.

<sup>105</sup> Compiling is the process of translating into a machine language an entire set of instructions written in a higher-level symbolic computer language, such as C, before the instructions can be executed by the hardware.

localisation benefit from having WYSWYG<sup>106</sup> translation tools (such as *SDL Passolo*, *Alchemy Catalyst*, or *Visual Localize*), so it is likely that as computing power keeps on increasing, and game localisation engineers specialise further, similar programs may be available in the future to suit the mixed picture that is game development.

It is also true that linguistic play-testing and bug reporting will always be necessary because entertainment software products are virtual machines and certain mistakes can only be judged in-game. Bug reporting applications such as *BugTracker*, *Mantis*, and *BugZilla* allow testers to describe each new issue via a shared online database listing every single detail about each bug with fields such as project, number, class, type, location, and frequency. Figure 84 below shows an example of the *BugTracker* reporting form, blurred due to copyright restrictions:



**Current issue: 438** Untranslated string in help message pause menu.  
**Owner and state change history**  
**Description**  
 Project  
 Number  
 Class  
 Type  
 Location  
 Frequency  
 Game-build  
 Hardware model  
 Language  
 Description  
 Additional info  
 Correction

**Figure 84.** Bug reporting database application

Bug reporting applications generate individual, itemised timelines specifying the dates and names of the team members involved in order to follow up on each issue until it is finally solved and closed. The example below (Figure 85) shows how many times a bug is examined and by whom. The process goes as follows: (1) a tester in the QA company (vendor) submits a bug to the QA coordinator on the 15<sup>th</sup> of February, (2) who then forwards it to the client

<sup>106</sup> Acronym used in computing to indicate that the display screens portray an accurate rendition of the final version received by the user. It stands for “what you see is what you get”.

with a query; (3) the game producer checks and (4) forwards the bug to the engineers in the development team in order to amend the code. After fixing the bug, (5) an improved version of the source-code is sent back to the vendor for retesting. Finally, when everything is satisfactory, (6) the bug is closed in the database on the 14<sup>th</sup> of March, one month after opening.



Figure 85. Bug reporting and fixing timeline

Bug reporting applications also produce inventories and summaries of bugs which can be viewed in tables, allowing every member of the team quickly to assume responsibility if need be (Samora and Airey 2011). These tables (Figure 86 below) which feed from the shared bug reporting database, can be organised by bug number, class, type, status, and language as seen in the image below. This makes it very easy to track individual issues and the language with the most bugs, for example.

<input type="checkbox"/>	Bug Number	<input type="checkbox"/> <input type="checkbox"/> Class	Summary	Type	Status	Language
<input type="checkbox"/>	465	A	Wrong use of authorised names - Installing the game	Naming Conventions	D, QA (L) - To be Verified from Prod	French
<input type="checkbox"/>	466	A	Incorrect reference to installing the game.	Naming Conventions	D, QA (L) - To be Verified from Prod	Spanish
<input type="checkbox"/>	468	A	Installation process: incorrect reference to the system	Naming Conventions	D, QA (L) - To be Verified from Prod	Italian
<input type="checkbox"/>	471	A	Incorrect reference to the system when installing game data	Naming Conventions	D, QA (L) - To be Verified from Prod	German
<input type="checkbox"/>	<input type="checkbox"/> 571	A	Untranslated audio throughout the game	Untranslated Text	D, QA (L) - Request to Waive	Italian
<input type="checkbox"/>	605	A	Clipped text - SDTV - In-game sub-commands	Clipped Text	D, QA (L) - To be Verified from Prod	French
<input type="checkbox"/>	<input type="checkbox"/> 590	A	Untranslated audio throughout the game	Untranslated Text	D, QA (L) - Request to Waive	Spanish
<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> 594	B	Mistranslation in Story archive item no. 19	Mistranslation	D, QA (L) - Unchecked	German

Figure 86. Bug reporting summary



Coordinators and test leads can automate tailor-made reports with whatever frequency is required (daily, weekly, fortnightly, etc.) and have them forwarded by email, so that all parties involved in the localisation process are kept informed and can make progress together towards the completion of the project in hand. These bug recording and reporting applications used to operate only in local area networks (LANs), but the majority are now web-enabled and server-based, which allows multinational teams and freelancers to work together despite being in different time-zones, thus enabling the quick turnaround of assets and the simultaneous distribution (Kuningas 2011).

It is considered good practice to archive full bug reports at the end of each project. Their inclusion in the final full closing-kit and their scrutiny during the post-mortem meeting can yield useful information on how to improve the testing process itself, as well as to assess the initial source language quality from the game developer, the performance of each team member, the most time-consuming bugs, the most common issues etc., all of which can contribute to a responsible developer-publisher-vendor relationship, focused on improving their quality and efficiency at every stage and on every project (Wittner 2007).

### **5.7- Some of the obstacles preventing quality translation in games**

The translation of video games has an infamous history concerning errors, many of which provoke laughter and all of them ultimately avoidable. Unfortunately, not everybody who can write is a writer, and not everybody who knows another language is a translator. Although

there are many different tasks and professionals involved in video game localisation, the core activity involves communication through language translation. The multimedia interactive nature of video games, and their development and production protocols impose previously non-existent steps in the translation process, slowing down and complicating the correction of translated assets. Inexperienced game developers and publishers tend to overlook the complexity of the script and the grammatical diversity of foreign languages and are later faced with countless errors when translated strings are imported back into their game and executed (Maxwell-Chandler 2005a: 181). There is still an over-simplistic preconception in the mind of some decision-makers in the game industry, provoking a whole range of errors, namely the belief that natural languages are formally similar enough to be replaced by near-automatic processes. This assumption seems to be directly linked to the old fallacy of word-for-word translation (Bernal-Merino 2002: 19) in which all text is perceived as being self-contained, so that there is no requirement for any additional information in the translation. As explained in Chapter 2, linguistic items are arbitrary signs, the meaning of which depends on contextual and situational information (often not expressed verbally because each culture provides its own framework for acts of communication), so that translators need to take into account the variations in meaning of their interpretation of the source language and their rendition in the target language destined for a new audience. In other words, the constant decision-making necessary to ensure quality translation rests to a great extent on the quality and comprehensiveness of the information made available to those responsible for creating this linguistic and cultural mediation. Video games, thus, require terminological rigour when dealing with established realities and stories, and playful creativity when tackling new narratives and items (Mangiron and O'Hagan 2006, Bernal-Merino 2008c).

Serón-Ordóñez writes about some of the misconceptions related to the rigours and the creativity in this area of translation, saying that “A higher number of video games than probably expected by readers rejects fantasy or science-fiction in order to focus on history.” (Serón-Ordóñez 2011: 45, my translation). In her case, she is focusing on historically-based military strategy games where players must inevitably become conquerors. Since part of the appeal of these products is their clear link to historical events, figures, places and artefacts, translators need to refer to specialised books devoted to the historical period in question, and to double-check with experts in that particular era. As was noted in Chapter 3, the correct utilisation of linguistic and literary mechanisms to add colour to the specific purpose of the text in question takes talent, knowledge, and well-crafted writing skills: the translation of video games is no different. The *Age of Empires* saga “is characterised by its historical accuracy, an accuracy that [...] has meant its incorporation into history teaching in many countries and that demands intense researching on the part of the translator.” (Serón-Ordóñez *ibid.*: 46, my translation). Video game texts are rich in terminology, an element which needs to be dealt with rigorously, not only because it is an essential part of the platform compliance process, but also because it is technically relevant for the execution of the game; legally binding, in terms of trademarks and copyright and essential for creating and maintaining the immersion of the player in the virtual world created by the game experience.<sup>107</sup>

It is clear that terminology plays an essential part in historical games, yet quality translation cannot be reduced to accurate terminology alone. This is only one side of the multifaceted reality of language and the textual types we create for each different purpose. The game localisation industry is gradually dispensing with the tacit stigmatisation that the translation

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<sup>107</sup> For this reason, most development companies have started employing dedicated professionals to take care of in-house terminological glossaries and translation memory files.

of recreational products (such as films, children's books, and video games) seems to suffer from, simply because it does not focus on traditionally 'serious' disciplines, such as science, engineering, finance, or law. Linguistically speaking, it only means a change of theme rather than a lowering of translational competence. If we think of any author, genre or spectacle, it becomes clear very quickly that every text utilises a specific array of terms within a particular semantic field, syntax identifiable to that discipline, as well as rhetorical figures. All these linguistic features make up the internal cohesion of a text allowing the reader to understand, identify and enjoy its content (Halliday *et al.* 1976). In many cases, these features are seemingly invisible to the untrained eye, but although readers, viewers or players may not be able consciously to formulate what is right or wrong with a text, most intuitively notice when there is something that has not been properly rendered. In other words, quality translation does not depend on correct terminology alone. Each language and creation follows a variety of rules and internal tensions that are unique and that can only be made available to another culture by a skilled translator. The smallest nuances in language can suddenly turn an evocative passage or dialogue into something bland, forgettable or even laughable. Some good examples from recent popular culture and the entertainment industries are, for example, if suddenly Fleming's James Bond were to say "Shaken, not mixed!", instead of "shaken, not stirred"; or George Lucas' Yoda was to say "You still have much to learn!", instead of "Much to learn you still have!"; or Tolkien's Gollum expressed himself in the words "He must not hurt Precious", instead of "He musn't hurt Preciouss"; or if Peyo's Smurfs were to say "Fantastic!" instead of "Smurftastic!", readers and audiences would notice that there was something not quite right about the text. This would have no bearing if they were aware that the texts had been altered in terms of lexical, syntactical, phonological, or morphological levels, respectively. Most people, however, would notice the difference and this would have the power to break the suspension of disbelief created by the successful parts of the product.

It is not only about terminology, the right choice of words is inexorably coupled with the writing style and the literary imprint of the authors, the genres, and the writing techniques of their time and place of creation; readers recognise this and assign a value to it. Similarly, the texts that appear in video games are often written by specialists in a particular field, whether technical or literary, so that they can fulfil their different purposes. Ignoring the stylistic features in the text to be translated, simply because they are more difficult to put into a glossary, generates confusion and the resulting translation may be perceived as ill-suited to its purpose. It should be obvious that a very similar degree of rigour and creativity is required for the translations, effected by weaving similar networks between all levels of language, between the lexico-semantic, the syntactical, the morphological, the phonological, and the audiovisual elements of the game.

This does not mean that translators are the same as authors. A comparison of the two different professions, simply because they both involve words, is rather flawed and yields no valuable insight. Writing from scratch requires a particular set of creative skills, whereas translating involves another, in which ‘directed’ creativity is coupled with a comprehensive knowledge of two cultural and linguistic world reference systems. In other words, if it is important that the original manuscript is well written and in accordance with internal, long established quality standards and storytelling, the same applies to the various language versions of the text in question (Hokenson 2007). Translation generates the *de facto* original for a new group of readers in a different language community, a fact to which today’s versions of *The Bible*, *Othello*, or *the Book of Tao* testify. Unfortunately, some developers and publishers do not formulate their plans with localisation in mind, and even when they do, they underestimate its complexity, actually provoking overspending and delays. Forgetting, or ignoring, localisation needs until the very end of the project has a direct and detrimental impact on the quality of all the language versions, the availability of translators qualified for

the task, the fun factor of the game and ultimately its success in foreign markets. The main obstacle preventing quality translation in game localisation is the somewhat dismissive attitude of a number of ill-informed decision-makers who insist on perpetuating an out-dated approach to localisation. However, it is important to acknowledge that the games market is a highly pressurised environment, so the next section provides a detailed explanation of the international simultaneous shipment of titles which often affects localisation quality.

### **5.8- Simultaneous shipment**

‘Sim-ship release’ as a commercial strategy is a distribution model that is being seen in more and more industries, but especially in those linked to entertainment (books, music, and films) or highly publicised goods such as Apple’s iPhone™ or BMW’s MINI™. The simultaneous worldwide release of video games has the benefit of reducing the impact on the revenues of grey and black market imports, as well as benefiting from an international advertising campaign preceding an eagerly anticipated title (Maxwell-Chandler 2005a: 46).

According to Bartelt (2011), once the decision to localise has been taken and the right vendors for the genre have been selected, pre-production can start, ideally in close cooperation with the development team. One of the most important documents for all involved in this shared venture is the project schedule, because it maps “translation, recording and testing timings so that the ultimate goal, which is the simultaneous shipment of all the different language versions on the same day around the world, is achieved” (*ibid.*: 82). In other industries the original version has often been completed before work on the various

language versions can start, “[game] localisation needs to happen in parallel with the final stages of development to ensure the development team is able to make changes in the game code that is shared between the English and the localised versions before this is finalised” (*ibid.*: 84). The reason for this approach is that a video game is a virtual machine that requires locale-specific fine-tuning by the professionals who have created the artificial intelligence of the system. Once the team moves on to new projects, further changes are often far too costly and time-consuming to be worthwhile. ‘Sim-shipping’ is always a difficult exercise to coordinate, especially now that traditional milestones in the development process overlap, becoming less clear-cut due to the fact that more developers are introducing ‘agile’ methodology, an approach that relies on rapid iterations and “creates more incremental updates for localisation than the traditional model” (*ibid.*), something which is no longer a realistic option.

Vanessa Wood, the head of localisation services at Sony Computer Entertainment Europe, expressed her concern concerning the increasing strain imposed by synchronised global releases on all involved (Wood 2008):

In SCEE we face new challenges with sim-ships because of the increasing size and complexity of games. We are entering new markets such as Eastern Europe and at the same time, we have seen the reduction of timescales. Localisation has to be in by beta. As the game edges towards its end-face, our tasks are being compacted. We pass those stresses on to our [translation] agencies.

What this means for both internal localisation teams and language service vendors is that they need to remain flexible throughout in order to deal with a heavily fragmented supply of

assets, and to be ready to absorb text updates by enlarging teams and working two or three shifts a day during crunch time.

Seb O. Berthelsen, the localisation production manager at Square Enix London, explained at the Game Localization Round Table how things can become even more problematic when having to work towards the simultaneous shipment of multilingual projects through a pivot language (Berthelsen 2008). This is part of his daily battle working for a Japanese company that develops role-playing games which are immensely popular in the rest of the world. In his presentation at the Game Localization Round Table of 2008 he said:

It is always difficult to get Japanese translators into all local languages, so we normally do Japanese into English and from that into FIGS. This process is really long. It is incredible to think that it used to take two years to bring a *Final Fantasy* title into FIGS, but now we are managing in six to nine months. We strive to translate directly from Japanese in all cases and do without pivot translation. (*ibid.*)

Another reason for the sim-ship push is the growth of fan communities using online services sometimes hosted by platform holders such as Microsoft (through Xbox live servers); publishers such as Blizzard (creators of the immensely successful *World of Warcraft*); developers such as ArenaNet (responsible for the popular *Guild Wars*) or CCP (creators of *Eve online*). Paid subscriptions to MMOGs are expected to reach thirty million, worldwide, by the end of 2012 (Merrel 2011), which already guarantees the liquidity necessary to fund more languages. If the growth of online memberships seems incredible, it is worth contrasting data with the most popular network on the web. Facebook has about 375 million daily users (although it has more than 750 million registered users),<sup>108</sup> and 70 per cent of these are outside the USA. Zynga, the biggest casual game developer using the Facebook

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<sup>108</sup> Facebook company statistics [www.facebook.com/press/info.php?execbios#!/press/info.php?statistics](http://www.facebook.com/press/info.php?execbios#!/press/info.php?statistics).



platform boasts a daily average of sixty million players in twelve different languages (Brinton 2011); this is only one developer operating through a single social networking site. Part of the attraction of many of these games is the social aspect of playing with other individuals, both known and unknown. This enables all players to access the game at the same time, and the unconstrained communication between them creates a spontaneous viral campaign that maximises official marketing. Of course, the sim-ship release of the game is a *sine qua non* for this to happen.

From the organisational point of view, it is difficult to create a workflow or find a project managing tool for pre-packaged Triple A titles – not so much for casual games - which is capable of handling a myriad of multimedia files in multiple language versions in a manner that is consistent and safe. It allows for different companies located in different time-zones to work together and to follow-up of each language and the overall progression of the localisation project against the sim-ship date. The following section deals with the most common software applications that are employed in game localisation in order to make sim-ship a reality from an organisational point of view.

## 5.9- Tools used in game localisation projects

Although Microsoft's *Word* and *Excel* are used very frequently thanks to their early entry on the scene and their ubiquity, they were designed for word-processing and bookkeeping respectively rather than for multimedia interactive game localisation projects. There are no tools designed specifically for games, partly because the entertainment software industry is still relatively young and there are, as yet, no officially agreed standards, and partly because programmers have to write most of the game code from scratch in order to optimise the performance of the engine for it to suit the particular gameplay and features in question, as well as for copyright reasons (Samora and Airey 2011). They cannot be blamed for focusing on gaming functionality of course, but paying attention only to their national fandom creates an obvious imbalance detrimental to the international versions, as we have seen in previous sections and chapters.

After years of struggling with a philosophy of development essentially inimical to localisation, hardcoded strings, and the inconsistencies that a fragmented source-text project tended to provoke, game localisation professionals began to realise that some of the tools commonly used in the translation of technical and scientific texts, as well as in multinational webpages and in the utility software sector, could be partially utilised to increase consistency and productivity, as well as to save time and money. This development did not occur before the mid-1990s, and many companies did not adopt these tools until the new millennium. Nowadays, most of the major game companies (such as Sony Online Entertainment, Disney Interactive, and Bioware) have developed their own tools to help them manage the growing number of complex multilingual projects with the variety of text and multimedia files that

video games entail so as to entertain players the world over. The most widely used tools are localisation project management tools, translation memory programs and terminology databases. There is obviously no single tool to deal with every stage and professional aspect of the multifaceted game localisation process, but there are several applications (expensive but available to both companies and freelancers) that, when adequately combined, can alleviate most tasks. The incorporation of translation tools in game localisation has started somewhat recently, so much so that they are only briefly mentioned in the “Best Practices for Game Localization” (Honeywood and Fung 2012) whitepaper initiative by the International Game Developers Association (IGDA) Localisation Special Interest Group (SIG) drafted by Honeywood and contributed to by other SIG members. The best effort to bridge the tool gap came from O’Malley Deming in her session entitled “The Right Tools for the Right Job”, presented at the Localization World International Conference in San Francisco on the 20<sup>th</sup> of October 2009. She grouped the most commonly used tools in four main categories, depending on the part of the process for which they are used and the professionals responsible for it. Since a detailed account of said tools is outside of the scope of the present research, her organisation is used in the following sections as a brief account of an issue that would require its own dedicated research. O’Malley Deming (2009) suggested the following four groups: (1) project management tools (*Project, Hansoft, XLOC*), (2) translation and bug reporting tools (*Déjà Vu, SDL Trados, WordFast, and Test Track Pro, DevTrack, BugZilla*), (3) engine tools (*Unreal, Cry*), and (4) proprietary tools (*T4, LocStudio, Helium, Devon, HAL*). The advantages and disadvantages of each of them are briefly listed in the following sections.

*Project management:*

These tools are mainly used by project managers and coordinators, although most people involved in the project, may have access to them with different viewing and editing rights. These are powerful databases that contain all the assets of the game, including follow-ups on updates, automatic deadlines, reminders, etc. Most of these applications are now web-enabled, which means that all parties involved can see the project as it evolves independently of the time zone they live in. Some popular names are *Project* by Microsoft, *Hansoft* by Hansoft AB, and *XLOC* by Xloc Inc. The advantages and disadvantages of these tools, summarised in Table 17 by O’Malley-Deming (2009), are included below:

PROS	CONS
Fully customizable.	Can sometimes be plug and play and can sometimes take time to customize.
Process is a key player.	Steep learning curve for publishers and developers.
Development process is well-understood.	Providing contextual information can be difficult.
Consistency.	
Flexible and variable for clients – allows for the creativity aspect.	
Fast response time and easier to customize on-the-fly.	

