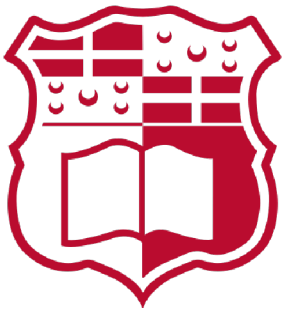
Exploring video game subtitling: a local user-oriented reception study



L-Università ta' Malta

University of Malta

Alessia Sciberras

June 2021

Supervisor: Dr Giselle Spiteri Miggiani

Co-supervisor: Dr Laura Mejías Climent

A dissertation submitted to the Faculty of Arts of the University of Malta in partial fulfilment of the requirements for the Degree of Master in Translation and Terminology Studies.

L-Università ta' Malta

FACULTY/INSTITUTE/CENTRE/SCHOOL_____Faculty of Arts_____

DECLARATIONS BY POSTGRADUATE STUDENTS

Student's Code ___323595_____

Student's Name & Surname _____Alessia Sciberras_____

Course _____Master in Translation and Terminology Studies_____

Title of Dissertation
_____Exploring video game subtitling: a local user-oriented reception study

(a) Authenticity of Dissertation

I hereby declare that I am the legitimate author of this Dissertation and that it is my original work.

No portion of this work has been submitted in support of an application for another degree or qualification of this or any other university or institution of higher education.

I hold the University of Malta harmless against any third party claims with regard to copyright violation, breach of confidentiality, defamation and any other third party right infringement.

(b) Research Code of Practice and Ethics Review Procedures

I declare that I have abided by the University's Research Ethics Review Procedures. Research Ethics & Data Protection form code _____.

As a Master's student, as per Regulation 58 of the General Regulations for University Postgraduate Awards, I accept that should my dissertation be awarded a Grade A, it will be made publicly available on the University of Malta Institutional Repository.

_____ _____ALESSIA SCIBERRAS_____
Signature of Student Name of Student (in Caps)

_____26/06/21_____
Date

L-Università ta' Malta

FACULTY/INSTITUTE/CENTRE/SCHOOL_____Faculty of Arts_____

Student's I.D. /Code _____323595M_____

Student's Name & Surname _____Alessia Sciberras_____

Course _____Master in Translation and Terminology Studies_____

Title of Dissertation/Thesis

_____Exploring video game subtitling: a local user-oriented reception study_____

_____

I am hereby submitting my dissertation/thesis for examination by the Board of Examiners.

_____ _____ALESSIA SCIBERRAS_____

Signature of Student Name of Student (in Caps)

__25/06/21_____

Date

Submission noted.

G.S.Miggiani

GISELLE SPITERI MIGGIANI

Principal Supervisor Signature

25.6.21

Acknowledgment

Firstly, my inmost gratitude goes to my supervisor Dr Spiteri Miggiani for her consistent support and guidance throughout the writing of my dissertation, as well as for introducing me to the many wonderful facets of Audiovisual Translation, and her commitment to making lectures enriching and enjoyable.

I would like to thank my co supervisor Dr Mejías Climent without whom I would not have been able to complete this dissertation. I am deeply appreciative of the knowledge she shared with me from beginning to end.

My appreciation goes to the Head of Department, Prof. Portelli to whom I owe such a positive learning experience at the Department of Translation, Terminology & Interpreting Studies. I would also like to thank the lecturers at the department, namely: Prof. Anthony Aquilina, Dr Claudine Borg, Dr Giselle Spiteri Miggiani, Prof. Sergio Portelli, and Prof. Clare Vassallo. Despite our time together in class ending sooner than anticipated, their lectures, contributed to my academic and personal growth and deepened my interest in Translation Studies even further.

Finally, I would like to thank my parents for teaching me the value of hard work and the meaning of perseverance.

Abstract

In recent decades, the revenues of the game industry surpassed that of other forms of entertainment, such as that of the cinema. Contemporary video games tend to have elaborate story lines which leaves extensive room for subtitles to be included. Nonetheless, there is no standardisation in video game subtitles. Whereas research in the field of Audiovisual Translation led to guidelines for intralingual and interlingual subtitles, such norms are not in place for video games. This is evident by the way subtitles are often displayed verbatim without attention being paid to legibility by video game developers, potentially making the video game unplayable for some users.