**Table 17.** Pros and cons of project managing tools

*Translation tools and bug reporting tools:*

Translation memory tools (TMTs) such as *Déjà Vu*, *SDL Trados*, *WordFast*, *MemoQ* and *Star*, are also based on databases containing all the previous translations segments (Quah 2006). TMTs are still not widely used in game localisation because they are only effective when large amounts of texts are regularly repeated which tends not to be the case in video games because of the need for novelty and new content. When there is repetition, this type of tool will provide users with a previous translation, reducing part of the time it takes to work on texts of a similar origin and nature. As we have seen earlier on in this chapter (Section 5.6), bug reporting tools such as *Mantis*, *Test Track Pro*, *DevTrack*, *BugZilla*, *Bugtracker*, create a database of each bug found in the game by the testers. These allow for the systematisation and tracking of the errors which need to be corrected: an improvement on the Excel lists previously used. The main advantages and disadvantages are detailed in Table 18, based on O'Malley-Deming's conclusions (2009):

PROS	CONS
Reusability of prior or related translation memory files (TMs).	"Box" translation resulted from the reusing of previously translated texts vs. "Style" translation newly created by a human editor.
Useful for making part of the translation process easy.	Limited compatibility and application with localisation management tools and game development processes.
Used across the translation industry.	Not specific to the game industry.
The possibility of some automatic translation.	Incompatible with client-side game applications.

**Table 18.** Pros and cons of translation and bug reporting

*Engine Tools:*

Engine tools are very much specific to games and they often work as plugins that are compatible with off-the-shelf game building engine environments, meaning the computer application that interfaces with the hardware, articulating all the behaviours and content of the game in real time. Two of the most popular game engines nowadays are *Unreal* (developed by Epic Games) and *Cry* (developed by Crytek). In some cases developers provide the game building tool for localisers to import, build and play-test their translations. Although they provide full access to the game in edit mode which is ideal for decision-making, they can be difficult to use and they are often poor word processing tools. Since they are customised to suit each game and development team, they all differ from each other. Their main advantages and disadvantages, according to O'Malley-Deming (2009) are itemised in Table 19, below:

PROS	CONS
Out-of-the-box localisation which means that translation work can start immediately.	Cross-engine compatibility issues, i.e. they only work with one of the many game engines.
Allows for immediate feedback and visualisation.	It incorporates too many non-localisation features.
Particularly useful for UI localisation.	No flexibility of file formats, they only accept files specific to that game engine.
Only requires standard text format.	All users have to license and use the same software. Little scope for reusability of the application for other projects.
Standard organisational structure format.	Steep learning curve to learn how to work with them.
	Difficult and expensive support for localisation.

**Table 19.** Pros and cons of engine tools

*Proprietary tools:*

Existing Proprietary tools are developed internally and are not available to the general public. There is little or no information about them and company bosses and employees are not inclined to divulge any details at all. Indeed, the names of many of these applications are not publicly known, whereas others are only referred to in vague terms at international conferences. Some of these names include *T4* by SOE (Sony Online Entertainment), *LocStudio* and *Helium* from Microsoft, *Devon* from Disney and *HAL* from Electronic Arts. These tools give the companies that use them a degree of independence from market products and more control over their own internal preferences and processes. In financial terms, they help them to save on the high price required per license of products such as *SDL Trados* or *Alchemy Catalyst*, which they would have to pay to external tool developers. However, their use also creates an additional challenge since language vendors have to be trained on how to use them. In general terms, according to O'Malley-Deming (2009), they have the following advantages and disadvantages (Table 19):

PROS	CONS
They help meeting specific needs for the game engine and assets.	They can be a 'one-hit wonder' and used only once if not continually updated.
In-house customisation is available as needed throughout the project.	They require a large in-house employee turnover to maintain and update.
Will work almost perfectly for that particular project and developer.	If the application is markedly different from existing ones, the learning curve will be steep.
	If their formats are not compatible with existing ones, stringent limitations and constraints will be imposed for both development and localisation teams.

**Table 20.** Pros and cons of proprietary tools

All the tools mentioned in the previous subsections require an army of professionals able to use them and willing to retrain themselves as the tools evolve into more powerful, but also more complicated applications. The ideal video game localisation tool is still several years away from being created, but with the continued attention to internationalisation and localisation, and the combination of the successful features of existing programmes, there is little doubt that it will eventually appear at some point during the first quarter of the 21<sup>st</sup> century. Of the main attributes to be successful in the industry, the tool will have to be reliable and to offer scalability so that it can be used for both small and triple-A titles. Another important feature is that it will have to be able to combine all the phases and stages described in this chapter, and to be adaptable to different projects, irrespective of particular game developing companies. Finally, the tool provider will have to link up with the various localisation professionals so as to guarantee that maximum functionality is implemented. If all these characteristics are taken into consideration, the application could, in turn, have the beneficial by-product of becoming a *de facto* industry standard, setting the patterns to carry out complex, multilingual video game localisation projects.

The following section explores the main professional roles and job opportunities that are open to translation graduates wishing to enter today's video game localisation industry.



### 5.10- Game localisation roles

From a socio-educational perspective, it is evident that the population in many cities around the world is becoming more multicultural and multilingual, that translation degrees and localisation certificates are more readily available in more countries, and that teleworking is growing in popularity in the global marketplace. All these changes are, in turn, leading to a permanent supply of freelance translators for some language-pairs that runs the risk of provoking the devaluation of traditional translation jobs.

In a parallel evolution, as the translation services industry becomes more specialised and demanding, linguists and translators are expected to incorporate into new areas of expertise their traditional skillset of excellent writing aptitude in their mother tongue; control of syntax and lexis in two languages; rigorous attention to grammatical detail, spelling and punctuation; proficient terminological research competence; and a knack for creative writing when needed. Aware of the changes taking place in the industry, some language professionals have indeed developed the complementary skills that are increasingly being sought by localisation teams and required by the organic development of new roles, especially when it comes to coordination and management positions (Wood and Ranyard 2009). These new roles are expected to contribute to the improvement of working processes and flows as well as to the overall game localisation quality, balancing linguistic accuracy, procedural efficiency, and managerial discernment.

These additional skills can be categorised under five broad groups, each of them made up of various professional roles: (1) managing, including associate producer, localisation coordinator, and production coordinator; (2) engineering, which includes localisation engineer and sound engineer; (3) translating, which includes text translator and translation editor); (4) testing, a category to which the QA coordinator, the QA technician, the QA lead, and the QA tester belong; and finally (5) consulting, which refers to localisation experts that are brought into a project to advise on a very specific aspect of the localisation of that game. So as to help us understand their place in the process, and the added value they bring to the success of the project, descriptions of these main roles are provided in the paragraphs which follow.

### 1- Managing

*-Localisation producers and managers.* Localisation managers are normally the point of contact for publishers and are ultimately responsible for obtaining all the original linguistic assets and delivering the translations fully proofread. Managers need to liaise with the localisation coordinators to make sure that the language register is correctly pitched, and is compliant with each platform's branding and naming conventions.

*-Localisation coordinators.* Localisation coordinators are in direct contact with all the translators and outsourced companies handling the translation, as well as with the linguistic tester heads. These professionals are responsible for making sure that all language versions go smoothly and stay on target. Coordinators have to verify that “bug reports” are filled in accurately and that relevant information is shared among all testers, as well as checking that the engineers understand the corrections detailed in the report.

## 2- Engineering

*-Localisation engineers.* Localisation engineers are often the only people allowed access to the game engine in order to manipulate game-builds. They are responsible for extracting translatable strings out of the game code and inserting them back again after translation. They normally organise these strings into spreadsheets, which translators use to produce their localised version. Engineers are also responsible for implementing the correction of bugs reported by linguistic testers.

## 3- Translating

*-Translators,* in-house and freelance translators are responsible for the bulk of the translation process at the beginning of the project. Besides being fluent in the original and target languages and cultures, they are expected to work with TMTs (Translation Memory Tools), word processors, tables and spreadsheets, audio, graphics and video files, as well as being able to learn quickly and to adapt to specific new tools and formats.

## 4- Testing

*-Head of linguistic testers.* Tester heads are in charge of overseeing the linguistic proofing and overall consistency and quality of the languages being checked, as well as the implementation of bug reports that will, in turn, be passed on to engineers in order for them to make the corrections to the game code.

*-Linguistic testers.* Linguistic testers have to explore every in-game narrative, option, pop-up caption, system dialogue, and help menu of the game meticulously, in order to verify that the

language used is terminologically accurate, correctly written, and in line with the style of the original game. They report to the head of linguistic testers in their language.

## 5- Consulting

*Localisation consultants.* These professionals are experts in very specific areas and constitute an ideal addition to a team that lacks the expertise for a particular project, theme or territory. They can be topic specialists (for example a pilot for a flight simulator game), internationalisation guides (for example a localisation engineer for the right dimensioning of the source-code), geopolitical advisers (for example a historian-geographer for real-world-based games), or literary editors (for example, a published author for games striving for quality literary prose).

The role of most of the professionals discussed in these pages has evolved so as to fit a particular new niche, whereas some other profiles have been created from scratch to keep pace in a very dynamic industry. It is also worth noting that some of these roles are sometimes informally performed by game fans acting as *ad hoc* amateur localisation companies, with considerable success if one considers the opinion of the many players downloading their language patches. This activity is explored in the following section.

### 5.11- Fan-translation: Players and localisation

Although the technology behind computers is a complex one, requiring solid programming skills, it seems to be an unavoidable facet of human ingenuity that, whenever people enjoy a certain product or service, some of them will feel compelled to learn and refine it to fit their own personal preferences or needs. This is also the case with video game localisation and its bilingual fans, a practice that had already started in the 1990s known as ‘romhacking’ (Muñoz 2007). This term is only used nowadays when referring to the localisation of old games for old consoles by fans. One of the most obvious needs for people unable to understand the language of release, initially only English or Japanese, was the translation of instruction manuals, and immediately after, the UI, system messages, and subtitles. Games involving some storytelling or complex instructions, as opposed to pure gameplay, were beyond the reach of many fans for many years, so spontaneous groups of players with programming skills and a knowledge of several languages started to be formed. They loved the game and wanted to enable their friends to partake in the enjoyment.

There are obviously several issues to be addressed here. A person who uses his computer skills to gain unauthorized access to computer files is referred to as a ‘hacker’ (OED online) and s/he is doing something illegal. The term started to be used in the mid-1970s, just a few years after the first computers became widely available in the US, so much so that, as early as 1985, there was a computer game called *Hacker* published by a very young Activision (one of the biggest publishers today), and the term was quickly adopted in all those countries where home PCs became routine.

The practice of translating a text or programme without the owner’s expressed authorisation is also illegal in principle although it has been practised since antiquity. In the case of fan-

translation, the practice is perceived as both illicit and admissible, although it is admittedly illegal (Muñoz-Sánchez 2008; Díaz-Montón 2011). According to Sherman and Bently (1999: 12), the modern concept of copyright laws in Great Britain came about after the popularisation of printing press technology, with the introduction of the “Statute of Anne” in 1710. This piece of legislation is usually revised every time new types of product and media break into the market. The advent of home computing and amateur hacking prompted the CEE’s Office for Official Publications of the European Communities to come up with a council directive “on the legal protection of computer programs” (CEE 1991), whereby any unauthorised manipulation of source code is prohibited. For their part, game developers and publishers come together in associations, such as TIGA (trade association representing the UK's games industry), UKIE (trade body for the UK’s wider interactive entertainment industry), ESA (Entertainment Software Association), ISFE (Interactive Software Federation of Europe), and aDeSe (Asociación española de distribuidores y editores de software de entretenimiento), which lobby for specific copyright laws to protect the integrity of their intellectual property. Bearing all this in mind, and although fan localisation falls technically within what is described as illegal, developers and publishers are more concerned about mass piracy, a phenomenon which really affects their profits. There has never been a court action brought against fan localisation groups because they actually seem to contribute to the popularity of games and brands. The individuals participating in fan game localisation are true fans and loyal clients of that particular brand.

Fan localisation becomes more understandable and even less legally clear-cut, when other facts are taken into consideration. The teaching of computing skills started to be formally introduced in the classroom in the early 1980s, although it had, in fact, already been available for at least a decade in a few selected higher education centres (Impagliazzo 2010: 2). This meant that programmers and hackers either shared the same classrooms or that the two skills

were combined in the same person, at different stages in their life. Some developer companies started distributing game engine tool kits with their games in the early 1990s to encourage players to create their own 'mods' (modifications) to the game, expanding on its popularity and longevity. This is often referred to as 'modding', and it is a relatively convincing marketing tool still in vogue nowadays. The most advanced 'modders' become so adept in the game engine that, in consequence, they are offered a position in the company that makes the games they so love.

Another interesting activity related to fan localisation is 'crowdsourcing'. Crowdsourcing, first seen in print in 2006 according to the Merriam-Webster online dictionary, is a practice that consists in the practice of obtaining needed services, ideas, or content by soliciting contributions from a large group of people and especially from the online community rather than from traditional employees or suppliers. Nonetheless, fan-translation should be differentiated from crowdsourcing for, although it is similar in its outcome and the agency of the participants, it is a process encouraged by the owners of the product as a money-saving strategy. It is particularly effective when the functionality of the target text, rather than its quality, is the top priority (Cronin 2010) and users are both aware and sympathetic of potential shortcomings, because the overall result is beneficial to the gaming community as a whole. Popular online applications such as *Second Life*, Facebook and Wikipedia have made use of the power of the people to help speed up the localisation of freely accessible software and tools by utilising crowdsourcing, where the developers themselves provide free tools and access to their products to enable individuals around the world to take care of most if not all the localisation process.

Finally, there seems to be an ever-growing community of professionals and hobbyists uploading their own guides and home-made tools onto public websites, which seems to indicate that this type of user-generated translation is likely to continue in one way or

another. Perhaps, the most important point concerning fan-sourcing is that, despite its technical complexity, time-intensive requirements and dubious legal status, players have been spontaneously getting together in order to collaborate in the translation (or retranslation) of games, making it available for free to players for more than fifteen years. Some authors have commented on the fact that user-generated translation, such as fan-subbing (Díaz-Cintas and Muñoz Sánchez 2006), scanlation (Deppey 2006), and fan-localisation are a “labour of love” (O’Hagan 2009: 111), and noting that they can be used as an educational aid in translation studies (Muñoz-Sánchez 2009: 182), and may even be beneficial for the original copyright holders because they contribute to the spread and popularity of games beyond the natural distribution area and time-window allocated by the publishers (O’Hagan 2009: 101, Díaz-Montón 2011: 68).

It seems clear that localisation matters enough for fans to feel compelled to take action when translation is not supplied or is so poorly done that it spoils the gaming experience. In a similar way as what Díaz-Cintas (2010: 112) comments for the case of fansubbing, technology has had a great impact in fan-translation practices. One of the first implications is that viewers are not ‘passive’ agents anymore since many of them also take an active role in the procuring, translating and disseminating of the programmes and their subtitles, a classic example of what has been labelled as participatory culture (Jenkins 1992) or collective intelligence (Lévy 1997).

Indeed, it is testament to the passion of gamers that, despite the technical complexities of some games and their own lack of resources, user-generated game translations can be remarkably successful and enjoyable. It is difficult to deny the fact that it has been only



thanks to fans organising themselves in this participatory culture manner, that many games are available in more languages than their publishers originally intended and budgeted for. Indeed, fan localisation can often lengthen the popularity of the title and its creators, paving the way for re-releases and sequels.

Dedication, team-working and determination are skills which contribute to the positive quality of fan localisation. In fact, this type of volunteering can sharpen the transferable skills of young adults interested in language, localisation and video games, so valued in professional life. Fan-translation is now relatively commonplace in most entertainment products, such as literature, comics, films, games: something unthinkable only twenty years ago. This display of affection for a particular piece of work has always existed in people with access to the original and the knowledge and tools to transfer it for the benefit of another linguistic community.

### **5.12- Strategies from the game localisation to the game development industry**

By the middle of 2010, the revenue from the global video game sector was estimated at \$60 billion, and it was expected to reach \$70 billion by the end of 2011 (Merel 2011) thanks to the continuous growth of the online and the mobile entertainment sectors, as Figure 87 below illustrates.

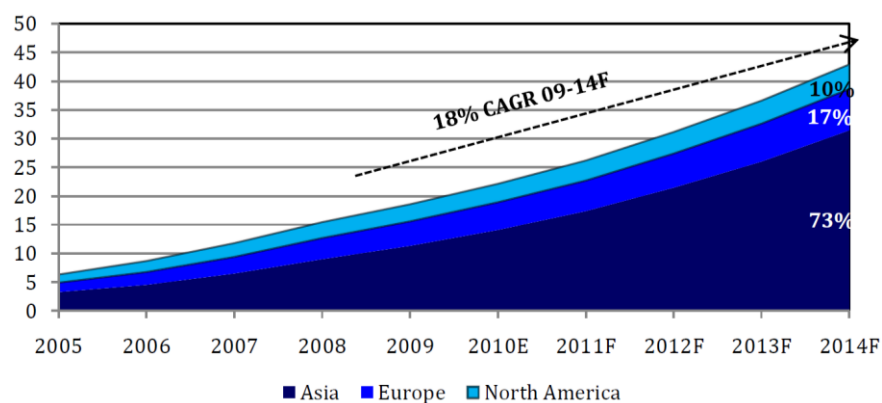


Figure 87. Regional online and mobile games revenue forecast in billions of dollars

Since established markets in the USA and Japan, for instance, seem to have reached their peak and are slowing down, and almost stagnating, it can be argued that this revenue can only be generated by the localised versions. From an international marketing point of view, once leading markets have reached their upper limit, the only way to increase domestic profits is to develop more products, a decision which requires considerable investment both in terms of time and money. The other possible strategy is to tap into young markets, a solution that entails de-centralisation and the need for making better use of local knowledge. On these occasions, the catalogue of existing products can only be offered to new markets if they are localised into foreign languages, which may rekindle interest in the games and guarantee big returns for a rather low investment.

The strategy to incorporate an ever-growing number of languages and locales when it comes to the international distribution of the games implies that the professionals responsible for this decision have to come up with a set of rules and processes that guarantee asset consistency across all versions and respect the brand image within each locale. In the pursuit of a high quality level, these are the main recommendations often suggested by language vendors at game localisation events to the game development and publishing industries:

- To ensure that the terminology and writing style are consistent when a number of authors are working on the same assignment.
- To guarantee that game brand image, trademarks and client glossaries are defined and incorporated in the translations.
- To certify that first-party terminology (e.g. Nintendo, Microsoft and Sony) is adhered to across territories in the original language text also because poor quality originals create confusion and delay translation. As already mentioned, many years after their acceptance and maximisation in the print and utility software industries terminology databases and translation memory tools are becoming widespread in game localisation, with the positive outcome of helping on the terminology front.
- To liaise with translation agencies in order to create and maintain these terminology databases when the expertise cannot be found in-house.
- To utilise software programs such as those seen in 5.9.2 that will help incorporate various media within the same file, such as graphics, audio, and video assets. The example given below in Figure 88, taken from the terminology database localisation project of *Resident Evil 5*, shows the six language versions (English, French, German, Italian, Japanese, and Spanish) of the name of Captain DeChant, as well as a full body image of what he looks like, something impossible in traditional glossaries.

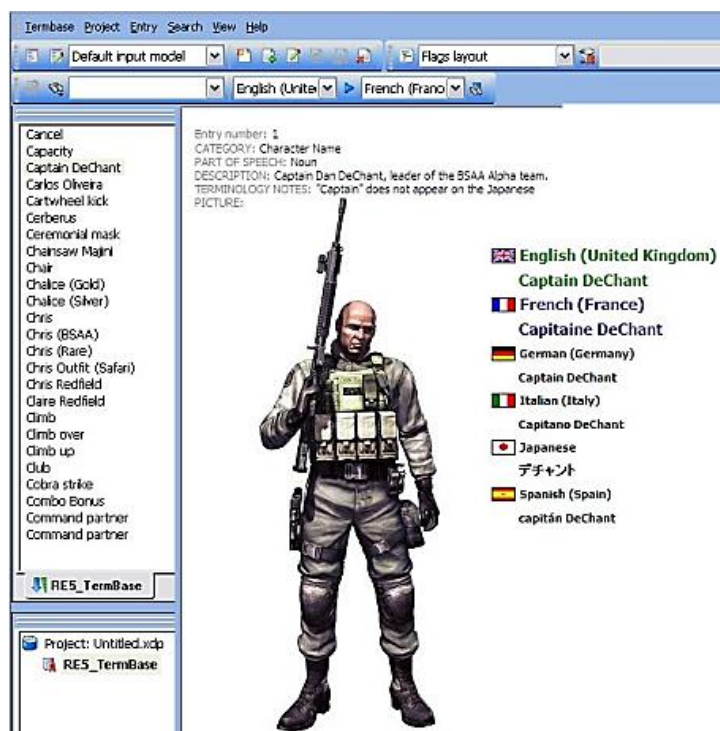


Figure 88. Multimedia terminological database tool for games

- To maintain source file compatibility with translation tools file formats through ‘.XML’ standard, as well as to maintain the internal investment in them in order to ensure a more precise control over projects and to avoid unnecessary delays and high localisation bills.
- To encourage and facilitate the use of TEnT (Translation Environment Tools) also for freelance translators because this makes the updating and proofreading less time-consuming and prone to error.
- To implement TMTs even for small projects in order to aid consistency and allow for possible future releases of the same franchise.
- To safeguard quality in large projects by making the entire team to work with TMTs because they can offer great leverage of past translations for the new content of the game, which will benefit from the established terminology.

- To utilise TMTs analysis and quick reports features (Figure 89 below) because they can help in the assessment of translation projects. These reports can be organised by segments, by words, by text-matching percentage, and they can keep records of previous stages and projects. Although this only constitutes abstract numerical data that can be qualified by project managers and translation editors, these statistics help to map the progression of a project and to ensure the efficiency of internal localisation handling as well as that of the vendors.

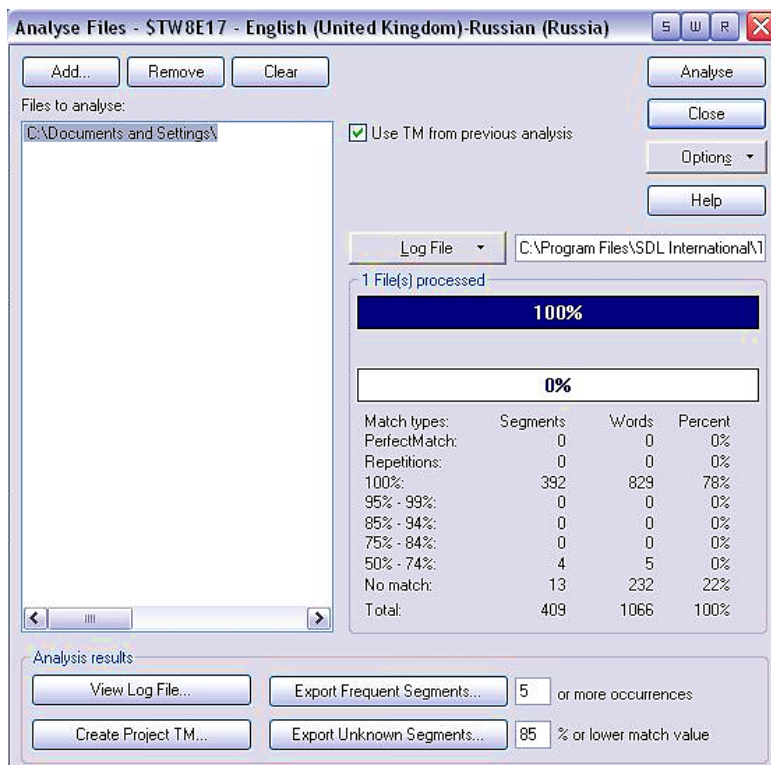


Figure 89. SDL Trados Workbench project progress analysis

It is not strange that all the previous recommendations are still necessary because the game localisation industry does not have an agreed set of minimum standards despite having being around for more than twenty years. The next section deals with the steps that are being taken in order to improve current professional practice.

### **5.13- Towards a better game localisation practice**

The game industry has perhaps been a victim of its own success, and its rapid growth has often meant that the language services industry has had to improvise and adapt equally fast to the new demands of game localisation without really having time to think about it and establish standards or even conventions among practitioners. The route to standardisation is however slowly being paved by the synergistic developments of the past six years from various informal associations, interest groups and professional initiatives. The summer of 2007 can be considered as a critical moment in terms of game localisation, one based on the common acknowledgement on the part of game developers and publishers that the task of creating marketable language versions of their products is a substantial one, complex, and continually evolving, requiring the collaboration of the best professional minds both inside and outside the industry. The ‘Game Localisation Round Table’ series within the Localisation World international conference began in June 2007, as an exclusive forum for top professionals involved in multimedia interactive entertainment software localisation. Although there was some printed information on the topic, such as the articles by Mangiron and O’Hagan (2006), and Bernal-Merino (2006), a localisation producer’s handbook by Maxwell-Chandler (2005a) and some generic publications such as Mandel (2000), game localisation remained a black-box for the wider community of scholars and professionals, who could not debate any issue in an open forum, because of the lack of information or legal constraints. Today the Game Localisation Round Table is the most important game localisation event within the international software localisation industry, taking place twice a year (in Europe and North America).

The 'Localisation SIG' (Special Interest Group) was also launched in June 2007, as part of the influential International Game Developers Association (IGDA). It took its cue from the L4G, an informal Hotmail mailing list set up in 2005. By coordinating their efforts with the Game Localisation Round Table advisory board, in 2009, the steering committee of the Localisation SIG managed to stage a full day's 'Game Localisation Summit' at the biggest and most important international Game Developers Conference (GDC) in San Francisco. The commercial success of these events and the tacit support of platform holders (Sony, Microsoft XBox, Nintendo, iPhone, Nokia), the most important entertainment software publishers (such as Activision, Electronic Arts, Sega, Disney Interactive), together with highly acclaimed game developers (such as Blizzard, Square Enix, and LionHead), and the most experienced game localisation service providers (such as Binari Sonori, Babel, Pink Noise, XLoc, etc.) have, finally, caused localisation to take up its position as an essential part of the global multimedia interactive entertainment software business after more than thirty years.

Professionals in the localisation industry have proffered several suggestions, mostly for game developers and publishers, but also for the benefit of their peers working in the translation and QA sectors. The following points constitute a summary of some of the ideas most often voiced at the events mentioned above:

1. Recruiting the best linguistic talent (meaning translation graduates) both in-house and outsourced.
2. Ensuring that (multilingual) translation project managers assume a proactive role throughout the entire process.
3. Scrutinising source files before sending them out to the vendors.
4. Extracting and translating terminology into several languages before localisation actually begins.
5. Maintaining and updating terminology during the course of the project.

6. Providing as much static reference material to vendors as possible through well-organised kits.
7. Resolving translators' queries in a timely manner and ensuring that feedback is shared with the entire team.
8. Making use of an online collaboration portal whenever possible, by means of applications such as *SharePoint*, for instance.
9. Hosting live conference calls with shared desktop with applications such as *Skype* whenever necessary.
10. Ensuring that the VO recording is co-directed or informed by an independent mother-tongue translator.
11. Splitting the work volume and working out systems for team translation and QA.
12. Planning staggered deliverables in order to avoid bottlenecks, to execute regular checks on quality and to facilitate continuous work guaranteeing translators availability.
13. Prioritising VO scripts and giving recording studios notice to enable them to secure voice talent.
14. Allowing for a time-buffer at the end of the project to cushion against unexpected issues that may crop up during the project.
15. Addressing the poor quality of preceding, unchecked translations that are going to be leveraged for new projects.
16. Avoiding hardcoded text that will delay the translation of all target languages.
17. Harmonising file formats and naming conventions to avoid confusion.

GALA, the Globalization and Localization Association, perhaps the main professional body for the localisation of utility software, digital devices, and websites since the disappearance



of LISA in 2011, is also collaborating and offering its support to the aforementioned game localisation forums, a healthy sign of the recognition of this growing professional niche within the translation and localisation industries.

Acknowledgement of the importance of this industry sector has also come from a number of higher education centres where game localisation has now been taught for several years (Vela-Valido 2011), as well as from some Translation Studies scholars. The latter have looked into traditional paradigms as well as into the most recent schools of thought in translation in an attempt to find a specific place for this new research area within the wider field of Translation Studies. With this aim, existing theoretical frameworks have been moulded and expanded so that the unique characteristics of multimedia interactive entertainment software can be properly addressed. These recent developments in education and academia and the way in which potential synergies can be channelled successfully are explored in chapter 6.



# Chapter 6

## Training and Research

As industries specialise further and professions assume new shapes to meet the latest developments, educators and training must evolve to meet these challenges. One of the drawbacks of professional practice and formal education is that they both tend to be unavoidably slow to adapt to new realities once they have established a stable and self-sustaining productive position. While it may be true that neither people, nor companies or institutions like change, especially when they are the ones who have to catch up, this attitude is often counter-balanced by the desire (and the need) to innovate coupled with a fear of being left behind. There is a wide array of practical reasons to explain this slow evolution, such as the lack of acknowledged experts in new areas, the pressures of everyday processes, the complex infrastructures, the high costs of some of the required tools, and the steep learning curve that must be overcome. In addition, a myriad of deeper conceptual reasons might also be mentioned: the lack of a solid self-evaluation process in the early stages (Kelly 2005), the absence of external criticism, and the almost non-existent access to different professional practices due to insularity and stringent confidentiality agreements. Nonetheless, since society demands the constant evolution and improvement of technology and theory, the need for professionals working in the areas of game localisation and education to adapt to new situations is inescapable. It seems, therefore, that the best strategy would be to

acknowledge change and to formulate a plan in order to facilitate the process. Of course, academics with direct professional experience may be active at times and passive at others, but having a system where internal assessment and external validation are recurrent and cyclical might help to guarantee a reasonably up-to-date quality programme of studies. This process would need both to integrate and to harmonise collaboration between researchers, translation tutors and professionals specialising in the many aspects of multimedia interactive entertainment software localisation.

Although the core task facing translators remains unequivocally centred on bilingual linguistic skills and their related cultures, the tools of the trade change regularly and, therefore, any training aimed at educating new professionals and preparing researchers to meet the demands of new markets and developments in industry must also inevitably change. In this sense, familiarity and expertise in the current technology seems to be of crucial importance, as is highlighted by Biau-Gil (2006: 89-90):

Personal computers and the Internet have brought about a shift in the way translators work. Twenty years ago most freelance translators used a typewriter or dictated translations to a secretary; ten years ago they had a computer with a word processor; nowadays most translators need to know how to use translation-memory software and terminology managers, and must be expert Internet users. They might also have replaced the secretary with a voice-recognition software system. [...] The Internet (and, by extension, computer proficiency) is not only a source of information or a tool for translations, but also the platform for communication with clients, agencies and fellow translators.

As might be expected, and depending on the interests and affiliations of the education providers, the localisation of multimedia interactive entertainment software can be explained from a variety of viewpoints, and different aspects may be discussed and considered as more relevant than others according to the professionals involved. Translators may, therefore,

prefer to draw attention to terminology and stylistics, while engineers highlight the fact that, in their opinion, it is easier to adapt language than to change game code, project managers will stress the crucial importance of keeping to deadlines, and the interests of producers will focus on budgets and financial considerations. While none of these approaches is incorrect, since each participant in the process has different interests and responsibilities, viewing his/her priorities accordingly, it is clear that comprehensive knowledge of the many tasks to be performed by all the stakeholders involved can make the whole localisation process run more smoothly. Ultimately, the two main factors that set the agenda in terms of relevance and priorities are the game product itself and the consumers who will purchase it.

One of the aims of this chapter is to analyse the existing provision of training in video game localisation in order to recommend a strategy by which industry and academic effort might be harmonised. The second part of this chapter deals with the little formal research which has been carried out to date concerning the specifics of multimedia interactive entertainment software localisation, highlighting the benefits of the first few texts to focus on it and suggesting possible avenues for further research.

The way in which teaching and learning are structured at different stages of formal education or professional training changes according to a variety of reasons, *inter alia* the need to follow a rationalised progression in the process of knowledge acquisition, the need to match the practicalities of covering the subject matter with the resources available, and even the need to adjust to social and academic trends in favour of particular tools and topics at any given time (Kelly 2005). Universities have often focused on theoretical teaching because it is somehow understood that, by promoting abstract thinking, students will be able to elicit practical strategies that will help them to perform to the highest standard and even push the

boundaries of what is currently known. The downside of the approach currently advocated in higher education is that there is a risk of creating thinkers who are unable to perform on a reasonable, down-to-earth level because they concentrate on ideals, finding it difficult to adjust to the realities encountered in industry. Professional training has the benefit of being very specialised, offering short, intensive courses that can sometimes be taken in isolation. In consequence, there is a risk of creating professionals, who are skilled in very specific tasks, focusing purely on the requirements of a particular company or a particular tool. This is an approach, which precludes any use of the imagination or interest in finding solutions beyond past and current practice, ensuring that the mistakes of the past are perpetuated.

From a learner's perspective, university students may emerge with a distorted idea of the professional world, a world which may not correspond to the theories they have learned in class. Additionally, because the academic approach is geared towards passing the required modules, students may end up unable to cope with the daily pressures found in the work place. On the other hand, trainees, who are already in employment within the industry may resent any attempt to change their working routine, falling back on old practice, especially when the intended changes are not implemented throughout the organisation and in all new games with equal zest. Faced with this dichotomy, it seems fair to ask where a happy medium can be found; the answer seems to point towards the needs of the product itself, in other words, each video game seems to set the creative parameters for the corresponding localisation.

## 6.1- Professional training

Professional training is delivered by experienced individuals running courses independently of university programmes and accreditation. They offer certificates attesting to completion (mostly verifying attendance), and in some cases, certificates for the level of proficiency attained if any formal assessment has been implemented and marked. Professional training can be divided into two main groups: (1) courses for translation and localisation professionals which focus on technology and the translation of game content, and (2) courses for coordinators and project managers which focus on topics such as scheduling, budgeting, liaising with clients and management. Most big developers and publishers have a localisation expert or a small team in charge of creating and disseminating guidelines internally, as well as instructing the other departments on internationalisation and localisation issues in terms of general practice and specific concerns directly relevant to the project in hand. Although there are several courses and certificates on website and utility software localisation in existence, such as the ones offered by SDL,<sup>109</sup> there is no comprehensive training on the many aspects of video game localisation explored in the present thesis. However, despite the current scarcity of courses on offer, this is already an improvement on the previous scenario of less than a decade ago where localisation did not feature in any way whatsoever during software development or game development training. The availability of these training courses can also be understood as a sign of the coming-of-age of video game localisation as an independent industry. It is also a necessary stage in the evolution of the production of entertainment software, particularly when the ultimate aim is to cater for the international community of video game players, a compulsory approach in today's highly competitive globalised marketplace.

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<sup>109</sup> See [www.sdl.com/services/education-certification/training-product/sdl-trados-training](http://www.sdl.com/services/education-certification/training-product/sdl-trados-training).

GALA, the Globalization and Localization Association, is the world's largest association for the localisation services industry ([www.gala-global.org](http://www.gala-global.org)). It is a non-profit organisation providing resources, education, knowledge and research for the benefit of many companies. It is explained on its website that the industry catering for the localisation of websites, utility software, and digital devices in general has been around since the late 1970s (GALA: online).<sup>110</sup> There are currently various introductory courses on general software localisation topics, certificates and webinars, which have been created by a variety of private providers and professional associations. *Multilingual Computing*, as one of the most widely read magazines in the localisation industry, regularly offers information on conferences, courses and certification in its calendar section, usually on pages 12 and 13. Although these are open to everybody, and there are few, if any, entry requirements, these courses are mostly aimed at both experienced professionals and newcomers looking for a recognised certification or for a detailed review of the localisation process, even though they may only touch on video games briefly. Some of them may be offered at colleges or universities, although they are completely separate and independent from BA and MA degree programmes. The most popular formal industry-related courses and informal webinars offered by practising professionals and companies are listed below, as follows:

1. The Certified Localisation Professional (CLP) project was originally funded by the European Union under its ADAPT initiative (1998-2000) and a framework was developed for the certification of localisation professionals under the leadership of the Localisation Research Centre (LRC). It was supported by the European Union TechLink Project under the Europe Asia IT&C Programme between 2006 and 2008. After a consultation process with all parties and stakeholders involved, it was decided

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<sup>110</sup> See [www.gala-global.org/node/35760](http://www.gala-global.org/node/35760).



that the results of the CLP project should be transferred to the ownership of The Institute of Localisation Professionals (TILP). The content of this certificate is delivered online as a self-teaching course with a final onsite training of four days.<sup>111</sup>

2. The Internationalization Summer School,<sup>112</sup> coordinated by the Localization Institute. The Localization Institute was founded in 1996 to assist the rapidly evolving localisation industry gain access to learning opportunities. The Institute offers public events and private consulting engagements to help companies to reduce the cost and time required for the delivery of their services.
3. The Localization Certification and Localization Project Management Certification (<http://rce.csuchico.edu/localize>). Despite of the fact that it is held at Chico State University, this certification is independent from the BA and MA degree courses taught there, as is made clear on their website: “The Localization Certification Program is administered by the CSU, Chico Research Foundation and does not provide academic units toward a degree”. These accreditations count within various localisation bodies, examples of which include: Across Systems, Enlaso, Lingoport, IMTT Translation & Training, Ocean Translations, and the Localization Institute.
4. EcoloMedia, an EU funded project designed with professional trainers and university lecturers in mind with the motto “Developing shareable and customisable resources for vocational training in multimedia eContent localisation”.<sup>113</sup> The project was co-created by academics from various European universities, professional bodies, game content developers, and independent experts. These freely available self-teaching courses and materials are completely web-based and offer no certification.

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<sup>111</sup> See [www.tilponline.net/Default.aspx?pageId=984473](http://www.tilponline.net/Default.aspx?pageId=984473).

<sup>112</sup> See <http://localizationinstitute.com/index.cfm?page=intsummer>.

<sup>113</sup> See <http://ecolomedia.uni-saarland.de/project.html>.

5. Audio and video localisation webinars offered by JBI,<sup>114</sup> a localisation company focusing on the translation of marketing and internal audiovisual products such as training videos.
6. Webinars, articles and white papers by Enlaso, a language service provider offering enterprise language solutions to companies looking to strengthen branding and customer loyalty through better multilingual communication. They offer very valuable information in completely independent sessions through what they call their Language Technology Centre,<sup>115</sup> although there is no resulting certification. In fact these resources can be seen as a sophisticated strategy designed to attract and educate clients rather than constituting formal training.
7. Webinars and online resources on audiovisual translation and localisation by Trágora Traducciones,<sup>116</sup> a company created with the support of the University of Granada, but completely independent and whose courses have no transferable credit value in terms of the degrees taught at the university. These courses are free, short and comprehensive although generic.

As this type of educational sector is virtually unregulated, it is worth pointing out here that the value of industry-related courses and certification is severely curtailed when not enough pedagogical rigour has been applied by the companies providing them, including the means of offering the participants some form of assessment concerning the expertise which they have gained. Indeed, some courses only really offer certificates of ‘attendance’ rather than a certificate of ‘proficiency’ in the subject, partly because some of the professionals attending the courses do not appreciate having to sit exams while working fulltime, and partly because the perceived value of industry-lead courses is placed on contact being made with

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<sup>114</sup> See [www.jbistudios.com/about-us/events.html](http://www.jbistudios.com/about-us/events.html).

<sup>115</sup> See [www.enlaso.com/Language\\_Tech\\_Center/Index.aspx](http://www.enlaso.com/Language_Tech_Center/Index.aspx).

<sup>116</sup> See <http://tragoraformacion.com/oferta-formativa>.

experienced individuals rather than on routine assessment. Given this state of affairs, it can be argued that sometimes a respected individual or an influential company can increase the perceived value of a course without any substantial evidence. However, the same shortcomings also exist in university education, although compulsory peer-reviewed validation cycles and external marking by tutors from other centres help to guarantee and safeguard certain levels of quality.

## **6.2- Higher education**

The varied array of entertainment software products, together with the apparent lack of standards and the different requirements imposed by the various gaming platforms make the translation of video games a difficult area to systematise for training purposes. As seen in the previous chapters, this fast-paced industry is driven by the growth of gaming markets around the world, and higher education establishments are still trying to learn and adapt to the latest developments in the industry in order to cater to the demands for new skills in the language specialists it requires. Although present translator training serves as an important and necessary starting point for all professions concerned with interlingual transfer (Ulrych 2005), the entertainment software localisation industry requires a slightly different set of skills. Among these are: proficient IT skills, an advanced use of translation memory tools and content management systems, as well as a detailed knowledge of popular culture and video gaming lore, and the ability to cope with the translation of the various narrative styles encountered in video game localisation (see Section 4.2). Altanero (2006: 31) comments on the difficulties that this textual variety and interdisciplinary skills have posed to university programmes wanting to incorporate localisation into their curricula:

Slowly but surely, academia is catching on to localization. From practically no programs in 1995, there are now many institutions offering courses on localization, primarily in North America and Europe. As with any new type of course or program, finding a home in the academy is difficult, especially for subjects that cross the rigid disciplinary lines that are the hallmark of colleges and universities.