Research in this area is worthwhile as video game subtitles are beneficial to a range of users, from those who do not want to miss out on any information to those with various degrees of hearing loss. Furthermore, research from a Translation Studies standpoint would consider the constraints associated with subtitling as well as the interactive nature of the medium. By gathering information and feedback from local players, this study aims to propose subtitling strategies that can pave the way for future studies.

List of Tables

List of Figures

Table of Contents

List of abbreviations

AVT	Audiovisual Translation
CESA	Japanese Computer Entertainment Suppliers Association
ESA	US Entertainment Software Association
ESIST	European Association for Studies in Screen Translation
FIGS	French, Italian, German and Spanish
FITA	Foundation for Information Technology Accessibility
ICT	Information and communications Technology
ISFE	European Interactive Software Federation of Europe
MCAST	Malta College of Arts, Science and Technology
MIES	Multimedia Interactive Entertainment Software
NPCs	Non-playable characters
SDH	Subtitles for the Deaf and the Hard-of-hearing
ST	Source Text
TS	Translation Studies
TT	Target Text
UGT	User-generated Translation
UI	User interface
UKie	UK Association for UK Interactive Entertainment
VO	Voice Over

1. Introduction

Unlike in cinema, TV, and streaming platforms, where current subtitling standards are in existence, the video games industry is yet to adopt such guidelines for subtitles. Additionally, in the mainstream games industry, game designers often devise games for the fictitious "average player". This leads to a one size fits all video game, that excludes large groups of players (Mangiron et al. 2014). The ad-hoc subtitling approach taken by game companies deters the legibility of subtitles and has a negative impact on playability. By making apt decisions at the design stage and preventing obvious design drawbacks, video games can become more user-friendly and accessible. The advantages of having subtitling guidelines that are suitable for video games are manifold as they would benefit a spectrum of users. For example, subtitles are convenient for individuals who may be unable to thoroughly engage with a video game due to various circumstances, such as; noisy environments impeding them from listening to dialogue and pick up sound effects. Apart from being helpful for any player who does not want to miss out on any of the information or dialogue, subtitles are also useful for language learners.

Initially, video game localisation encountered adversity in gaining recognition in the industry and academia. However, it is now a fundamental part of the video games industry where global sales are compelling. Furthermore, video game localisation is now an interdisciplinary area of research in academia (O'Hagan et al. 2014). In Translation Studies (TS), video game localisation is generally presented as an amalgam of Audiovisual Translation (AVT) and Software Localisation (Munday 2008: 190). According to O'Hagan et al. (2014), both AVT and Software Localisation are dynamic fields susceptible to technological advances, which is why the boundaries between the two are occasionally blurred. Notwithstanding video games having the user as the target, and growing in popularity globally, reception studies are still in their inception. According to Fernández Costales (cited in Esser et al. 2016: 183) additional research is "welcome in humanities (Translation Studies and Applied Linguistics)".

1.1 Local Scenario

In Malta, The Institute of Digital Games at the University of Malta started receiving students in 2013 and is currently offering courses at Master and Doctorate levels. As reported by the Princeton Review, the institute ranked 16th in their list of top graduate programs for video game design, based on academics, faculty, technology, and career prospects. The Faculty of Media Knowledge Sciences offers a Bachelor of Fine Arts Honours in Digital Arts, intended for students endeavouring to become professional artists, including in the digital games industry. The Malta College of Arts, Science and Technology (MCAST) also offers a Bachelor of Arts (Honours) in Game Art and Visual Design on digital games. The Master in Translation and Terminology Studies, delivered by the Faculty of Arts, offered a study unit involving introduction to video game localisation for students following the AVT specialisation. Furthermore, in 2019, the Maltese government launched its vision for video games development and Esports. The aim was for the video games sector to contribute to 1% of the GDP within a decade, and to create between 2200 to 3000 jobs within that timeframe (The Independent 2017). Meanwhile, research in the video game localisation field is still in progress. In Malta, this is even more so being a relevantly a recent field. Localisation tends to take place overseas because of the shortage of trained localisers (Pagano Mariano 2020).