As the previous chapters have shown, there are different elements within IT (Section 4.2.3), software engineering (Sections 3.2.4 and 4.3.3), areas which include marketing (Sections 5.3 and 5.8), creative writing (Section 3.2.1), popular culture (Sections 2.2 and 3.2.2), and audiovisual media (Sections 3.2.3 and 4.2.2). All these different areas have been brought together to cater to the requirements of intercultural communication, the needs that a multimedia interactive entertainment software product has in order to be understood and enjoyed in other countries. This is why the discipline and framework of audiovisual translation is the most suited to offering training in the area of the localisation of video games (Mangiron 2011, Vela-Valido 2011, Granell 2011).

Developing a programme of study to cater for the localisation of video games can present a considerable challenge for universities (Kelly 2007) for a variety of reasons. Bernal-Merino (2008d) gives five main reasons describing this problematic situation:

- 1- The lack of time and interest from established translation departments, partly due to their members being too involved with their own tasks, and perhaps also because they are unaware of new professional practices.
- 2- The scarcity of professionals working in this new specialisation; they tend to be very busy and are not usually willing or able to teach on top of their normal workload.
- 3- The high investment in new hardware and software applications that universities need to make in order to teach the new specialisations.

- 4- The problems involved in establishing and consolidating working links with companies due to the time constraints experienced by academics and professionals alike.
- 5- The difficulty in obtaining copyright permission, a situation that tends to acts as an impediment in terms of using authentic material, such as original localisation files.

Despite these obstacles, video game localisation started to be introduced into some translation BA and MA degree programmes in about 2005. There are three basic ways in which higher education providers have achieved this: (1) as part of a generic module on audiovisual translation which usually covers subtitling, dubbing and localisation; (2) as part of a software and website localisation course dealing with the translation of websites, utility and entertainment software; or (3) as a fully-fledged module devoted entirely to video game localisation, including textual types, industry processes, tools, genres and platforms. Vela-Valido (2011: 89) offers a summary of the ways in which modules with a game localisation component have been introduced into BA and MA university programmes in Spain, through modules entitled Multimedia Localisation, Audiovisual and Multimedia Translation (both corresponding to the first option), Software Localisation (the second option), and Video Game Localisation (the third option). At most universities, the provision for the subject takes the form of optional or compulsory modules, either counting towards the final degree or in the form of short courses open to all those students who want to learn about the topic as an extra-curricular activity.

In spite of this, there is no doubt that academia needs the frequent input of professionals working in the industry if it is to keep abreast of new changes and practices, although this is

by no means straightforward. In this respect, Poupaud (2006) emphasises how difficult it was for his translation department in the University Rovira i Virgili (Spain) to find localisation practitioners willing to combine an interest in teaching and scholarly research with their heavy professional commitments. Another issue relates directly to the fact that the subject is essentially interdisciplinary and, consequently, the right place within university curricula is difficult to establish, as Altanero (in Poupaud *ibid.*: 64) emphasises:

one of the most insidious problems facing localization professionals was the academy itself, which is broken down into small units unable to accommodate a field such as localization, which is largely metalinguistic and straddles over the borders of traditional individual language departments, computer sciences, business and other fields.

Besides the involvement of individual companies and professionals in the enhancement of some aspects of training in this field, professional bodies and associations could also contribute to its synergic development, a fact which is pointed out by Drouin (2006: 53) when he states that he “would like to see the professional translators’ associations become involved. They could ensure a flow of expertise”. The reality is, however, that in most cases, everybody is so busy that only an express willingness combined with a highly motivated group of practitioners and educators would be able to break this sterile vicious circle.

Despite its having previously been ignored, it is reassuring to see that the translation of multimedia entertainment is gaining a foothold in academic curricula and that an increasing number of scholars are devoting their efforts to its study and teaching. At some international events, such as “Media for All” and “Languages & the Media”, short workshops are being offered as part of pre-conference programmes. A list of European universities offering courses and postgraduate degrees in translation with a partial or total emphasis on audiovisual translation is included below. Some of these offer video game localisation as part of a broader

area, as a short course, or as a full module. This list expands on the Spanish institutions included in Vela-Valido (2011):

1. Universidad Alfonso X el Sabio, Spain. Máster en Tradumática, Localización y Traducción Audiovisual. This is a 300 contact hour master's degree focusing on the localisation of utility software, websites and video games. It offers an introduction and practice with assisted translation tools both for software and audiovisual products, file and project management tools, as well as the use of macros, and file formatting in Word, FrameMaker, and InDesign. Some modules can be studied online. One of its final modules involves writing an MA dissertation. [www.uax.es/uax/que-estudiar/postgrado/masteres/derecho/xtl.html](http://www.uax.es/uax/que-estudiar/postgrado/masteres/derecho/xtl.html)
2. Universitat Autònoma de Barcelona, Spain. Máster en Tradumática. This is a year-long master's degree focusing on the localisation of utility software, websites and video games. The emphasis is on IT skills and assisted translation tools such as InDesign, SDL Trados Studio, terminology database management, Wordfast, MemoQ, Across, Catalyst, SDLX, Déjà vu, and WebBuket. Shorter sessions and seminars are offered on the legal issues involved in starting out as an independent translator, subtitling, image editing, and video game localisation. Some modules can be studied online. It concludes with an extended research essay or dissertation. <http://pagines.uab.cat/mastertradumatica/es>.
3. Università di Bologna, Italy. A master's degree in Screen Translation. This is a one year course with modules that focus mostly on dubbing and subtitling for television, cinema and business. The course offers specific training for audiovisual translation including the translation of videogames, applications in portable technology, and subtitling for the stage. It also covers the training for the latest developments in

audiovisual translation such as audiodescription (for the blind) and respeaking (real-time subtitling for the deaf and hard of hearing). It concludes with a dissertation. <http://masterst.sitlec.unibo.it/Master.htm>.

4. Dublin City University, Ireland: A master's degree in Translation Studies. It is a year-long postgraduate programme of studies with core modules in translation theory, research methodology, translation technology, terminology management, and professional aspects of translation. Optional modules include economic translation, technical and scientific translation, localisation, audiovisual translation and corpus linguistics for translators. Language pairs offered are Chinese, French, Gaelic, German, Japanese and Spanish into English. It concludes with a practicum, also called a master's degree dissertation. [www.dcu.ie/prospective/deginfo.php?classname=MTS](http://www.dcu.ie/prospective/deginfo.php?classname=MTS).
5. Universidad Europea de Madrid, Spain: Máster en Doblaje, Traducción y Subtitulación. This MA is centred on the translation work generated by the audiovisual industries in Spain. It has modules on the technologies applied to dubbing and subtitling, audiovisual translation where game localisation is covered, dubbing and public speaking, and multinational management and production. It concludes with a practicum or dissertation. In addition, this programme offers students the opportunity of an internship in local companies some of which partake in the teaching. [www.uem.es/graduate/masters-degree-in-dubbing-translation-and-subtitling/program](http://www.uem.es/graduate/masters-degree-in-dubbing-translation-and-subtitling/program).
6. University of Hildesheim. Medientext und Medienübersetzung. This course combines Translation Science, Media Linguistics and Media Studies. It opens a range of vocational opportunities to students in the media sector with modules on subtitling, (film/TV/stage) script translation, and translation of audiovisual documents for international corporations. It has modules such as intralingual and interlingual



subtitling, audio-description, translation of speech and dialogue, accessible internet, internal corporate translation, communicative strategies in mass media among others. It concludes with a practicum or MA dissertation. [www.uni-hildesheim.de/index.php?id=4595](http://www.uni-hildesheim.de/index.php?id=4595).

7. Imperial College, London, UK. MSc in Scientific, Technical and Medical Translation with Translation Technology. This course is designed to provide training for those intending to enter the field of specialised translation. It offers the training needed for professional work in scientific, technical and medical translation, software localisation, and audiovisual translation (subtitling, audio-description, and dubbing), as well as for research work in translation studies. Other modules include language and automation, translation technology, and publishing skills (using programmes such as FrameMaker, Dreamweaver and Photoshop). It is a yearlong postgraduate programme that offers up to eighteen language combinations, ending with an MA dissertation. [www3.imperial.ac.uk/humanities/translationgroup/mscintranslation](http://www3.imperial.ac.uk/humanities/translationgroup/mscintranslation).
8. Imperial College, London, UK. Translation Technology e-course on Localisation. This is an interactive e-learning course run in collaboration with the Humanities Department at Imperial College London and spanning a total of eleven weeks. It is entirely taught using WebCT/Blackboard (an e-learning platform). This course has a practical approach to translation, ranging from using the world-wide web as a source of information via terminology management and translation memory tools to website and software localisation. It touches briefly on video game localisation. [www3.imperial.ac.uk/cpd/courses/subject/other/localisation](http://www3.imperial.ac.uk/cpd/courses/subject/other/localisation).
9. Universidad Jaume I, Spain. Máster Universitario TECNOLOC: Tecnologías de la traducción y la localización. It combines corpus linguistics and translation with an emphasis on technology and localisation. Core modules include corpus linguistics,

assisted translation, automatic translation, website localisation and software localisation. Optional modules include text editing, teletranslation, project management, translation tools, and video game localisation. It offers two possible itineraries for a final MA project where students can choose between a professional project or a research essay. It offers a number of placements for students. [http://tecnolettra.uji.es/es/?page\\_id=39](http://tecnolettra.uji.es/es/?page_id=39).

10. University of Limerick, Ireland. MSc in Multilingual Computing and Localisation is a taught programme delivered online and its main focus is on translation technology and computing. Its modules are localisation project management, advanced language engineering, localisation standards & best practice, localisation process automation, translation technology, best practice internationalisation and applied research methods. It concludes with a dissertation. [www.localisation.ie/education/index.php](http://www.localisation.ie/education/index.php).
11. LRC (Localisation Research Centre), University of Limerick, Ireland. The Localisation Research Centre runs an intensive one-week summer school every year. In 2011 this focused on computer and video game localisation. It offered presentations and workshops given by local companies such as Corncrow Games AB, Big Fish Games, Enzyme Testing Labs, Guerilla Translations, Language Automation, Inc., Microsoft, Mi'pu'mi Games, OnLegends. There is no specific assessment although a certificate of attendance is given on completion. [www.localisation.ie/resources/courses/summerschools/2011](http://www.localisation.ie/resources/courses/summerschools/2011).
12. Universidad de Las Palmas de Gran Canaria, Spain. Master's degree in Professional Translation and Intercultural Mediation. This is a full year's postgraduate programme of studies with four possible specialisations: literary, humanities and audiovisual translation, legal and international business translation, interpreting and intercultural

mediation, and research in translation and interpreting. It concludes with an MA dissertation. [http://www.fti.ulpgc.es/estudios\\_masters\\_traduccion.php](http://www.fti.ulpgc.es/estudios_masters_traduccion.php)

13. Universitat Pompeu-Fabra, Spain. Máster en Traducción Literaria y Audiovisual. In this course, the postgraduate programme in literary translation and the postgraduate programme in audiovisual translation are combined. It is divided between theoretical seminars and practical workshops. The content includes: reading, translation, writing, editing and proofreading, as well as, dubbing, subtitling, audio-description and game localisation. An extended research essay or dissertation is required to conclude the master's degree. [www.idec.upf.edu/master-en-traduccion-literaria-y-audiovisual](http://www.idec.upf.edu/master-en-traduccion-literaria-y-audiovisual).
14. University of Roehampton, London, UK. Master in Audiovisual Translation. This is a year-long master's programme offering core modules such as translation theory, translation tools, interlingual subtitling, and a dissertation, as well as optional modules on dubbing and voiceover, audio-description for the blind, subtitling for the deaf, and localisation of video games and utility software.  
[www.roehampton.ac.uk/postgraduate-courses/audiovisual-translation/index.html](http://www.roehampton.ac.uk/postgraduate-courses/audiovisual-translation/index.html).
15. Universitat Rovira i Virgili, Spain: Máster Universitario en Traducción y Estudios Interculturales. This is a year-long postgraduate programme focusing on research and theory with some modules taught online only. Its modules include: rules of academic English, introductory texts on translation studies, principles of empirical research in translation studies, contemporary translation theory, functional analysis of translations, sociocultural analysis of transfer between social groups, research on training translators, research on translation processes and new technologies, research on interpreting, career counselling and citizenship. It concludes with an MA dissertation. [www.urv.cat/masters\\_oficials/es\\_translation.html](http://www.urv.cat/masters_oficials/es_translation.html).

16. Université de Strasbourg, France. A master's degree in Multilingual Web Design (CAWEB). CAWEB is a two-year professionally oriented master's degree in foreign languages and multimedia. Students learn to design and manage websites, as well as to localise websites and IT products. The course is organised around several online distance seminars and four group meetings. It has several teaching units including topics such as linguistic spelling, multimedia creation, foreign languages, professionalisation, linguistic transfer, web and cat tools, multimedia law, website creation and management, localisation, image processing and project management and a professional project. The second year of the degree is spent under a traineeship contract at the same time as attending the course. <http://mastercaweb.u-strasbg.fr/caweb/en/Presentation/master-caweb-professional-training.html>.
17. Universidad de Valencia, Spain. Máster en Traducción Creativa y Humanística. This is a year-long master's programme which includes compulsory modules such as text analysis for translation, theoretical approaches to translation, proofreading and a dissertation, and optional modules such as literary translation, interlingual subtitling, translation for dubbing, translation of comics and video games, and translation of stage plays and poetry. [www.uv.es/uvweb/college/en/postgraduate-courses/official-master-s-degrees/official-master-s-degrees-offered/master-s-degrees-alphabetical-order/master-universitario-en-traduccion-creativa-y-humanistica-1285848941532/Titulacio.html?id=1285857507847&plantilla=UV/Page/TPGDetaill](http://www.uv.es/uvweb/college/en/postgraduate-courses/official-master-s-degrees/official-master-s-degrees-offered/master-s-degrees-alphabetical-order/master-universitario-en-traduccion-creativa-y-humanistica-1285848941532/Titulacio.html?id=1285857507847&plantilla=UV/Page/TPGDetaill).
18. Universidad de Vic, Spain. Màster Universitari en Traducció Especialitzada. This master's degree includes various fields such as audiovisual and multimedia translation, scientific translation, technical translation, economic and legal translation and literary translation. The programme offers modules on the theory of translation, research methodology, the history of translation, gender and multiculturalism. It also

teaches the use of new technologies applied to translation such as CAT and localisation tools. It concludes with a dissertation. [www.uvic.es/en/estudi/traduccion-especialitzada](http://www.uvic.es/en/estudi/traduccion-especialitzada).

The previous list shows the many ways in which the translation of audiovisual media in general, and video game localisation in particular, has been introduced into various postgraduate study programmes. It also shows the needs and priorities of each country depending on the established practice in each of them, but more importantly for this research, it brings to light an emerging interest in game localisation, an interest which has not yet crystallised into its formal inclusion on translation programmes, despite the fact that the game industry is outperforming Hollywood (Chatfield 2009, Wallop 2009). Of course, it is not a question of saying that BA and MA courses are better since, as with industry-related courses and certificates, higher education programmes can also have their weak points. These might include a lack of dedicated focus due to academic time constraints, the lack of expertise among lecturers, excessive use of out-of-context issues and solutions that are not always applicable to real practice. There is little doubt that, when new professions are rationalised and systematised by institutions of higher education, there is an improvement in standards in terms of practical performance. Many scholars have the kind of analytical and communication skills that enable them to learn a particular trade and to teach it. Many of them are also able to create practice scenarios and to manage the transfer of their knowledge by adjusting the content and speed of delivery and progression in order to cater to the requirements of all their students.

When new professional practices are introduced into university curricula, the mode of assessment can also be problematic. This might include exams to check content retention;

commentaries to help students reflect on their translations; diaries and logs used to follow up team translation projects and highlight time management issues and case-studies and comparisons to encourage critical and constructive thinking based on a descriptive approach as opposed to a prescriptive one. Giving detailed feedback to students and marking their work so that they can see how they progress brings added value to courses in higher education. This is something rarely offered by industry-based courses because feedback and discussions with students are necessarily time-consuming.

Outside the field of translation, it is rather disappointing to observe that undergraduate and postgraduate degrees on game development only cover localisation very briefly, if at all, as can be seen in the curricula of most higher education providers offering these courses around the world. The IGDA Education SIG (the Special Interest Group dedicated to the education of video game professionals part of the International Game developers Association) ([www.igda.org/wiki/images/e/ee/Igda2008cf.pdf](http://www.igda.org/wiki/images/e/ee/Igda2008cf.pdf)) mentions it only once in its recommended curriculum. In some cases, scholars in universities with apparently ideal-sounding combined degrees seem to struggle to liaise with each other. An example of this is reflected by the current situation at the University of Limerick where they offer study programmes in game development<sup>117</sup> and software localisation,<sup>118</sup> but they are apparently unable to collaborate in any meaningful way, let alone create truly integrated programmes. This is perhaps symptomatic of the long road ahead before video game localisation becomes fully assimilated by institutions of higher education.

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<sup>117</sup> Official website: [www.ul.ie/courses/MultimediaAndComputerGamesDevelopment.shtml](http://www.ul.ie/courses/MultimediaAndComputerGamesDevelopment.shtml)

<sup>118</sup> Official website: [www.csis.ul.ie/course/LM632](http://www.csis.ul.ie/course/LM632)

### *6.2.1- The content of university game localisation modules*

As with other fields related to translation, the ultimate goal in game localisation should be the narrowing of the gap between professional practice and training in centres of higher education. A solid academic training in audiovisual translation (and not only in video games) would give students a head-start in the professional arena while, at the same time, catering to the needs of single and multiple language vendors and helping to boost the quality of the linguistic transfer. Most of the essential skills needed to perform these tasks can be obtained in the classroom where real practice can be simulated with good planning and some resources from the game industry. Although this teaching material could be generated or extracted from games by lecturers with game localisation experience and the right tools, it is important that the assets utilised are as close as possible to the actual content and formats in which they are used by companies on a day to day basis, so that graduates become accustomed to real practice and can therefore perform professionally almost immediately after finishing their studies.

In order to help institutions to incorporate modules to teach the right set of skills, universities could begin by offering training in game localisation through their language, translation or localisation departments, pacing their modules so as to include various, progressive steps, depending on the availability of their staff, budget potential, technical facilities, and their contacts in industry (Bernal-Merino 2008d: 150). The following are some of the topics and activities that could be included in these modules:

- 1. Text translation focusing on terminology and text type.* The genre of the video game should also be taken into consideration when selecting material for teaching and

assignments. Games could be selected from a variety of different genres such as racing, role playing, strategy, fighting, etc. (see Section 2.2). This would have implications concerning the terminology used as well as the writing style and the actual number of strings requiring translation.

2. *Text internationalisation and marketing considerations*, both from a geocultural and geopolitical perspective. The analysis of all the content and assets included in the game, and not only the linguistic component, would help to foster the development of a mature critical approach to localisation practice in students. Some of the areas that might be discussed include the way in which the game will be received by importing locales, taking into consideration the relevant political, cultural and religious practices, for instance.
3. *Textual analysis for audio and video localisation*. Listening to voiceover files whilst watching video renders and gameplay allow students to assess how the interplay of language and multichannel information create meaning. This is also the ideal way to prepare for recording duration and lip-synching requirements, aspects which appropriate translations can assist through the provision of longer or shorter options, as well as options with more or less bilabial consonants and close vowels.
4. *Text translation for multilingual game websites*. According to Esselink (2006: 28) most of today's websites contain considerable scripting and software functionality, so much so “that Web localization requires a wide range of engineering skills. For Websites based on content management systems (CMSs), the story gets even more complex”. Students should be taught to use these applications and to work in teams through a content management system, to simulate as closely as possible the reality of today's web localisation industry. A good example of current professional practice is the European PlayStation website (<http://uk.playstation.com/country-selector>), where lecturers can



easily find material to use as exercises for their students by consulting the different language versions.

5. *Text translation and platform-specific considerations.* Although these are, in fact, similar and are ultimately used in comparable ways, there are enough platforms to keep a classroom occupied for weeks: desktop computers and consoles (PC, Mac, Xbox 360, Wii, PS3), and handheld devices (Nintendo DS and 3DS, PSP, mobile phones, smart phones, tablet computers). The particular platform influences the size of the project as well as the type and rigidity of the constraints encountered. For instance, as was seen in Section 2.2.3, a mobile game may have a few hundred translatable strings. This text has to be displayed on a small screen ranging from 240 x 320 to 1280 x 768 pixels. Although high screen resolution can project a very crisp image, the texts displayed in video games have to be sized specifically for each handset in order to enhance legibility and readability. On the other hand, a game for a personal computer normally has several thousands of lines to be translated, and the screen resolution can be higher than 1920x1080 pixels, which can neatly display lines of text with more than a hundred characters per line.
6. *Translation and project management tools.* The training necessary to use these tools could be shared across different modules so that their use becomes as frequent as possible. Computer assisted translation tools are becoming more commonplace in translation companies regardless of the industry to which they cater. Project management and content management tools must also be introduced because the translator profile sought by companies increasingly includes project management skills, owing to the fact that basic translation work is frequently outsourced to freelancers. It is of course important to understand that “teaching students how to handle specific localization tools is not the most important aspect” (Drouin 2006: 51), as these tools will no doubt change

and evolve. Tutors should certainly “help students understand the capabilities and [...] the limits of such tools. It is also crucial that they understand when, and in which context, they should or should not use electronic tools” (*ibid.*).

### 6.2.2- *The practical exercises included in university game localisation modules*

Since proficient bilingual communication remains at the core of any localisation project, the initial approach might include the use of text-based exercises. The first two or three sessions of a dedicated game localisation module, for example, could be organised to make use of this ready resource. Students could be given a variety of excerpts from games across the different genres using manuals, web resources, screenshots, and text-only files. The tutors could, then, focus on the translation of various textual types, as was proposed earlier, in Section 4.2.

- Narration: in which gamers would be immersed in the imaginary world of the game and the role selected by them in order to complete the adventure successfully. This would include the necessary literary writing style, with a focus both on narration and dialogue.
- Instructions: with which players are instructed on how to install and play the game correctly. Applying the right terminological conventions for each brand and platform is a key part here. For example, game controllers for the three main desktop consoles have small joysticks which players manipulate with their thumbs in order to play the game. This joystick is called the ‘analog stick’ [*Joystick analógico*] for Sony’s Playstation, ‘thumbstick’ [*Stick*] for Microsoft’s Xbox, and ‘control stick’ [*palanca de control*] for Nintendo’s Wii. Here the focus would be on a didactic writing style.

- Technical specifications: these inform buyers of hardware and software requirements so that they can fully enjoy the product, know what to do and whom to call on when the hardware malfunctions. Here the written style is direct and exhortative.
- Promotional discourse: this is used to attract the customer's attention and encourages him/her to purchase the game. A journalistic writing style with marketing characteristics is necessary here.
- Legal contracts and agreements: these remind buyers of their rights and duties as owners of the product. The writing style should be assertive and legally precise.

This first step would familiarise students with the linguistic variety encountered within a single video game project, and initiate them regarding the appropriate use of terminology, genre, register, and style. In addition, they would also sharpen their desktop publishing skills by dealing with richly formatted files.

#### *Project workflow: collaboration and management*

Simulating genuine practice in the classroom is not always easy, especially when several students need to work together towards a common end because of the tensions resulting from team work (Vienne 2000) when they are used to working alone, and the demands resulting from the simulation of a business environment. This is certainly a good way of enhancing the learning experience of students, assisting them to start on their professional path as translators by focusing on a particular project and how their own personal skills can enrich it (Kelly 2007, 2008). Students can be organised into groups in imitation of game localisation companies, in which they are given different tasks to contribute to the overall project. Of course, students should be guided by their tutors at all times so that they are aware of how

they may complement each other's skills within the team. By collaborating in this way, trainees can better appreciate the relevance of quality assurance, the importance of working as part of a team, the necessity of sticking to project deadlines, and the like. Austermühl (2006: 72-3), talking about his own teaching experience and how he introduced localisation into his university, writes about team work and real-life projects as follows:

Students not only use typical translator tools such as terminology management systems, translation memories, and localization tools, but also learn how to manage and coordinate small localization projects. On each of the two levels, students carry out a specific localization project, one focusing on software localization, the other on website localization. If possible, these courses are based on real translation tasks, i.e. involving real clients and the subsequent publication of the project results. Where this is not possible, a real-life project is simulated. The courses include all stages of a localization project from analysing the source text, calculating the (unfortunately fictitious) budget, organizing and managing the distributed translation of the files, creating and maintaining a project terminology base, building customized corpora, and using CAT tools such as Catalyst or Passolo for software localization or Cats Cradle or Trados Tag Editor for HTML/XML files. Students take on individual roles and become project managers, terminologists, translators or revisers.

Depending on the size of the project and the language pairs present in the group, lecturers can set up different teams and projects, and then assign roles to each of the students, whilst at the same time trying to maximise the resources and facilities available in the university. Student roles should rotate among the various members of the team so that everybody learns about the different tasks, pressures, and responsibilities involved in the process. Of course, lecturers would need to do a lot of preparatory work, setting themselves up as the client (developer or publisher) and encouraging professional interaction between all the team members. The roles that might be simulated include:

- Localisation managers: These normally represent the point of contact within the company for publishers and are ultimately responsible for obtaining all the original linguistic assets that need to be translated, and for delivering the translated assets fully tested. Managers need to liaise with the different localisation coordinators to make sure that the language register of the target text has been correctly pitched and that it is compliant with the branding and naming conventions required by each platform.
- Translators: Whether working as freelancers or in-house, translators are responsible for the linguistic transfer from the source to the target language. Translators are expected to work with TMTs, word processors, tables, and spreadsheets. The variety of formats and lack of context can make the task facing language professionals unnecessarily complex. In order to adhere to real-life practice as closely as possible, students should be made to translate isolated strings of text without any more context so that they become familiar with professional practice, developing their imaginations (as is done in some audiovisual translation study programmes). Students should also learn what remuneration may be expected in this field (per word, per page, per project), the legal process of becoming self-employed, and how to invoice for their services.
- Localisation coordinators: These professionals are in direct contact with the translators or the (outsourced) companies handling the translation, as well as with the head linguistic testers, previously via email and telephone, but increasingly through project and content management tools such as XLOC (Section 5.9.1), which include a query pipeline system to this effect. Localisation coordinators are responsible for making sure that all language versions go smoothly and are delivered on time, in accordance with the deadline. Coordinators have to verify that ‘bug

reports' are filled in accurately, and that relevant information is shared among all testers, as well as checking that engineers understand the corrections detailed in the report.

- Linguistic testers: These professionals have to examine every text, option, dialogue, and game menu meticulously and to verify that the language used is terminologically accurate, correctly written, and in line with the feel of the original game. This role can be simulated by selecting a recent notoriously 'buggy' game, or one of the older titles still available.
- Lead/Head linguistic testers: These are in charge of overseeing the linguistic proofing and overall quality of the languages being tested, as well as being responsible for the implementation of the bug reports that will in turn be passed on to the engineers who have the responsibility of making the corrections to the game code. As with the previous role, linguistic testing can be simulated by selecting a recent notoriously 'buggy' game, or one of the older titles still available.

This type of exercise can help to bridge the gap between in-house training and higher education, with the added benefit of encouraging students to learn about all the tasks and professional roles involved in order to complete a localisation process. This in turn contributes to the recruitment of more knowledgeable and responsible practitioners. Indeed, the more realistic and professional the classroom practice, the more complex and sensitive the assessment of such exercises can become. This is because the measurement of some of the professional parameters and skills, such as team coordination, query management, project deliverables per milestone, etc. tend to fall outside the assessment criteria commonly used for educational purposes.

### *6.2.3- The assessment component of university game localisation modules*

The basis for an appropriate assessment is the selection of the right material combined with a set of crystal-clear outcomes closely associated with the task at hand. Any assessment will have to be consistent with the content taught throughout the module as well as with the exercises carried out during classes. As far as possible, the degree of complexity of the evaluation task should be measured and the potential difficulties identified and quantified beforehand. In Kussmaul's words (1995: 153): "we cannot grade an error unless we have analysed the problematic text passage. Analysis is the basis for our evaluation". This makes the preparation of exams and assignments more time-consuming, but the marking process can be speeded up if the assessors have access to a template of expected results. When feasible, feedback should be provided to all students individually as soon as possible after the completion of the actual task, as students tend to benefit most from feedback given when the task is still fresh in their minds.

Individual performance in the proposed types of group-work activities mentioned above can be difficult to assess, but careful preparation of projects and the rotation of roles should give enough evidence with which to assess the performance of each student. Project logs and team reports can facilitate individual assessment by providing the assessor with an insight into how tasks were carried out and by whom, as proposed by Kelly (2005: 144-5). If tutors have a large intake of students with different language pairs, it is a good idea to design several multilingual projects with different parts that extend the duration of the module, even allowing for the chronological overlapping of some of them in order better to simulate their future professional life. This may help students to abandon the mentality created by the university environment in which assignments are only partially applicable to the professional

world outside, and to help them come to terms with the pressures typical of the profession and the complex issues that might arise suddenly, but that have in fact been planned by the lecturer to this effect. Although this might seem daunting to students at first, the skills which they will develop as a result will be appreciated by employers when they see that these recent graduates are performing in a manner similar to professionals early on in their careers, owing to the fact that they have both the traditional linguistic and translation skills and an understanding of the industry, the project milestones, team coordination, and a knowledge of the tools used by the industry.

The use of the latest tools can give lecturers and universities the illusion of offering the best training, but although important, technology should be seen neither as an obstacle to training new translators because of their complexity and high price tag, nor as an end in itself, as Pym (2006: 132) warns us:

It has taken us some decades to develop modes of teaching that reduce the asymmetric relation between teacher and student. We have found ways to teach translation without pretending to be absolute authorities. We have learned to live with the imbalances of our situation. The risk is that we now make the technology an authority. We should not assume that its deceptive symmetries provide answers to all our problems.

However, it is also true that technology has become an abiding reality and with due care it can be used as a flexible tool that can help create a better training environment for learners, as well as an assessment aid to enable educators to design their testing activities, thanks to the many reporting features possessed by the applications mentioned earlier (Section 5.9), such as the bug reporting summary (Figure 86 in Section 5.6). This can be used a means by which the performance of the team can be appraised, enabling an evaluation of the involvement of



each member, thanks to the fact that the tool records all the actions taken by each of the team members, which always poses a problem when evaluating team work in university assignments (Fox 2000). Continuous assessment through exams and assignments should provide lecturers with a sense of both the practical and theoretical knowledge of their students, as well as indicating their flexibility of mind and their potential for further professional development.

### **6.3- Translation theory and game localisation**

As we have seen in Chapters 4 and 5, video games are complex audiovisual entertainment products with a wide variety of multichannel, interactive texts. This alone sets it apart from previous translation practices and merits new cross-disciplinary studies to explain their translational challenges. From a professional viewpoint, today's rapid-changing game industry requires that LSPs (language service providers) offer them an end-to-end solution, in other words, it demands that LSPs work with multiple text and image formats, software tools, and translator teams in order to fulfil the simultaneous worldwide release promised to fans. Existing theoretical models of translation can help in the study and understanding of the localisation of video games, but it seems that a more comprehensive, holistic approach would be needed in order to explain the phenomena described in the previous chapters. The present research tries to open a new pathway by identifying useful concepts in established translation theory.

Linguistic-based theories have dominated translation studies with equivalence at its heart until the last part of the 20th century: sense-for-sense translation (with dynamic equivalence

(Nida 1964), functional equivalence (De Waard and Nida 1986), covert translation (House 1981), communicative translation (Newmark 1988)), and word-for-word translation (formal equivalence (Nida 1964), overt translation (House 1981), semantic translation (Newmark 1988)). The reality of translation has often fallen short of the equivalence ideal because of the natural linguistic, cultural and historical differences between languages. The prescriptive nature of linguistic-based theories and their apparent disregard for the sociocultural conditions under which originals and translations have to be created in order to comply with the requirements of communication (Bassnett-McGuire 1980; Bassnett and Lefevere 1990) are their weakest point. The realisation that neither originals nor translations are ever created in a vacuum, resulted in a logical shift away from a prescriptive approach to a more descriptive one (Hermans 1985).

Hatim and Mason (1990) and Baker (1992) drew on text linguistics, discourse analysis and pragmatics to conceptualise translation on the model of Gricean conversation. In these terms, translation means communicating the foreign text by cooperating with the target reader according to four conversational principles: quantity of information, quality of truthfulness, relevance of context, and manner. A translation is seen as conveying a foreign message by utilising the rules of the target community. Pragmatic-based translation theories assume a communicative intention and a relation of equivalence, based on textual analysis, making the entire text the unit of translation. Gutt (1991) employed a cognitive approach to study translation. He extrapolated from relevance theory (Sperber and Wilson 1986) by arguing that faithfulness in translation is a matter of communicating the intended interpretation of the ST through an adequate TT creation that avoids excessive or unnatural processing on the part of the receiver of the translated text. From his viewpoint, relevance theory disposes of the need for an independent theory of translation by incorporating it into the category of human communication. These theories may help with certain tasks in game localisation, such as with

the creation of glossaries and phraseologies, the alignment of strings across languages for the creation of TMs and evaluative checks on new translations to repurpose old ones, but their textual scope is too narrow to account for the localisation of multiformat, audiovisual interactive entertainment products.

Krings (1986) studies the process of translation from a psychological point of view, a popular shift during the 1990s. Lörscher (1991) and Fraser (1996) used think-aloud protocols to collect empirical data, as well as questionnaires and interviews. However, it was obvious quite early on that this verbalisation could not register unconscious processes, and it may actually change the mental activity it is trying to report on. Bell (1993) argued for two actions to be taken in translation theory. First of all, given the emphasis placed in the past on the evaluation of the product, it seems essential that the balance be redressed through a systematic study of the process of translation, because part of a theory of translation would account for the process of moving from original text to mental representation and how it differs from the original text. Secondly, to formulate a translation theory that helps in the understanding of the processes undertaken in the act of translation. Translation theory must be able to explain the steps translators take to turn the ST into the TT, and the strategies followed to accomplish this; the emphasis is on the process to generate the translation. Process-oriented translation theories can help video game translators by providing them with the strategies applied more often for each type of translation challenge, and perhaps to inform quality control mechanisms, but it is text and the translator that are at the centre of these theories, a focus too narrow to account for the complex, pressurised professional activity that is the localisation of multimedia, interactive, entertainment software.

The most common theoretical assumption of these approaches is the relative autonomy of the translated text that is the result of translation. Descriptive translation theorists start with an examination of a corpus of texts in order to determine the norms operating on them, in a specific culture and at a specific moment in time (Even-Zohar 1990). The relation between translations and their originals is described in terms of the alterations that may come about in each instance given the circumstances present in the TL country around that type of text. This perspective is often labelled the “manipulation school”, and it counted with the studies and insights of Toury, Lefevere, Lambert, van Gorp, Hermans, and Bassnett. Although video games have been around for more than four decades, many consumer countries have not developed their own video game industries, so they did not have an existing text model when video games arrived, which means that their gaming habits and culture were modelled after, the two leading nations in this industry, the US and Japan. In this sense, the polysystem approach proves more fruitful when studying the localisation of games between North America and Japan, where video games are clearly manipulated (Mangiron and O’Hagan 2006) to enhance the reception of the game product to the taste of the receiving gamer community.

The functionalist approaches seek to liberate translators from an excessively servile adherence to the source text, looking at translation as a new communicative act that needs to adjust to the person, company or organisation that pays for the service. The intended function or *skopos* of the TT determines the translation strategies to be employed, as oppose to the function of the ST (Reiss and Vermeer 1984). In this way, they overthrew both the ST and linguistic equivalence as the measure of quality. Vermeer regards a translation as valid as far as it functions according to the purpose it has in the target culture. This was the first time that aspects of professional practice beyond the text and the translator were formally included in a

translation theory. It is clear that a translator begins by analysing the translation skopos as contained in the client's brief. It is the initiator of the process that rules on the translation skopos and not the ST. Nord (1997) adds the concepts of loyalty and convention in order to limit the variety of possible skopos. The translator is free to contravene existing conventions, but loyalty towards the author, the ST and the readers of the TT are meant to compel translators to specify exactly what aspects have been adapted (Nord 1997). As internationally popular consumer products with short shelf-life, localised video games rarely vary in skopos from their original. In addition, a growing number of games encompassing both casual and mainstream markets, encourage the virtual interaction of players irrespectively of their nationality and country of residence, resulting in a skopos that is shared by all countries. For this reason, game developers and publishers are interested in maintaining the brand intact across nations, although the functionalist approach may be inappropriate for many video game products, it can yield valuable results for the study of the influence, and even the censorship, that highly profitable markets, political regimes and independent age rating boards across the globe exert.

During this same decade, a postcolonial translation theory emerged from the reflexion that translation has often served as a tool of imperialism (Robinson 1997) both consciously and unconsciously. The formulation of recent concepts on globalisation, tribalisation and cultural identity stem from it (Snell-Hornby 2000). Words and concepts are utilised in the TT (foreignisation) to drawing attention to the difference between the local and the imported, initially from a more powerful nation. Venuti (1995) uses the concept of 'resistance' to refer to the strategy of translating a text so that it retains something of its foreignness. This approach challenges the functionalist approach that the only valid way of translation is to produce a TL translation that can pass for original, domestic penmanship, because some

readers in some cases may favour an ‘alien’ reading experience (Wallmach 2000). Language service providers in the last two decades, and especially those associated with the software industry embraced globalisation early on, and other common terms such as ‘locale’, ‘localisation’ and ‘territories’ seem to confirm the imperialist spirit. However, not only has there been an increase in the amount of languages demanded from LSPs, but the direction of translation is starting to change on the back of emerging game development industries in countries around the world, such as Poland, Russia, Korea and China. So while tribalisation is at work in countries whose population feels that its cultural identity differs from the country that invaded them, such as Mexico and Spain, or Brazil and Portugal, the picture is far more complex, and the appeal of the foreign (North American and Japanese) remains a selling point in many importing countries regardless of history.

As a result of the recent emphasis on culture within TS, translation has become an important object of study in the search for the cultural impact of gender-specific influence on culture (Simon 1996). The dethronement of the ST, universal meaning and the link between gender and language is showing a worthy ground for the exploration of interventionist practices in the translation profession (Von Flotow 1997, De Marco 2012). Video games have traditionally been designed by men and played for men, and it seems rather self-evident when considering the most popular activities depicted in games up until recently: shooting, racing, fighting, sports, and war strategy. However, this is starting to change due to the rise of casual gaming enabled by the immense popularity of social networks and smartphones which have favoured a different array of game genres, tailored to an ever-increasing community of casual players internationally, young and old, male and female. This approach may yield valuable results specially if inclusive of various genres and combined with statically significant player data.

Corpus linguistics applied to TS uses immense cross-referenced databases in one or several languages that can be explored with the appropriate software. Corpus linguistics provides translation studies with powerful analytical tools that can dissect and quantify trends. The first corpora of translations were created by Baker (1993, 1996, 2000). The promise of this approach is that it may be able to isolate the distinctive features of language in both original and translation, highlighting, for example, the features that may be a clear result of interference of the ST in the TT. The descriptive and cultural approach of corpus TS opens exciting avenues for research grounded on quantitative and qualitative evidence that can shed new light on language, translation in particular, but also on culture and society in general. In this sense, corpus translation studies may highlight the preferences in the translation of video game texts that could help with later formulation of strategies and analysis of quality. However, the postcolonial and gender-based perspective, as well as the applied corpus linguistics one, seem to ignore the significant role that translation tools play in today's language service industry and how they shape not only the TT but also professional practice. In my opinion, the localisation of video games shows that a more comprehensive theory of translation is needed from Translation Studies if it is to accommodate and explain current translation practices. The formulation of such theory is outside of the scope of the present investigation, but it is hoped that the information provided in the preceding pages will go some way into substantiating such need, a research objective that will be undertaken in future projects.

#### **6.4- New research: Industry and academia**

Thanks to the growing appreciation by some chief executives of the important role played by international sales as well as to the increased responsibilities on the part of the personnel in charge of the localisation services, department heads and managers are starting to attend conferences and language services trade fairs to look for ways of improving their translation and localisation strategies and processes, to learn about new tools and technological developments, and to discuss emerging trends such as outsourcing models. Two of the most important initiatives that have contributed to this cross-fertilisation are the “Game Localization Round Table” and the “Localization Summit”.