1.2 Aims

Based on the absence of uniformity in video game subtitling, and the lack of research in the local context, the aim is to gather feedback from a group of end-users regarding video game subtitles. The collected data is intended to explore possible subtitling strategies that reflect user preference, and the interactive nature of the medium. The analysis of the data would help to pave the way to design future subtitling strategies.

The research question and sub-questions that this study seeks to answer are the following:

1. What is the impact of subtitles in video games on the end-user?
2. When there is dialogue, does the average user find subtitles helpful or distracting?

3. How often does a game become unpleasant to complete due to subtitle presentation?
    a. and how could this be overcome?

1.3 Structure

The first chapter introduces the subject of video game subtitles in AVT, the local scenario and considers the aims of the study.

Chapter 2 brings together pertinent works of literature and studies that have been carried out so far in the area of video games localisation and subtitling guidelines while addressing what is lacking.

Chapter 3 discusses the methodology used for data collection and acknowledges its strengths and weaknesses.

Chapter 4 presents and analyses the data obtained in order to answer the research aims.

Chapter 5 gives an overview of the research and views its strengths and limitations. Additionally, possible further research avenues are discussed.

2. Literature Review

This chapter considers AVT in TS, definitions of video games, genres, video game localisation, assets, and the distinctive characteristic of interactivity. Additionally, subtitles and subtitling guidelines are discussed. The relevant research to date on these subjects, as well as the gaps in the literature needed to be filled in, are located for this chapter.

2.1 Audiovisual Translation in Translation Studies

As an academic discipline, TS is concerned with "the study of the theory and phenomena of translation" (Munday 2008: 1). Despite documentations on translation going as far back as the first century BCE, as a discipline, TS came into being in the second half of the twentieth century (ibid.). Prior, translation was a mere facet to language learning incorporated in modern language courses. Throughout the latter half of the 20th century, many exam boards relied on translation to test the student's language learning capacities. For example, in the 1970s, the Department of English and the Department of Maltese, within the University of Malta, offered study units in translation theory, mostly based on J. C. Catford's works (Briffa 2015: 45). Translation was also part of contrastive analysis, which influenced Vinay and Darbelnet, and Catford in the 1950s and 1960s. Ostensibly, translation was linguisticoriented. An ascent in the descriptive approach, rooted in Russian Formalism, was observable in the 1970s and the 1980s. In the mid-1980s, the focus was on the target text (TT), rather than on the source text (ST) the translation had to be equivalent to. Before that point, the source was at the heart of translation, with equivalence being a dominant matter. Recently, the academic situation regarding TS changed due to "ICT (Information and Communication Technology), globalisation (rankings of universities), internationalisation (research networking and funding) and employability (cooperation between university and industry, training, and labour market)" (D'hulst, Gambier 2018: 179).

Over time, the interdisciplinarity concerning TS became discernible, resulting in persisting admissions of concepts and models from other disciplines, such as semiotics, computer science, anthropology, and sociology (Munday 2008: 17). Since coming into its own as an

academic discipline, TS has gone through various 'turns'. More recently, the new media brought about new concepts in the discipline. The theorising on translation taking place in the 1950s and 1980s tended to overlook the intervention of audiovisual texts. Perego and Ralph Pacinotti (Bogucki and Deckert 2020: 33) define AVT as:

> a form of transposition whereby only a given portion of the source text is transformed (or "adapted", Delabastita 1989) and relocated in its new shape within the same complex audiovisual (AV) ensemble.

Fawcett (1996) shone the spotlight on hindrances encountered by AVT in academia until the mid-1990s by noting the lack of articles appearing in mainstream TS journals. As Chaume Varela (2002: 1) states, "Audiovisual translation is one concrete example of an area of research that had to find its rightful place in Translation Studies. It is the responsibility of teachers and researchers to draw our attention precisely to those aspects which mark it out as different from other modalities [of translation]". AVT encountered hindrances in its institutionalisation and academisation. For example, Snell-Hornby (1995) and Basnett (1991), placed audiovisual texts under literary translation.

Currently, AVT is a fixed research area within TS, as it attained visibility in the 1990s as a result of the spread of audiovisual material. During the past decades, remarkable advancements were made in AVT. The start of the 21st century was a fruitful time concerning AVT research which detached itself from linguistics and comparative literature. AVT scholars (Díaz Cintas, Neves 2015), now point out the "independent maturity" of AVT. Although AVT is presently treated as an integral part of the field of translation, for many years, it was disregarded by scholars who did not give AVT academic attention and instead focused on literary artifacts, and comparative literature (Bogucki, Deckert 2020). Thus, AVT only started being recognised as an independent discipline and research field in recent years. Since then, AVT has seen steady progress and further research. Bogucki and Deckert (ibid.) attribute this to two reasons: the move towards depending on visual material in communication products, and changes in AVT due to research as well as new technologies. Undeniably, AVT has matured rapidly in recent decades. Bogucki and Deckert (ibid.: 12-13) compare AVT to the polysystem theory, where there is a shift from the periphery to the centre as AVT became more prevalent within TS.

At the outset, AVT has developed parallel to new technologies. Audiovisual texts are recognised as multimodal. Multimodality is the incorporation of speaking, writing, visualisation, and music, in other words, the inclusion of other modes of communication in addition to written text. AVT incorporates multimedia products where the transmission of meaning takes place through at least two channels: the acoustic and visual channels. The aural, visual, and tactile channels are involved in video games (Mejías-Climent 2020), which represent the most complex and multifaceted form of modern audiovisual products. The translator is required not to contradict the visual medium. There generally must be synchrony between the subtitle and the image, and the subtitles should not anticipate the visual narration. Proxemics and kinesics must be kept in mind by the translator to achieve coherence, AVT therefore involves the interaction between codes. The translator is driven to employ translation strategies, such as elimination, rendering, and condensation, to convey the meaning which results from the interaction between codes, and to diminish the problem generated by code interaction. The outcome is an added value (Chion 1993 cited in Esser at al. 2016: 80), and an extra meaning (Fowler 1986 cited in ibid.) "that goes beyond the mere sum of the two narratives" (ibid.).

2.2 Video games

The following organisations all chose to make use of extensive terms in their titles: The European Interactive Software Federation of Europe (ISFE), the US Entertainment Software Association (ESA), the UK Association for UK Interactive Entertainment (UKie), and the Japanese Computer Entertainment Suppliers Association (CESA). Nevertheless, the use of the hypernym 'game' is prevalent, as pointed out by Chandler (2005) and Bernal-Merino (2006). O'Hagan and Mangiron (2013) make use of the term 'video game'.

In Game Studies, attempts at defining games have been made since the inception of the field. At the start, the 'narratology versus ludology' debate within Game Studies further highlighted the necessity for defining games. While the more traditional narratologists believed that games should be considered for their stories, like novels and films, ludologists believed that games are dissimilar from these other mediums as they acknowledge that the player is

actively taking part in a structured world. The ludic approach recognises interactivity as a defining characteristic of video games. According to Salen and Zimmerman (2003: 80), "a game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome". For Juul (2005: 22), "a game is a rule-based system with a variable and quantifiable outcome", to unite digital and non-digital games and show the connection between them. Difficulties arise when trying to accommodate a game into a single definition, especially since most definitions apply to tabletop or sports games. Aarseth and Calleja (2015) propose to dismiss Wittgenstein's belief, that concepts like "game" are analytically indefinable and suggest a definition. Furthermore, conversation about games encompasses a variety of activities and outlooks which "have little in common with each other aside from their expected role of inducing entertainment" (ibid.: np). The three characteristics of video games that set them apart from other entertainment media or board-based games are; they create an audiovisual text (thus audiovisual translation modes are required to translate it), they are transmitted using software (thus localisation comes into play), and they create interaction with the player.

Frasca (2001: 4 cited in Mejías Climent 2019: 25) defines video games as:

> computer-based entertainment software, either textual or image-based, using any electronic platform, such as personal computers or consoles and involving one or multiple players in a physical or networked environment.