The first Game Localization Round Table ([www.localizationworld.com](http://www.localizationworld.com)) was held in Berlin as part of the Localization World international conference in June 2007. Since then, it has taken place twice a year, once in Europe during the summer and once in the US during the autumn. This full-day event organised by the industry consists of several distinct sessions presented by experts in game localisation from both the game industry and the localisation companies. Its role is to provide the best possible venue to enable a fruitful and balanced debate between the stakeholders. It has been a multilateral initiative from the beginning, counting on the informal but essential support of a small group of people made up of the conference organiser, video game publishers, game localisation vendors and an academic researcher. The round table relies on the advice of an advisory board of game localisation experts that expands on the knowledge, expertise and contacts of the initial precursors. Some of the companies to have been part of the board are Binary Sonory, Whp, Babel, XLOC (localisation vendors), Electronic Arts, Microsoft Lionhead, Sony Computer Entertainment



Europe (video game publishers and developers), and an academic researcher from the University of Roehampton in London.

The Localization Summit ([www.gdconf.com/conference/gls.html](http://www.gdconf.com/conference/gls.html)) originated from a similar type of synergy between highly motivated stakeholders. The first summit took place in the spring of 2008 within the context of the most important conference in the industry, GDC, the international Game Developers Conference in San Francisco. This aims to help localisation professionals, game developers and publishers understand the critical details involved in planning and executing game localisation as a strategic part of the game lifecycle. The summit is coordinated by its two advisors, Kate Edwards, the geopolitical consultant from Englobe, and Miguel Á. Bernal-Merino, a video game localisation researcher working at the University of Roehampton. It also relies on the support of an elected steering committee from the IGDA Localization SIG whose task is to advise on the new challenges involved in game localisation practice and to promote open professional dialogue and feedback through the mailing list connected with their “Topic of the Week” email initiative. The steering committee consists of game localisation experts who represent the principal actors in the game industry, such as a geopolitical consultant (Kate Edwards, Englobe), a specialist audio localisation vendor (Fabio Minazzi, Binary Sonory), an Asia-block localisation vendor (Ed Steussey, Apogee Communications), an in-house translator and localisation expert (Richard Honeywood, Blizzard Entertainment).

These are the most highly attended events in the field, where game localisation professionals can meet their peers for the sake of sharing information concerning strategies, best-practice, and new challenges. Industry-related events rarely generate proceedings or books, but some of the presentations delivered can be accessed in ‘.pdf’ or ‘.ppt’ format, free of charge, others

by paying a small fee, and are sometimes even accompanied by audio or video recordings from the session itself.

Research into video games is closely linked to audiovisual translation and some conferences in AVT have recently made space for video game localisation research such as Media Across Borders (<http://mediaacrossborders.com>), Media for All ([www.imperial.ac.uk/humanities/translationgroup/mediaforall4](http://www.imperial.ac.uk/humanities/translationgroup/mediaforall4)), Languages and the Media ([www.languages-media.com](http://www.languages-media.com)), Portsmouth Translation Conference ([www.port.ac.uk/research/translation/portsmouthtranslationconference](http://www.port.ac.uk/research/translation/portsmouthtranslationconference)) to name but a few. As with AVT, research in video game localisation is still very new and has taken a while to take off, but the body of knowledge provided by AVT has been the perfect growing grounds for game localisation to develop academically.

Awareness has been raised concerning the localisation of video games in both academic and industry-related circles by the conferences mentioned above. Some highly motivated professionals have also produced a reasonable number of publications and peer-reviewed research papers on video game localisation. Some of the most relevant works in this area have been published in the last ten years or so, showing that this field is relatively new to the academic arena.

*The Game Localization Handbook* written by Heather Maxwell-Chandler, an experienced video game localisation producer, was first published in 2005 and can be considered as the very first comprehensive publication on this topic. A second edition was brought out early in 2012, this time co-authored by Maxwell-Chandler and O'Malley-Deming. While this publication is not openly marketed as a revised edition, it has improved on the first edition by

the inclusion of a number of additional contributions by several game localisation professionals, who were invited to write chapters on topics such as culturalisation (Edwards), audio localisation (Minazzi and Ballista), game localisation tools (O'Malley-Deming), and Translation (Bernal-Merino). This title is a comprehensive guide to producing localised games, irrespective of their platform. However, it has been written from the viewpoint of localisation professionals, with developers and publishers in mind. It contains valuable tips on project planning and management, providing guidelines related to all the tasks involved in the process and their scheduling, including the integration of translation in order to improve the final quality of a localised video game. The topics covered in the 2011 edition are divided into five main sections providing details concerning the principal aspects of game localisation from inception to completion. The first section comprises three chapters which focus on a definition of localisation and an analysis of the required global mind-set. It provides a general overview of each phase of the industrial localisation process, including internationalisation and some of the related legal issues such as software age rating requirements. The second section, containing four chapters, discusses localisation planning, analyses the details pertinent to pre-production tasks, calls attention to the specifics needed when creating localisation-friendly code, explains the ins and outs of working with third-party vendors, presents the various console submission processes, and offers an overview of how to determine budgets, work out schedules, and deal with staffing requirements. Section three is divided into five chapters, relating to the core of the production process in which the production of final, code-released localised versions is discussed. It also provides valuable advice on the organisation and integration of assets for translation as well as on linguistic testing. Section four focuses on the final tasks involved in the localisation process, such as marketing, localisation of demos, assembling localisation kits, and the like. In the fifth and final section, containing two more chapters, the authors explore the common pitfalls in video

game localisation and suggest ways in which to avoid them. It also includes a valuable case study of the localisation of *Tom Clancy's Ghost Recon: Island Thunder*, in which the main complexities faced with regard to the UI and text embedded in graphics are discussed. This manual contains the type of information that could help scholars and tutors to form a better understanding of the process involved in the localisation of video games seen from the viewpoint of the producer. In addition, it might act as a springboard for academics, who could use its content in order to formulate theoretical models, as well as for lecturers, who might be inspired to design valid exercises for the benefit of their students.

Number 5 of the online translation journal *Tradumàtica*, a special issue on video game localisation, was published in November 2007. Guest-edited by Mangiron i Hevia, it represents the first concrete attempt to treat this topic from an academic perspective. She states in her editorial that the ultimate goal of this collection of articles is to present a detailed overview of this new translation practice which for her seems to sit somewhere between the localisation of software and audiovisual translation. In order to study this field from different angles, the articles have been written by academics and professionals alike. This is the list of authors included in this special issue: O'Riada, a journalist specialising in video games, Loureiro, a localisation manager at Pink Noise, Dietz and Torres, two experienced translators in the field of video games, Bernal-Merino, lecturer and researcher at the University of Roehampton, Di Marco, lecturer at the University of Perugia, Muñoz-Sánchez, research student at the University of Granada, Fernández, lecturer in translation at the Universitat Autònoma de Barcelona, and O'Hagan, lecturer and researcher in localisation at Dublin City University. Although some of the articles sometimes incline more towards the anecdotal than a thorough analysis of the subject, this dedicated issue of the translation journal hosted by the

Universitat Autònoma de Barcelona has heralded the formal inclusion of video game localisation as an area of research within translation studies.

The localisation industry magazine *Multilingual*, which is included among the products and services offered by the company MultiLingual Computing Inc, has dedicated some of its pages to the localisation of video games since 2006. Arguably, this magazine is one of the most widely read sources of information open to the localisation industry and businesses, worldwide. The articles, written mostly by practitioners, are rather short and seldom have space to explore issues deeply, but there is a genuine value in the strategies and examples they describe because most of them come from the writers' everyday experiences and natural professional interest. Authors such as Dietz (2006), Hainley and Henderson (2006), Fulvio *et al.* (2007), Wittner (2007), Edwards (2007, 2008), Bernal-Merino (2008c), Crosignani *et al.* (2008), and Zhang (2008) have all contributed to these issues.

In 2011, the academic journal *Trans*, brought out by the University of Málaga in Spain, published a dossier guest-edited by Bernal-Merino which offered “a comprehensive cross-section of the many aspects and decision-making processes concerned with successful video game localisation”. Some of the contributors to this volume are academics with professional experience in the field of game localisation such as: Mangiron, Universitat Autònoma de Barcelona; Serón-Ordóñez, Universidad de Málaga; Vela-Valido, Universidad de las Palmas de Gran Canaria; Bernal-Merino, University of Roehampton. Others are professionals working in the industry with an interest in divulging the principles of good practice such as: Edwards, Englobe; Crosignani and Ravetto, Binari Sonori; Christou, McKearney & Warden, Bioware; Díaz-Montón, WordLab Translations; Bartelt-Krantz, Electronic Arts. In a review on this dossier, Baños-Piñero (2012: 211) compliments the contributors for “treat[ing] the

reader to a wealth of resources, best practices, suggestions, research results, and even didactic proposals”. The reviewer recognises that “[t]aking into consideration the secrecy that often characterises the video game localisation industry, this dossier is a must for those who want to gain some insight into this industry and carry out research in the field”. Although some of the articles focus on Spain and are written in Spanish, the topics discussed are, in the opinion of the reviewer, relevant to an international audience. Méndez (2012) defended his PhD thesis on translation and paratranslation of videogames at the University of Vigo; unfortunately this document was unavailable prior to the defence of the present research.

It is clear that, although research into the translation of multimedia interactive entertainment software is still in its infancy, there is a clear impetus in this area, making it one of the emerging topics in translation research. In this respect, the material which has been published so far is a good foundation for present and future researchers starting their MA dissertations or writing their first articles. They should be able to carry out their research by building on previous experience which will provide them with a starting point from which to focus their investigation.

In this chapter the training opportunities offered by industry-related courses and higher education institutions have been analysed. They both have their strong and weak points often explained by the context from which they originated. Industry-related courses may be too short or too specific, and they may lack the formal assessment that helps teachers to confirm their students’ progress, but they often use real case-studies and direct experience to illustrate each lesson. University programmes may use *ad hoc*, out-of-context examples and ideal solutions that are not always applicable in everyday practice, but they offer continuous and

final assessment to check progress and their essay type assignments encourage the type of reflection and critical thinking that the industry needs in order to find new solutions to existing problems. The relative youth of game localisation both as a profession and as an academic area within translation studies partly explains the shortcomings of the training on offer at the end of 2012.

With the growing demand for translation services at a global level and the call for faster linguistic services, the need for specialisation has reached the translation profession and, although university degrees have been trying to reflect this market reality for some years, there is still some ground to cover, particularly in respect of training students to work in the localisation of video games. With entertainment software no longer being an isolated recreational activity that only appeals to hobbyists and computer geeks, industry, educational centres and academia have finally started to pay closer attention to this field. Nowadays, the domain of video games is a broad one, fuelling a multi-billion pound industry catering for male and female players alike, as well as attracting gamers from all age groups. Another sign of its vigour and strength can be seen in the fact that it is still growing and branching out to adapt to other areas outside the entertainment industry, such as education, professional training and research activities.

At present, the number of courses on offer, specialising in the localisation of video games is still very low, and having little tradition on which to fall back, they tend to suffer from a number of shortcomings. In this sense, neither professional training courses nor university degrees, whether at undergraduate or postgraduate level, can guarantee the absolute top performance of all their students, but the combination of good practices from both, together with the support of professional associations, the localisation industry, translation tool

developers, and working placements and internship schemes can dramatically improve the educational situation. Although there is no doubt that there is still a long way to go, it can be said that, after more than twenty years since its very beginnings, there is now a maturing game localisation industry with strong foundations on which to build. It is the formal educational framework within higher education that has, hitherto, been missing from the picture. It seems clear that for an industry to be truly successful and sustainable in the long run, teaching and research in that topic ought to be fully developed in order to provide the industry with the necessary expertise, as well as the research possibilities to build on current practice year after year.



## **Chapter 7**

### **Conclusion**

Video games, also known as multimedia interactive entertainment software, have been enjoying increasing prominence over the past two decades, so much so that they have become a common pastime for people of all ages and genders, transcending cultural and geographical borders. According to ISFE's latest report for the year 2010 concerning entertainment habits in Europe, one in three Europeans have confirmed that they spend between 5 and 16 hours a week playing games. This is also the case in the US, where ESA's latest report for the year 2011 states that video games are played in 72% of American households, and that the average age of players is 37. Such high percentages have been made possible because of the increasing variety of available games, not only in terms of themes and game mechanics, but also in terms of the development of new genres and the advent of serious games for education and training purposes, as seen in Chapter 2. It is, therefore, not surprising that video games now generate more revenue than the cinema box office and the home video and music sales businesses. Despite these staggering figures which place gaming as a mainstream entertainment activity popular in an increasing number of countries, video game localisation, which has been an essential factor contributing to this global success, has been seldom researched, perhaps due to the low esteem in which it is held in the most traditional academic

departments. This research is intended as a step forward in this respect, advocating the premise that the discipline of Translation Studies is the right one to offer a solid and rigorous conceptual framework, both from a theoretical and translational skills perspective, that can equip researchers with the right tools to embark on the study of this little researched reality. New knowledge and training are necessary to tackle multimedia interactive entertainment software creations because they are some of the most theoretically and technically complex products translation professionals have to work with. The present research is also intended to contribute to and strengthen current translation training in university programmes and professional translation courses with a view to facilitate access to previously unavailable knowledge on game localisation, as well as to promote the development of new skills on translation graduates with first-hand information on principles, strategies, tools and techniques.

As new products requiring translation enter the market, the resulting expansion in research possibilities would seem to constitute a logical step forward for academics operating within the paradigm of Translation Studies. In this sense, the translation of video games shares some characteristics with the translation of literature, film, and software applications, as illustrated in Chapter 3, but it also shows features and processes that are unique to multimedia interactive entertainment software and that set it apart from existing practices. To promote the suspension of disbelief and the immersion of players in the game world is an essential designer strategy that requires, among other things, the use of linguistic variables to enable the interactive dialogue and branching storylines which lead to the feeling of autobiographical involvement among players explained in Chapter 4. In addition, another fundamental aspect of video game localisation is the fact that, unlike most other products, publishers plan for the simultaneous worldwide release of all language versions. This usually

means that the localisation process needs to start well before the product itself has been completed if decent levels of quality are to be guaranteed. Simultaneous shipment, thus, adds unprecedented layers of complexity to the whole localisation endeavour, not only because cross-time zone teams need to be synchronised so that pre-announced dates of release are met, but also because of the lack of finalised information during the translation process, and the multifarious socio-cultural and geopolitical legal issues that need to be taken into account prior to the release of the final video game in each individual country, as explained in detail in Chapter 5.

Although the main countries developing video games are still the US and Japan, many others have joined this blossoming industry, including Canada, the UK, Germany, Russia, Poland and Spain. There is no doubt that the rapid spread of gaming through countries around the world has favoured the young, but expanding, sector of translation services dedicated to the translation, localisation and linguistic testing of video games. Even though English remains in many cases the pivot language through which some languages are translated, adding yet another layer of theoretical and practical complexity worthy of research, the variety of both source and target languages is increasing in terms of new language combinations. In turn, owing to the pressure of time constraints, translation companies demand recruits who are proficient in these previously unusual language pairs, so that the consolidation and provision of such combinations impose new demands on translation degrees that have to cater for this very linguistically diverse new market.

The lack of professionals with the time and aptitude to teach and the absence of published research and works that could help training existing lecturers contribute to the challenge facing current translation programmes in terms of the knowledge and skills required to fill the

gaps created by the emergence of new translation realities, such as video game localisation. Such research needs to be cross-disciplinary in essence, because of the various theoretical issues involved, such as the translation of linguistic variables and culturally marked interactivity, but also because of the need to understand the industrial process in which it is embedded. In this sense, three essential viewpoints have been taken into consideration in Chapter 6, namely that of Translation Studies as an academic discipline, that of the game localisation vendors as the language professionals, and that of the global game development industry as the original creators. The tensions among these three involved parties explain many of the peculiarities that can be found in video game localisation and that have been discussed in detail throughout this thesis and specifically in Chapter 4, in terms of translation and the tasks required of translation professionals. As has been argued in this thesis, a better knowledge of current practice would help generate the beneficial research required to inform and improve processes, as well as to produce better quality products for players across languages. After years of exposure, players have come to expect a translation that allows them to remain immersed in the game world, in contrast to previous, earlier generations which became accustomed to the original version because the quality of localisation tended to be rather low.

To add to the complexity of the translation procedure, professionals catering for the video game localisation industry are confronted with the translation of a wide array of linguistic assets, not only in terms of hardware and software manuals, interactive menus, rich storylines, and voiceover scripts, but also regarding games as products using promotional texts to appeal to players in other countries, with different sets of legal requirements. As discussed in Chapter 5, the concept of ‘deep’ or ‘enhanced’ localisation has recently emerged with respect to video games. This new concept refers to the high degree of creativity required from translators, which is almost one of shared-authorship, resulting in localised versions that

can depart vastly from the original in an attempt to engage players and maintain their immersion in the game experience; an approach practically unheard-of in the translation of other texts where faithfulness to the original tends to be considered sacrosanct. This focus on the creation of a highly customisable entertainment product together with the commercially necessary simultaneous worldwide release are two factors contributing to the relocation of game localisation from the post-production stage it previously occupied to the pre-production stage of product development, turning this particular translation practice into one that can directly influence and, ultimately, modify the final product not only in terms of its language but also of its actual content.

In my opinion, the localisation of video games shows that a more comprehensive theory of translation is needed from Translation Studies if it is to accommodate and explain current translation practices. While linguistic-based theories, process-oriented, descriptive and functionalist approaches, postcolonial, gender-based and corpus linguistics perspectives on translation all can and do contribute to clarify a part of video game localisation, it seems necessary that a harmonisation of theories is achieved so that current professional practice can be fully explained. The formulation of such encompassing theory was outside of the scope of the present investigation but I believe that the preceding pages mapping out game localisation practice, have provided enough evidence to substantiate such need and to point towards new research avenues that will be undertaken in future projects.

The interest behind this investigation has been furnished by the author's avid curiosity concerning the way in which video games are originally produced and later translated into other languages so as to be enjoyed by different linguistic communities with different cultural backgrounds. Together with its extensive bibliography, glossary and additional resources, the

present study present itself as solid ground for future, much-needed research in the area of multimedia interactive entertainment software localisation. The author is well aware that each chapter could constitute a topic for an entire new thesis in itself, as indeed could many of the sub-sections. The lack of available resources and professional forums encountered when the present study was only an ambitious PhD proposal has changed to some degree, and this study has benefited immensely from the opening up of an industry which for several years and until very recently operated in silence and, indeed, almost in secret.

The author has enjoyed being a witness to, and an agent in these changes, contributing to them by creating forums for professional gatherings such as the Game Localization Roundtable and the Localization Summit, by publishing articles in both academic and industry journals with a view to raising awareness of localisation issues in a wider readership, and by initiating a game localisation white paper with the Localization Special Interest Group in the IGDA. This is the most important game developer association and the white paper aims to help companies to write their own set of guidelines and stylebook for each of their localisation projects. It is hoped that these initiatives may help to educate professionals in the game industry in order to guide recruitment processes, as well as ensuring that new employees, from linguistic testing to translation and project management begin with the right knowledge and skills, so that they do not have to improvise *in situ* as their predecessors did.

It is also hoped that the present PhD dissertation will trigger the development of exciting future research within the discipline of Translation Studies, helping it to diversify as well as to explain the increasing translation requirements brought about by multimedia interactive entertainment software products in the new millennium.

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# Gameography

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*James Bond 007: Quantum of Solace* (Treyarch Invention 2008: Activision)

*24: The Game* (SCE Studio Cambridge 2006: 2K Games)

*50 Cent: Blood on the Sand* (Genuine Games 2009: Vivendi Universal)

*Action Man: Search for Base X* (Natsume 2001: THQ)

*Age of Empires II: Age of Kings* (Ensemble Studios 1999: Microsoft Game Studios)

*Age of Empires* series (Ensemble Studios 1997-2009 Microsoft Game Studios)

*Alice in Wonderland* (Digital Eclipse Software 2000: Nintendo)

*America's Army: True Soldiers* (US Army 2007: Ubisoft)

*Asheron's Call 2* (Turbine 2002: Microsoft Game Studios)

*Astérix* (Etranges Libellules 2008: Atari)

*Baldur's Gate* (BioWare 1998: Interplay)

*Barbie Fashion Show: An Eye for Style* (Activision 2008: Activision)

*Batman: Arkham Asylum* (Rocksteady Studios 2009: Eidos Interactive)

*Batman: Arkham City* (Rocksteady Studios 2011: Warner Bros. Interactive Entertainment)

*Brain Training* series (Nintendo 2005-2011)

*Bratz: Forever Diamondz* (Blitz Games 2006: THQ)

*Britney's Dance Beat* (Metro Graphics 2002: THQ)

*Bubble Bobble* (Taito: Romstar 1986)

*Buffy, the Vampire Slayer* (Eurocom Entertainment Software 2003: Vivendi Universal)

*Buzz!* series (Relentless Software 2005-11: SCEE)

*Chillingham* (Bavisoft 2004)

*Club Penguin* (Disney Interactive 2008-present)

*Colin McRae: Dirt* (Codemasters 2007)

*Computer Space* (Nutting Associates 1971)

*Dance Central* (Harmonix 2010-present: MTV Games)

*Dead or Alive 4* (Team Ninja 2005: Tecmo)

*Dead Space 2* (Visceral Games 2011: Electronic Arts)

*Def Jam: Icon* (Electronic Arts 2007: Electronic Arts)

*Desperate Housewives* (Liquid Entertainment 2006: Buena Vista Games)

*Diablo III* (Blizzard 2012)

*Dragon Age II* (BioWare 2011: Electronic Arts)

*Duke Nukem Forever* (3D Realms 2011: 2K Games)

*Elder Scrolls IV: Oblivion* (Bethesda Softworks 2006: 2K Games)

*Escape from Monkey Island* (LucasArts 2000: LucasArts)

*E.T. The Extra-Terrestrial* (Atari 1982: Atari)

*Eve Online* (CCP 2003-present)

*Fahrenheit 451* (Byron Preiss Video Productions 1984: Trillium Corp.)