Mangiron (2006: 3) points out that this definition does not consider mobile phone games and arcade games which are not software-based and usually are not localised as they do not have much text. Alternatively, Mangiron (ibid.) proposes the following explanation from a TS standpoint:

> a video game could be defined as an interactive multimedia text that combines words, images and sound, and whose main objective is to entertain.

According to Bernal Merino (2015: 46):

> Once we have clarified what we understand by video game, we can assure that it is the most complex current example of audiovisual text, given its multimedia and interactive characteristics.

As Newman (2004) claims, video games are “easily and readily denigrated as trivial”. Scholars, such as Newman (ibid.), have called attention to games on the whole being seen as an immaterial form of amusement or not as adequately respectable to warrant meaningful attention, both in the context of academic game research and in business. Despite reticence to recognise video games as a virtuous activity, game studies scholars such as Juul (2010), consider them as a social norm. Games have existed since at least the days of ancient Egypt, and till this day, human beings still seek to fill their leisure time with an array of games, both as participants and as spectators. The video games industry has made this sort of activity more readily available by offering anything, from electronic versions of traditional pastimes to sophisticated alternative realities. Thanks to technology such as consoles and the internet, now easily within reach, video games are thriving. In recent decades, the growth of the game industry overshadowed other forms of entertainment such as that of the cinema. As the COVID-19 pandemic compelled people around the world to stay indoors, many turned to video games, and the video game industry flourished even more. Nintendo’s ‘*Animal Crossing: New Horizons’* (Nintendo, 2020), sold more than 14 million copies just between April and September of 2020 (The Economist). Steam, an online video game retailer, reached its peak with 20.3m players online at a given time (ibid.). These records prove the influential cultural role played by video games. As reported by Nielsen, a marketresearch firm, consumers globally are spending $120bn per year on videogaming in comparison to roughly $30bn on recorded music and $42.5bn at the box office. According to the Interactive Software Federation of Europe (ISFE), the video game industry is worth €20bn. Furthermore, the stereotypical image of the teenage male gamer, is no longer true, if it ever was. As reported by the ISFE, 51% of the European Union’s population aged 6 to 64 play video games, of which 45% are female. Society’s scepticism of new forms of media is not unusual, as Socrates argued, relying on written texts instead of relying on the oral tradition would create forgetfulness, the television criticised for fear of creating social isolation, and the internet for promoting antisocial behaviour, video games too are denounced for being a bad influence. Although video games are still being perceived as destructive and addictive by some groups in society, it is now being recognised that video games are indeed beneficial to society. For example, according to the ISFE, video games promote teamwork, strategic thinking and help to integrate students who face challenges in school, especially when conventional methods are not successful. Coined by Ben Sawyer (2002 cited in Wolf, Perron 2014: 202), the term

“serious games” involves social games, political games, training games, and educational games. Rather than designed purely for entertainment, serious games have specific didactic intentions. For example, a player in a training or educational game learns skills through game, as is the case in specialised military training games. There has been a growing interest in educational video games through conferences, journals, and grants (Ferdig 2007 cited in ibid.: 317), this is due to researchers providing theoretical and empirical evidence of their value, the rise in opensource tools available for educators and students to create video games, and the surge in video game system use and availably.

As Bernal Merino (2018) maintains, the growth in the video game industry can be summarised by three main aspects: the prevalence of portable devices, the multitude of multimedia interactive software in numerous languages at one’s disposal, and the interest in first-person experience regarding new media. Notably, translation played a crucial role in this growth and the revenue increase, as through localisation, video games are reaching many more users. Traditionally, FIGS (French, Italian, German, and Spanish) are given a priority, however, video games are now being localised in even more territories. For instance, there is an increase in demand for Polish localisation. According to Reuters statistics, about half of Poland’s population is made up of gamers and the video games industry in Poland is anticipated to reach $850 million in the coming years. As indicated by the figures showing the size of the industry, and given its roots in user satisfaction, video game localisation is worthy of study.

2.2.1 Game Genres

In North America, during the early 1980s, the video games industry went through a phase where anybody could produce games for consoles. This meant that the market was flooded with consoles, and numerous games were produced by third-party developers, which eventually led to consumers losing confidence in the industry, and business analysts seeing no long-term future for the video game business. As a result, the industry crashed in 1983. The collapse lasted two years and it led to games being controlled by the console manufacturer. Subsequently, retailers began organising games in recognisable genres, such as sports, fighting, action, and role-playing (Gamasutra 2009).

Considering the user's participation, video game genres are distinct from film or literary genres, as they are not defined by setting, but rather by the mechanics and the interaction. Additionally, video game genres are flexible, as they are increasingly hybrids of traditional genres. "Games might share some basic purpose—to entertain—but each new game that appeared on my screen could well have been in a different medium, or a different language, altogether" (Nick Caldwell 2004: 42 cited in Apperley 2006). Based on this statement, Apperley (ibid.) suggests that video games cannot be deemed as "a consistent medium". As industry sources (Darolle 2004; Crosignani et al. 2008 cited in O'Hagan, Mangiron 2013) mention, due to the range of games and genres within today's market, a standardised approach to game localisation is complex. Fernández-Costales (2016) states that future studies concerning video game localisation would profit from taking into consideration different types and genres of games when gauging their preferences, as different games require different translation strategies.

Due to the vastness of game genres, the action-adventure genre will henceforth be considered. Action games are particularly performative and engaging in comparison with other genres. According to Kent (2004 cited in O'Hagan, Mangiron 2013: 205), Western players lean towards action games as they prefer interactivity and depth of graphics. They also favour games with a first-person perspective where they have great freedom to explore and interact with the game environment; these kinds of games are known as sandbox games. "The action genre consists of two major subgenres: first-person shooters and thirdperson games. […] Action games, in particular, are often intensively performative games" (Apperley 2006: 15-16). Therefore, when playing an action game, users interact with the game to beat challenges to move forward. Initially, adventure games were called 'text adventures' or 'interactive fiction', as the players navigate their world and interact with it, through the word (Wolf, Perron 2014: 232). As Juul (2001) states, the events unfold as the player interacts with the word. This is done via a character who explores and figures out a fictional world and then solves puzzles. Thus, in the adventure game genre investigation is crucial. Action-adventure games add an active dimension to this. "This genre is strongly attached to action and adventure movies, hence the highly cinematographic or narrative aspect of most of these games" (Wolf, Perron 2014: 101). As a result of the dependence on character dialogue and cutscenes to tell a story, action-adventure games typically have large quantities of text for

translation. Progressively, the popular 'action' genre, is replaced by 'action-adventure', "the catch-all term par excellence for third-person video games in which the player must navigate a player-character through space, fight enemies, pick up objects, solve puzzles, and talk to other non-player characters" (ibid.). For reasons of terminological coherence, the term 'action-adventure' is utilised, rather than 'adventureaction' as authors who recognise this subgenre also use this term (Fencott et al., 2012; Granell, Mangiron and Vidal, 2015 cited in Mejías-Climent 2019: 68).

Action-adventure games have become more popular than the true adventure games and platform action games that inspired them. Some of the major video game titles in recent years fall under the action-adventure genre: *Grand Theft Auto V* (2013), *The Last of Us* (2013), *Wolfenstein: The New Order* (2014), *The Legend of Zelda: Breath of the Wild* (2017), *God of War* (2018), *Red Dead Redemption 2* (2018), *Shadow of the Tomb Raider* (2019), and *Watch Dogs: Legion* (2020).

2.3 Video Game Localisation history

O'Hagan and Mangiron (2013: 19) define video game localisation as

> all the many and varied processes involved in transforming game software developed in one country into a form suitable for sale in target territories, according to a new set of user environments with specific linguistic, cultural, and technical implications.