*FIFA 09* (Electronic Arts 2008)

*FIFA Series* (Electronic Arts 1999-2011)

*Final Fantasy series* (Square Enix 1987-2011)

*Flight Simulator X: Acceleration* (Microsoft Game Studios 2007)

*Food Force* (PlayerThree/Deepend 2005: United Nations World Food Programme, UN WFP)

*Free Realms* (SOE 2009-present)

*Galaxian* (Namco: Midway 1979)

*GCSE Physics* PC CD-ROM. (Letts 2006: GSP)

*Grand Theft Auto: San Andreas* (Rockstar North 2004: Rockstar Games)

*Gran Turismo* series (SCE 1999-2011)

*Grim Fandango* (LucasArts 1998)

*Guild Wars* series (Arena Net 2005-2011: NCsoft)

*Guitar Hero II: Aerosmith* (Harmonix 2008: Activision)

*Hacker* (Activision 1985)

*Half-Life 2* (Valve 2004: Sierra Entertainment)

*Halo: Combat Evolved* (Bungie 2001: Microsoft Game Studios)

*Harry Potter and the Half-Blood Prince* (Electronic Arts Bright Lights 2009: Electronic Arts Games)

*Heavy Rain* (*Quantic Dream 2010*: SCE)

*Kakuto Chojin* (Dream Publishing 2002: Microsoft Game Studios)

*Kinectimals* (Frontier Developments 2010: Microsoft Game Studios)

*L.A. Noire* (Team Bondi 2011: Rockstar Games)

*La Abadía del Crimen* (Opera Soft 1987)

*LEGO Indiana Jones: The Original Adventure* (Traveller's Tales 2008: LucasArts)

*LEGO Star Wars II: The Original Trilogy* (Traveller's Tales 2006: LucasArts and TT Games)

*Les Misérables: The Game of the Book* (C. Tolworthy 2009: [www.lesmisgame.com](http://www.lesmisgame.com))

*LittleBigPlanet* (Media Molecule 2008: SCEE)

*Little Britain: The Video Game* (Revolution Studios 2007: Blast! Entertainment Ltd.)

*Mass Effect* (BioWare 2007: Microsoft Game Studios)

*Mass Effect 2* (BioWare 2010: Electronic Arts)

*Max Payne 2* (RockStar 2003: Remedy Entertainment)

*Mortadelo y Filemón: El Escarabajo de Cleopatra* (Alcachofa Soft 2001: Zeta Multimedia)

*Ms. Pac-Man* (Midway 1982: Atari)

*Pac-Man* (Namco 1980: Midway)

*Planescape: Torment* (Black Isle Studios 1999: Interplay)

*Pong* (Atari 1972)

*Ratchet and Clank* (Insomniac Games 2002: Sony Computer Entertainment)

*Raiders of the Lost Ark* (Atari 1982: Atari)

*Re-Mission* (Realtime Associates/Terminal Reality 2006: HopeLab)

*Rent-a-Hero* (Neo Software Productions 1998: Magic Bytes)

*Resident Evil 5* (Capcom 2009: Capcom)

*Resistance: Fall of Man* (Insomniac Games 2007: SCEE)

*L.A. Noire* (Rockstar Games 2011)

*Scribblenauts* (5<sup>th</sup> Cell 2009: WB Games)

*September 12<sup>th</sup>: A Toy World* (NewsGaming 2003: Freeware)

*Silent Hill: Homecoming* (Double Helix Games 2009: Konami)

*SimCity* (Infogrames 1989)

*SimCity* series (Electronic Arts 1989-2009)

*Smarty Pants* (Electronic Arts 2007: Electronic Arts)

*Space Invaders* (Taito 1978: Midway)

*Spacewar!* (Steve Russell 1962)

*Spider-man: Friend or Foe* (Beenox 2007: Activision)

*SpongeBob SquarePants: Creature from the Krusty Krab* (Blitz Games 2006: THQ)

*Star Wars: Jedi Knight* (LucasArts 1998: LucasArts)

*Super Mario Bros* (Nintendo 1985)

*Super Mario Bros. 2* (Nintendo 1988)

*Super Mario Galaxy 2* (Nintendo 2010)



*Tactical Questioning* (iMedia 2005) \* Not available for the general public

*Teletubbies* (The Learning Company 2005: GSP/BBC)

*Tetris* (AcademySoft 1986)

*The Chronicles of Narnia: The Lion, the Witch, and the Wardrobe* (Traveller's Tales 2005: Buena Vista Games)

*The Complete Driver Learner Kit* (Focus Multimedia 2008: Focus Multimedia)

*The Legend of Zelda* (Nintendo 1986)

*The Lord of the Rings: The Fellowship of the Ring* (Surreal/WXP 2002: Black Label Games)

*The Monkey Island Series* (LucasArts 1990-2009)

*The Sims 2: Nightlife* (Maxis Software 2005: Electronic Arts)

*The Sims 3* (Electronic Arts Redwood Shores 2009: Electronic Arts)

*The Weakest Link* (Traveller's Tales 2001: Activision)

*The Witcher 2* (CD Projekt 2011: Atari)

*The X Factor* (Milestone s.r.l. 2005: Black Bean Games)

*Tiger Woods: PGA Tour 10.* (Electronic Arts Tiburon 2010: Electronic Arts)

*Tomb Raider: The Angel of Darkness* (Core Design 2003: Eidos Interactive)

*Tom Clancy's EndWar* (Ubisoft 2008)

*Tom Clancy's Ghost Recon. Advanced Warfighter 2* (Red Storm Entertainment 2007: Ubisoft)

*Torrente* (Virtual Toys 2001: O3 Entertainment)

*Virtua Tennis 2009* (SEGA 2009: SEGA)

*Viva Piñata* (Rare 2006: Microsoft Game Studios)

*Who Wants to Be a Millionaire?* (Jellyvision 2000: Buena Vista Interactive)

*World of Warcraft series* (Blizzard Entertainment 2004-present)

*Zero Wing* (Toaplan Co 1991)

*Wolfenstein* (Raven 2009: Activision)

# Filmography

(Director Year: Distributor/s)

*007: Quantum of Solace.* (Forster 2008: MWM/Columbia)

*24* TV series. (Surnow/Cochran 2001-09: Fox)

*Alice in Wonderland.* (Geronini 1951: Disney)

*Buffy, the Vampire Slayer.* Drama TV series (Whedon 1997-2003: The WB)

*Charade.* (Donen 1963: Universal Studios)

*Dead or Alive.* (Yuen 2006: Universal Studios)

*Desperate Housewives.* Drama TV series (Shaw/Grossman 2004-09: ABC)

*ET: The Extra-Terrestrial.* (Spielberg 1982: Universal)

*Harry Potter and the Half-Blood Prince.* (Yates 2009: Warner Bros.)

*Little Britain.* Sketch comedy TV series (Walliams/Lucas 2003-06: BBC)

*Lost in Translation.* (Coppola 2003: Focus Features)

*Modern Times* (Chaplin 1936: United Artists)

*Raiders of the Lost Ark.* (Spielberg 1981: Paramount)

*Resident Evil.* (Anderson 2002: Screen Gems)

*Silent Hill.* (Gans 2006: TriStar Pictures)

*Snatch.* (Ritchie 2000: Columbia TriStar)

*Star Wars.* (Lucas 1977: 20<sup>th</sup> Century Fox)

*Street Fighter.* (De Souza 1994: Universal)

*Super Mario Bros.* (Morton 1993: Hollywood Pictures)

*Tom and Jerry*. Cartoon TV series. (Hanna and Barbera 1940-present: Metro-Goldwyn-Mayer)

*The Chronicles of Narnia: The Lion, the Witch and the Wardrobe*. (Adamson 2005: Walt Disney Pictures)

*The Flintstones*. TV cartoon series. (Hanna Barbera 1960-present: ABC-Cartoon Network)

*The Lord of the Rings: The Fellowship of the Ring*. (Jackson 2001: New Line Cinema)

*The Secrets of Genghis Khan* (2008: Odeon Entertainment)

*The Simpsons*. TV cartoon series (Groening 1989-2009: 20<sup>th</sup> Century Fox)

*The Weakest Link*. TV quiz show (BBC 2000-present)

*The X Factor*. TV talent show (ITV 2004-present)

*Tomb Raider*. (West 2001: Paramount)

*Torrente: El brazo tonto de la ley*. (Segura 1998: Lolafilms)

*Who Wants to Be a Millionaire?* TV quiz show (ITV 1998-present)

*Zorro: Generation Z*. (Evans 2006)



# Appendix 1

## Glossary of Terms and Acronyms

**3G:** Third generation telecommunication standard protocol for high speed data streaming via wireless networks.

**ADESE:** Stands for *Asociación española de distribuidores y editores de software de entretenimiento* (Spanish Association of Distributors and Editors of Entertainment Software).

**Agile workflow:** Agile is a software development methodology based on iterative and incremental development where solutions evolve through collaboration between self-organising, cross-functional teams. It is often seen as an alternative to the *waterfall model*.

**AI:** Artificial intelligence. Combination of computer algorithms allowing video games to adapt to the behaviour of players within the virtual world.

**Arcade game:** Name given to the first video games to introduce the electronic form of entertainment into the general conscience. Some of the most popular games in this category include *Space Invaders*, *Asteroids*, *Pac Man*, and *Centipede*, to name but a few.

**Asset pack:** another term for *closing kit*. It contains all the assets and documentation necessary to rebuild the game from scratch without help from the original developers.

**BBFC:** British Board of Film Classification. An independent body that advises on film and video game age ratings for the United Kingdom.

**Beta stage:** The 'beta' version of a software application is a product in a state of near completion that still needs to go through a process of testing in order to solve coding errors, typos, etc. which hamper the smooth running of the software.

**Bug:** Any type of error in programming or writing that makes a computer application malfunction in any way, such as the inaccurate display of graphics textures or typos in on-screen text for example.

**C++:** A programming language that has evolved since 1979 when Dennis Ritchie developed it for the first time. It is regarded as an intermediate level language, as it comprises a combination of both high level and low level language features. These are used to create most software applications on the market nowadays.

**Casual games:** Games used by a mass non-gamer audience, typically distinguished by their simple rules. They have low production and distribution costs for developers and publishers.

**CERO:** Computer Entertainment Rating Organisation. An independent body that advises on video game age ratings for Japan.

**Cheat codes:** Secret passwords unique to each game created by game developers in order to navigate quickly and test specific areas of the game while ignoring some of its rules. Some of the most commonly used ones make players invincible so that enemies can cause them no harm, or endow them with the superhuman ability to pass through walls, for example.

**Cinematics:** Pre-rendered or in-game movies that are an essential part of the storytelling and gameplay experience.

**CGI:** Computer-Generated Imagery, which is the application of 3D computer graphics in order to create special effects for film and television.

**Closing kit:** Folder including the totality of assets of a game (original and localised) compiled after its release for future reference.

**Code:** General term to refer to computer programming languages such as C++, HTML, and Java.

**Code release:** Term used to describe a game that has been fully tested, bug-fixed and is considered ready to ship by publishers.

**Concatenation:** A method whereby text stored in different parts of the game code is put together in a sentence or paragraph by means of linguistic variables and formulae.

**Cutscenes:** Also known as in-game cinematics and in-game movies. Video sequences often found in games over which the player has very limited or no control. Cutscenes are used to strengthen character development and give relevant background information in order to provide the right atmosphere so as to enhance player immersion in the game world.

**Cybercitizen:** This term identifies a person as an active participant in the online community of the internet. This term appeared a few years after '*netizen*'.

**Dev. team:** Abbreviation for 'game development team'.

**Dialogue tree:** Organogram of all the utterances of each character and the different paths the conversation may follow depending on the choices made by players. It is necessary for writers and programmers to keep track of how dialogue exchanges may evolve and affect the outcome of the game.

**DIGRA:** Digital Game Research Association. It is the international association for academics and professionals who research digital games and associated phenomena.

**Dolby Pro Logic:** Surround sound processing technology designed to decode soundtracks encoded with Dolby Surround.

**Dolby Surround:** The earliest consumer version of Dolby's multichannel analogue film sound decoding format Dolby Stereo which was introduced to the public in 1982 during the time when home video recording formats such as Betamax and VHS were introducing Stereo and HiFi capability.

**Double-byte:** Due to the nature of the script in many languages (mostly Asian ones), two bytes are necessary to display their ideograms correctly. The script of most languages based on the Roman alphabet can be displayed in one byte.

**E3:** Electronic Entertainment Expo. One of the most popular consumer fairs held annually in the US to promote new video games and platforms.

**E-FIGS:** Acronym used in the game localisation industry to refer to the five main languages usually chosen for simultaneous international release, i.e. English, (usually the language of development), French, Italian, German, and Spanish.

**ELSPA:** The Entertainment & Leisure Software Publishers Association which defends the interests of interactive entertainment software publishers in the UK. It became *UKIE* in 2012.

**ESA:** Entertainment Software Association. North American association dedicated exclusively to serving the business and public relations requirements of companies that publish video and computer games.

**ESRB:** Entertainment Software Rating Board. An independent advisory body for video game age rating for the US.

**Fandom:** Community of fans of a particular theme (e.g. science fiction), story (e.g. Camelot's Knights of the Roundtable) or character (e.g. Spiderman) often belonging to popular culture.

**FIGS:** Acronym used in the game localisation industry to refer to the four main languages into which most games are translated, i.e. French, Italian, German, and Spanish.

**G11N:** Globalisation. It refers to the range of processes necessary to prepare and launch products worldwide based on the strength of the internationalisation of the product design.

**GALA:** The Globalization and Localization Association is a worldwide professional organisation within the localisation industry providing resources, education, ideas and research to enhance the power and performance of the translation and localisation sectors.



**GameCube:** First game console by Nintendo, released in 2001. See also *GC*.

**Gameplay:** This is mainly used in video games to describe the overall experience of playing a video game. It normally refers to the ease with which the game is learned and how much fun can be derived from playing it. Sometimes, factors such as story, graphics and sound come into the equation as their quality can greatly affect the experience of the gamers.

**GBA:** GameBoy Advance. Hand-held game console released by Nintendo in 2001.

**GC:** GameCube, first game console by Nintendo, released in 2001.

**GDC:** Game Developers Conference. It is one of the most important international developers' conferences for the video game industry.

**GILT:** Globalisation, Internationalisation, Localisation and Translation.

**Gold master:** This is the term used to refer to the final version of the game code when it is ready to be manufactured.

**GUI:** Graphical User Interface. The acronym used to refer to the menu screens navigated by the users of software products in order to interact and customise the program to their needs or preferences.

**Hard-coded localisation:** An expression used to allude to the strings of translatable text embedded in the game code, which are, therefore, more troublesome to work with for translators.

**HP:** Hit Points. In most video games, players are given a certain amount of points that illustrate their character's health or resistance to damage. When this figure is reduced to zero in the course of a challenge, i.e. the points of damage inflicted is higher than the health points, the player's avatars die.

**HTML:** Hypertext Marked-up Language. Artificial language used to create hypertext documents like the ones we find on the internet.

**I18n:** Internationalisation. The process designing a product so that it can be easily localised in order to achieve worldwide distribution and success.

**IGDA:** International Game Developers Association. This is the largest non-profit membership organisation serving individuals who create video games.

**IP:** Intellectual property. This is mostly used in the entertainment industries to refer to specific products, series or franchises such as *Final Fantasy*, *Super Mario* or *Halo* in the case of video games.

**Java:** Programming language based in C and C++ and released by Sun Microsystems in 1995. It is very popular for internet-based applications and games, and it is platform independent.

**Locale:** The language and culture variety natural of a particular geographic region. It is more specific and business-sensitive than language, for example, Portuguese from Brazil is a locale different from Portuguese from Portugal.

**L10n:** Localisation. The process of adapting a product to each of the importing locales in terms of their linguistic, technical, cultural and legal requirements.

**LAN:** Local Area Network. Small group of computers located in the same room, or building, and linked to each other in order to enable concurrent group work or co-op game playing. This functionality ushered in the beginning of the online gaming revolution of the past ten years.

**LCD:** Liquid Crystal Display. Term used to refer to the technology employed in most portable computing devices such as laptops, gaming consoles, and mobile phones.

**LISA:** Localisation Industry Standards Association, founded in 1990. One of its principal remits was to provide professional support for the development of enterprise globalisation guidelines, with the ultimate goal of ensuring that multiple language business processes, services, software, documentation, and other products could be implemented worldwide to the highest possible standards. It ceased to exist in April 2011.

**Locale:**

**LPM:** Localisation Project Manager.

**LW:** Localization World. The biggest international software localisation conference, which takes place twice annually, once in Europe and once in North America.

**MAC:** Line of computers designed by Apple.

**MLV:** Multi-Language Vendor. A translation services company providing different language combinations, carried out either by in-house professionals, or by subcontracting *SLVs*.

**MM:** Acronym originated in the technology industry to refer to ‘MultiMedia’ capable computers.

**MMO/MMOG:** Massively Multiplayer Online / Game.

**MMORPG:** Massively Multiplayer Role Playing Game.

**Multi-layered graphic file:** Image editing programs which seamlessly apply multiple layers to an image. One of the layers may contain the graphics from the game, while other layers will be created for the title, the age rating, the logos of the various companies involved in the project, newspaper quotes, and the copyright notice.

**Multitextual:** Term used to refer to a translation project containing different types of text in different styles and formats.

**NDA:** Non-Disclosure Agreement. Legal contract signed by people involved in game development, publishing, and localisation to prevent them from divulging any information about the game in question.

**Netizen:** Blending of the words ‘internet’ and ‘citizen’ to refer to individuals involved in online communities. They are also referred to as *cybercitizens*.

**NINTENDO DS:** Handheld console with Dual Screen, one of which is touch-sensitive. Released in 2004 by Nintendo.

**NINTENDO Wii:** Latest high-end console released by Nintendo in 2006. Code-named ‘revolution’, it is based around the concept of direct motion control, which means that when players move the controllers their avatar will move the screen. This is a more intuitive control system than the traditional abstraction represented by pressing buttons.

**NPC:** Non-Playing Character. Acronym used in role playing, in both table and computer games, to refer to game characters created and controlled by the game master, or the computer.

**NTSC:** This is the analogue television system in use in Canada, Japan, South Korea, the Philippines, the United States, and some other countries. It is the abbreviation for the National Television Systems Committee, the US standardisation body that adopted it. Other common analogue television systems are SECAM and PAL.

**OEM:** Original Equipment Manufacturer. Generally used to indicate the original version of a product, often when referring to the software preinstalled on hardware such as a PC.

**Open world game:** An open world game is a type of video game level design where players can roam freely through the virtual world and are given considerable freedom in choosing how or when to approach their objectives.

**OS:** Operating System. Software program that interfaces between the user and a piece of computer hardware, and is designed to enable users to communicate with the machine successfully and productively.

**PAL:** Acronym for Phase Alternating Line, which is a colour encoding system used in broadcast television systems in large parts of the world. Other common analogue television systems are *SECAM* and *NTSC*.

**PC:** Personal Computer. Term often used to differentiate Windows OS (by Microsoft) from MAC OS (by Apple).

**PDA:** A Personal Digital Assistant is a handheld device designed primarily as a personal organiser or diary although it may have many other features. All these features are now available on smart phones.

**PEGI:** Pan European Game Information. Age rating system established in 2003 to help European parents make informed decisions when buying interactive games.

**Pickup-and-play:** This phrase refers to the unwritten but widely accepted game developing philosophy which places the player's instantaneous immersion in the game as its most important prerequisite and prioritises a pain-free game playing learning curve.

**P&L:** Profit and Loss statement. Projection generated by the publisher in order to assess profitability.

**Platform:** General term used to refer to any digital gaming devices such as desktops and laptops, personal computers, desktop game consoles, or mobile devices such as handheld consoles, PDAs, and Mobile phones.

**Playerdom:** Community of video game players possibly overlapping the wider fandom community, but specific to multimedia interactive entertainment software.

**Port/Porting:** Product or process of adapting a game to create a new version for another operating system or console platform.

**Pre-rendered:** Term used to describe video game graphics that cannot be generated in real time by the game engine due to their high level of detail, typically used in in-game *cutscenes*.

**PS:** PlayStation. First trademark game console released by Sony in 1995. More powerful versions are the PS2, launched in 2000, and the PS3, in 2007.

**Pseudo-translation:** Process by which localisation (coding) engineers can automatically replace the original language contained in a game by random characters often from the Unicode standard set. This allows for the checking of clarity and completeness of display, of

bugs triggered by special characters, etc., solving preventable localisation problems before the language transfer.

**PSP:** PlayStation Portable. Handheld game console designed by Sony in 2005.

**Regression:** Part of the linguistic testing process in which *bugs* are retested after being fixed by development teams.

**Rom hacking:** Process in which game fans and hackers get together with the aim of cracking and modifying games (mostly those belonging to older game generations) with the intention of localising them (or improving them in any way) for their locale or community.

**Screenshot/Screen capture:** Image taken straight from the video game while playing. It is often used by marketing teams to attract possible buyers, and by players to assess the aesthetic quality and appeal of games.

**SDK:** Software Development Kit. Group of computer programs and tools facilitating the development of video games.

**SECAM:** *Séquentiel couleur à mémoire* (Sequential Colour with Memory), is an analogue colour television system first used in France. Historically, the first European colour television standard.

**Serious games:** Game-like interactive applications designed for the purpose of communicating specific information (advertising) or training players on a particular issue or professional skill.

**SIG:** Special Interest Group. Acronym used within the IGDA to define different communities of volunteers seeking to develop further specialist topics in the creation of video games.

**SKU:** Stock Keeping Unit. Often used by producers in video game localisation to refer to the different builds or platform versions that need to be localised.

**SLV:** Single-Language Vendor. Translation company specialising in only one language combination.

**Splash screen:** Name usually given to the first screen that appears when inserting the game disc or executing the launch file.

**Specs:** Short for (technical hardware) specifications.

**Texture/Texture map:** Term used in 3D digital design to refer to 2D images that, when applied to the wire frame of the graphic, give the illusion of an authentic 3D object with a real surface or texture.

**TILP:** The Institute of Localisation Professionals, whose primary aim is the global development of professional practices in localisation. TILP is a non-profit organisation.

**TM files:** Translation Memory files contain extensive glossaries which, when used with *TMTs*, can speed up the translation process by automatically prompting the correct authorised translation for all the terms contained in the TM file which appear in the text being translated.

**TMT:** Translation Memory Tool. Professional software tool originally developed to speed up technical translation, software localisation and multinational websites, used nowadays across the translation industry for many types of text.

**Triple A title** (also AAA title): These are games with the biggest budgets (in excess of £10 million) which are expected to become blockbusters. They attract the best creative talent into the team appointed to design the game down to every last detail, and are subject to very aggressive marketing campaigns even rivalling cinema releases.

**Sim-Ship:** Simultaneous Shipment. The practice of releasing internationally both the original and the localised versions of a video game at the same time.

**UI:** User Interface. This term is used to refer to the device or display needed by users in order to interact with a machine or computer application. The UI provides the means to input data and commands in order to manipulate the system.

**UKIE:** This is a trade body concerned with representing game publishers in the wider interactive entertainment industry in the UK.

**Unicode:** This is an internationally recognised standard for representing all the letters and symbols used in the various human languages. It contains more than 65,000 characters. Thanks to this standard, data can be transferred and displayed accurately on all computers.

**USK:** *Unterhaltungssoftware Selbstkontrolle* [Self-Monitoring of Entertainment Software]. German entertainment software age rating board.

**W3C:** The World Wide Web Consortium is the main international standards organisation for the World Wide Web (W3).

**WAP:** Wireless Application Protocol, part of the second and third generation telecommunication services offered for data streaming over wireless networks.

**Waterfall workflow:** is a sequential design process often used in software development where progress is seen as flowing downwards from conception, design, production, etc. It is often seen as the opposite of *agile workflow*.

**Wizard:** Name given to small programs used to make the manipulation of software applications more user friendly.

**Wysiwyg:** This stands for ‘what you see is what you get’. Acronym used in computer programming to indicate that, during the editing process, the content is displayed as closely as possible to its appearance as a final product.

**XBOX:** First game console by Microsoft released in 2001. The latest version is the Xbox 360.

**XBOX 360:** Improved version of Microsoft’s console released in 2005 and major rival of PlayStation 3 in the next-gen console wars.

**XML:** This stands for ‘Extensible Mark-up Language’. It is a fee-free open standard recommended by the World Wide Web Consortium (W3C) for creating custom mark-up languages which allows its users to define their own elements.



# APPENDIX 2

## List of Additional Resources

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## **1. Fan game localisation**

Charnego Translations: <http://www.charnego.da.ru>

ClanDlan: [www.clandlan.net](http://www.clandlan.net)

DeJap: [www.dejap.com](http://www.dejap.com)

Fortaleza Romhack: <http://fortaleza.romhackhispano.org>

Romhacking.net: [www.romhacking.net](http://www.romhacking.net)

RPGOne Translations: <http://rpgone10.tripod.com/dq12e.html>

Sayans Traductions: <http://sayans.romhackhispano.org>

Traducciones Magno: <http://magno.romhackhispano.org>

## **2. Gameology**

DIGRA: [www.digra.org](http://www.digra.org)

Gameology: [www.gameology.org](http://www.gameology.org)

Ludology: [www.ludology.org](http://www.ludology.org)

Research paper repository: [www.gamecareerguide.com/features](http://www.gamecareerguide.com/features)

## **3. Localisation associations**

GALA (The Globalisation and Localisation Association): [www.gala-global.org](http://www.gala-global.org)

TILP (The Institute of Localisation Professionals): [www.tilponline.net](http://www.tilponline.net)

## **4. Tools**

### **4.a. Asset extraction and integration, and content management tools**

XLOC [www.xloc.com](http://www.xloc.com)

LocDirect [www.localizedirect.com](http://www.localizedirect.com)

Localizer <http://lingobit.com>

Wordbee [www.wordbee.com](http://www.wordbee.com)

Pootle <http://translate.sourceforge.net/wiki/pootle/index?redirect=1>

Excel/Word + Visual Basic macros <http://office.microsoft.com/en-us>

#### **4.b. Project Management (PM) tools**

Microsoft Project [www.microsoft.com/project/en/us/default.aspx](http://www.microsoft.com/project/en/us/default.aspx)

Plunet BusinessManager [www.plunet.com/en](http://www.plunet.com/en)

Projetex <http://projetex.com>

XTRF [www.xtrf.eu](http://www.xtrf.eu)

LTC Worx [www.langtech.co.uk/us/products/ltc-worx.html](http://www.langtech.co.uk/us/products/ltc-worx.html)

Project Open [www.project-open.com](http://www.project-open.com)

Hansoft [www.hansoft.se](http://www.hansoft.se)

XLOC [www.xloc.com](http://www.xloc.com)

#### **4.c. Computer Assisted Translation (CAT) tools**

ABBYY Aligner [www.abbyy.com/aligner](http://www.abbyy.com/aligner)

Across [www.across.net](http://www.across.net)

Catalyst [www.alchemysoftware.ie](http://www.alchemysoftware.ie)

Déjà Vu [www.atril.com](http://www.atril.com)

MemoQ <http://kilgray.com/products/memoq>

Multicorpora [www.multicorpora.com](http://www.multicorpora.com)

Omega T [www.omegat.org/en/omegat.html](http://www.omegat.org/en/omegat.html)

Pootle: <http://translate.sourceforge.net/wiki/pootle/index?redirect=1>

SDL Passolo [www.sdl.com/products/sdl-passolo](http://www.sdl.com/products/sdl-passolo)

SDL Trados [www.trados.com/en](http://www.trados.com/en)

SDL Trados Multiterm Extract / Phrasefinder

Rainbow [www.translate.com/technology/tools/index.html](http://www.translate.com/technology/tools/index.html)

Rc Win Trans [www.schaudin.com](http://www.schaudin.com)

Star [www.star-group.net](http://www.star-group.net)

Similis <http://similis.org/linguaetmachina.www/index.php?afficher=10&info=Similis>

TermoStat Web [http://olst.ling.umontreal.ca/~drouinp/termostat\\_web/index.php](http://olst.ling.umontreal.ca/~drouinp/termostat_web/index.php)

TerminoWeb [http://terminoweb.iit.nrc.ca/terminoWeb-v2\\_e.html](http://terminoweb.iit.nrc.ca/terminoWeb-v2_e.html)

Wordbee: [www.wordbee.com](http://www.wordbee.com)

Wordfast: [www.wordfast.net](http://www.wordfast.net)

You Align: <http://youalign.com/Default.aspx>

#### **4.d. Bug reporting tools**

Mantis: [www.mantisbt.org](http://www.mantisbt.org)

Jira: [www.atlassian.com/software/jira](http://www.atlassian.com/software/jira)

Test Track Pro: [www.seapine.com/ttpro.html](http://www.seapine.com/ttpro.html)

DevTrack: [www.techexcel.com/products/devSuite/DevTrack.html](http://www.techexcel.com/products/devSuite/DevTrack.html)

Hansoft: [www.hansoft.se](http://www.hansoft.se)

BugZilla: [www.bugzilla.org](http://www.bugzilla.org)

PR Tracker: [www.prtracker.com](http://www.prtracker.com)

Bugtracker: [www.bugtracker.com](http://www.bugtracker.com)

### **5. Universities offering some video game localisation content**

Universidad Alfonso X el Sabio, Spain: Máster en Tradumática, Localización y Traducción

Audiovisual

[www.uax.es/uax/que-estudiar/postgrado/masteres/derecho/xtl.html](http://www.uax.es/uax/que-estudiar/postgrado/masteres/derecho/xtl.html)

Universidad Autónoma de Barcelona, Spain: Máster en Tradumática

[www.fti.uab.es/pg.tradumatica/Tradumatica\\_ES/index.html](http://www.fti.uab.es/pg.tradumatica/Tradumatica_ES/index.html)

Università di Bologna, Italy: Master in Screen translation

[www.unibo.it/Portale/Offerta+formativa/Master/2009-2010/ Master in Screen Translation .htm#didattica](http://www.unibo.it/Portale/Offerta+formativa/Master/2009-2010/Master_in_Screen_Translation_.htm#didattica)

Dublin City University, Ireland: M.A. in Translation Studies

[www.dcu.ie/prospective/deginfo.php?classname=MTS](http://www.dcu.ie/prospective/deginfo.php?classname=MTS)

Universidad Europea de Madrid, Spain: Máster en Doblaje, Traducción y Subtitulación

[www.uem.es/postgrado/master-en-doblaje-traducccion-y-subtitulacion](http://www.uem.es/postgrado/master-en-doblaje-traducccion-y-subtitulacion)

Imperial College, London: Translation Technology e-course on Localisation

[www.imperial.ac.uk/cpd/courses/subject/other/localisation](http://www.imperial.ac.uk/cpd/courses/subject/other/localisation)

Universidad Jaume I, Spain: Máster Universitario en Tecnologías de la traducción y Localización

[http://tecnolettra.uji.es/es/?page\\_id=39](http://tecnolettra.uji.es/es/?page_id=39)

University of Limerick, Ireland: Computer & Video Game Localisation Summer School

[www.localisation.ie/resources/courses/summerschools/2011](http://www.localisation.ie/resources/courses/summerschools/2011)

Universitat Pompeu-Fabra, Spain: Máster en Traducción Literaria y Audiovisual

[www.idec.upf.edu/master-en-traducccion-literaria-y-audiovisual](http://www.idec.upf.edu/master-en-traducccion-literaria-y-audiovisual)

University of Roehampton, England: Master in Audiovisual Translation

<http://www.roehampton.ac.uk/Templates/Pages/Course.aspx?id=2147484892&terms=ma+audiovisual+translation>

Universitat Rovira i Virgili, Spain: Máster universitario en Traducción y Estudios

Interculturales [www.urv.cat/masters\\_oficials/es\\_translation.html](http://www.urv.cat/masters_oficials/es_translation.html)

Université de Strasbourg, France: Master's Degree in languages & multimedia

<http://mastercaweb.u-strasbg.fr/caweb/en>

Universidad de Valencia, Spain: Máster en Traducción Creativa y Humanística

[www.uv.es/posgrau/pdf/castellano/traducccion.pdf](http://www.uv.es/posgrau/pdf/castellano/traducccion.pdf)

Universidad de Vic, Spain: Máster Universitario en Traducción Especializada

[www.uvic.es/en/estudi/traduccio-especialitzada](http://www.uvic.es/en/estudi/traduccio-especialitzada)

## **6. Video game awards**

BAFTA Video Game Awards: [www.bafta.org/site/page20.html](http://www.bafta.org/site/page20.html)

Golden Joystick Awards: [www.goldenjoystick.com/](http://www.goldenjoystick.com/)

## **7. Video game events**

Comic Con: [www.comic-con.org/cci](http://www.comic-con.org/cci)

Develop: [www.developconference.com](http://www.developconference.com)

E3 (Electronic Entertainment Expo): [www.e3expo.com](http://www.e3expo.com)

Gamescom: [www.gamescom-cologne.com](http://www.gamescom-cologne.com)

GDC (Game Developers Conference): [www.gdconf.com](http://www.gdconf.com)

PAX (Penny Arcade Expo): <http://prime.paxsite.com/index.php>

TGS (Tokyo Game Show): <http://tgs.cesa.or.jp/english>

## **8. Video game industry age rating boards**

BBFC (British Board of Film Classification): [www.bbfc.co.uk](http://www.bbfc.co.uk)

CERO (Computer Entertainment Rating Organisation): [www.cero.gr.jp/e/index.html](http://www.cero.gr.jp/e/index.html)

DJCTQ (Departamento de Justiça, Classificação, Títulos e Qualificação):

<http://portal.mj.gov.br/data/Pages/MJFDA11DA1ITEMIDDC6E4B1838104E848ABB30AD195E745DPTBRIE.htm>

ESRB (Entertainment Software Rating Board): [www.esrb.org/index-js.jsp](http://www.esrb.org/index-js.jsp)

PEGI (PanEuropean Game Information): [www.pegi.info/en/index](http://www.pegi.info/en/index)

USK (Unterhaltungssoftware Selbstkontrolle): [www.usk.de](http://www.usk.de)

## 9. Video game localisation events

Game Localization Roundtable: <http://localizationworld.com/lwparis2012/P2.php>

International Conference on Translation and Accessibility in Video Games and Virtual

Worlds: <http://jornades.uab.cat/videogamesaccess>

LRC Computer and video game localisation summer school:

[www.localisation.ie/resources/courses/summerschools/2011](http://www.localisation.ie/resources/courses/summerschools/2011)

Localization Summit: [www.gdconf.com/conference/gls.html](http://www.gdconf.com/conference/gls.html)

Media Across Borders: <http://mediaacrossborders.com>

SIG-Glocal: <http://www.igda.jp/modules/bulletin/index.php?storytopic=21&storynum=5>

## 10. Video game news, reviews and resources

Edge: [www.edge-online.com](http://www.edge-online.com)

Eurogamer: [www.eurogamer.net](http://www.eurogamer.net)

Gamespot: <http://uk.gamespot.com>

Games™: [www.gamestm.co.uk](http://www.gamestm.co.uk)

Gametrailers: [www.gametrailers.com](http://www.gametrailers.com)

Meristation: [www.meristation.com/v3/GEN\\_portada.php](http://www.meristation.com/v3/GEN_portada.php)

Metacritic games: [www.metacritic.com/game](http://www.metacritic.com/game)

Mobygames: [www.mobygames.com](http://www.mobygames.com)

## 11. Video game professional associations

ADESE (Asociación española de distribuidores y editores de software de entretenimiento):

[www.adese.es](http://www.adese.es)

ESA (Entertainment Software Association): [www.theesa.com](http://www.theesa.com)

Miguel Ángel Bernal-Merino

IGDA (International Game Developers Association): [www.igda.org](http://www.igda.org)

ISFE (Interactive Software Federation of Europe): [www.isfe.eu](http://www.isfe.eu)

TIGA (Game Industry Trade Association): [www.tiga.org](http://www.tiga.org)

UKIE (Association for UK Interactive Entertainment): <http://ukie.info>



## Appendix 3

### Game Code UI Script Fragment Sample

```
exec("~/art/gui/gameProfiles.cs");

singleton GuiControlProfile (InvList)
{
    opaque = true;
    fontType      = "Arial";
    fontSize      = 16;
    fillColor     = "150 150 158"; //selection color
    fontColor     = "255 255 255";
    justify       = "left";
};

singleton GuiControlProfile (InvScroll)
{
    // make transparent
    opaque = false;
};

singleton GuiControlProfile (InvGui)
{
    // make transparent
    opaque = false;

    //Font
    fontType      = "Arial";
    fontSize      = 18;

    //Set font color - R G B (range 0 -255 )
    fontColor     = "200 200 200";
    justify       = "center";

    //Draw a border
    border        = 1;
    border        = false;
};

singleton GuiControlProfile( profile name ){ ... }
```

```
//
//global arrays for initial content to be displayed
//

$FOOD      = 0;
$SPELLS    = 1;
$WEAPON    = 2;
$ARMOUR    = 3;

$aInv[$FOOD,0] = "Bread x 1";
$aInv[$FOOD,1] = "Apple x 1 ";
$aInv[$FOOD,2] = "Pie x 2";

$aInv[$SPELLS,0] = "Fall From Grace";
$aInv[$SPELLS,1] = "Ice Call";
$aInv[$SPELLS,2] = "Water Wish";
$aInv[$SPELLS,3] = "Fire Storm";
$aInv[$SPELLS,4] = "Healing Heart";

$aInv[$WEAPON,0] = "Sword of Truth";
$aInv[$WEAPON,1] = "Chain Axe";
$aInv[$WEAPON,2] = "Dagger";
$aInv[$WEAPON,3] = "Elf Staff";
$aInv[$WEAPON,4] = "Ork Hammer";

$aInv[$ARMOUR,0] = "Light Mail";
$aInv[$ARMOUR,1] = "Light Shield";
$aInv[$ARMOUR,2] = "Cursed Gloves";
$aInv[$ARMOUR,3] = "Invisibility Cloak";

//
//Give each of our buttons a function to call
//

function inventoryGui::btn1()
{
    //set the title text
    lblInvTitle.setValue("FOOD");

    //clear the list box of previous content
    lstInventory.clearItems();

    //iterate through our array adding items to our list
    for(%i = 0;%i < 4;%i++)
    {
        lstInventory.addItem( $aInv[ $FOOD,%i ]);
    }
}

function inventoryGui::btn2()
{
    lblInvTitle.setValue("SPELLS");
    lstInventory.clearItems();
    for(%i = 0;%i < 5;%i++)
    {
        lstInventory.addItem( $aInv[ $SPELLS,%i ]);
    }
}

function inventoryGui::btn3()
{
```

```

lblInvTitle.setValue("WEAPONS");
lstInventory.clearItems();
for(%i = 0;%i < 5;%i++)
{
    lstInventory.addItem( $aInv[ $WEAPON,%i ]);
}
}

function inventoryGui::btn4()
{
    lblInvTitle.setValue("ARMOUR");
    lstInventory.clearItems();
    for(%i = 0;%i < 4;%i++)
    {
        lstInventory.addItem( $aInv[ $ARMOUR,%i ]);
    }
}
}
exec("scripts/gui/InventoryGui.cs");

```

The previous script is part of the lines of programming code necessary to create the menu screen shown below.



From Garage Games tutorials on: [http://docs.garagegames.com/torque-3d/official/content/documentation/GUI%20Editor/Tutorials/Images.html#File\\_List](http://docs.garagegames.com/torque-3d/official/content/documentation/GUI%20Editor/Tutorials/Images.html#File_List)