Although video game history is well cited (Wolf 2008, Hertz 1997, Kent 2001, among many others), there are a lack of sources that take up the history of game localisation (ibid.: 46). The 1970s saw the dawn of the modern video game thanks to game consoles. At the time, Atari dominated the American market by bringing arcade games into the home. During this time, the onscreen information was in English as games were developed in the US (Bernal Merino 2015: 1). Since the users of these early games were already familiar with them and the gameplay was rather simple, anyone could have a pleasant gaming experience, even those with limited or no knowledge of the English language. Similarly, early Japanese arcade games exported to the US market, mostly posed no major language barriers, and localisation efforts were an afterthought (Corliss 2007). Some details still needed to be rectified for socio-

linguistic reasons. For example, *Pac-Man* (1980) was changed from its original Japanese translation presented as *Puck Man* (1980) to prevent vandalism on the word "Puck". Subsequently, the art and the title screen changed, and this served as a glance of what was to come for game localisation. Additionally, due to the intellectual property of character design and music utilised in some Japanese games, adjustments were essential when they were sold in foreign markets. In addition, the suitability of the content also needed consideration, particularly regarding aspects of religious references. Still, there was little room for translation in these initial games, as they mainly consisted of dots and lines with very few command lines. Sequences did not have a voice track, but there was a subtitle-like running text which does not observe today's subtitling conventions (O'Hagan, Mangiron 2013: 52).

The translatable content subject to localisation increased as game machine capacity increased. It was only in the late 1990s that console games were specifically localised to be sold in the European market (O'Hagan, Mangiron 2013: 55). However, this period was characterised by low quality translations due to "technological and financial limitations"' and "the growing pains of a nascent games industry" (Corliss 2007: np). Ostensibly, localisation was not yet pertinent. With game consoles moving on to DVD-ROM, in the early 2000s, storage increased which meant the gameplay became more realistic. Non-interactive sequences in video games, known as cutscenes, became commonplace, not only to display the novel technology but also to serve a practical purpose. The inclusion of cutscenes meant that there is more room for translation with techniques similar to those used in AVT now being employed. Video game users have very little or no control over these sequences which they have to watch unfold to "break up the game-play […] to advance the plot, strengthen the main character's development, introduce enemy characters, and provide background information, atmosphere, dialogue, and clues" (Rodgers 2010 cited in PérezGonzález 2014: 231). It is important to point out that if they are available at all, video game subtitles are not usually enabled by default, and they must be switched on from the settings menu. This means that for video games that have opening cutscenes, users miss out on the beginning of the story. Enabling the subtitles by default, and then giving the option to change this later, rather than the opposite, would be beneficial.

When Chandler's 2005 *The Game Localization Handbook was* published, the field of video game localisation was not yet highly established. In TS, it is occasionally introduced as an amalgam of AVT and Software Localisation (Munday 2008: 190). According to Mangiron, Orero and O'Hagan (2014) localisation practices with relation to video games were underreported until recently in academia. Although video game localisation initially met obstacles on its way to gaining recognition in the industry and in academia, it is now not only a fundamental part of the video games industry, which is dependent on global sales, but also an interdisciplinary area of research in academia.

2.4 Translatable Assets

In today's competitive market, leaving text in game software untranslated is no longer feasible. In comparison to the early video games, most modern video games have become far more intricate with the inclusion of elegant storylines, written text, and graphics, as well as audio which leaves more scope for translation and different translation techniques. According to Mangiron and O'Hagan (2013: 17), this poses a context that differs from other translation types, not only due to interactivity but also due to the nature of modern games as affective media where technology engages the user at a deeper level. There is thus a "need to extend the appeal to the end user beyond functionality alone" (ibid). Although most games are still developed in Japanese and in English, game localisation is a worthwhile effort to augment sales figures by making games available to a broader audience.

Different components that shape a video game can be subject to localisation. There are different text types commonly found in a video game, each having their own functions, and constraints, which translation needs to respond to. Constraints stem from the nature of the medium as well as from work practices (O'Hagan, Mangiron 2013: 171). Today's multimodal video games consist of assets that call for localisation so that they can be marketed in other territories. According to Mangiron (2006: 3), based on Chandler (2005: 51), video games are composed of assets, namely, in-game text assets, art assets, audio assets, cinematic assets, and printed materials. All these assets must be localised and combined seamlessly, so that the video game is not only engaging but also feels like the original. As multimedia products,

video game assets to be translated and customised can be abundant. As stated by Bernal Merino (2006), with reference to video games, "It is the first time that one single product requires all types of language transfer specialisations." Additionally, assets must be translated and unified seamlessly with images and sound files. Furthermore, MendezGonzales and Calvo-Ferrer (2017), arrange assets from a semiotics angle: a video game is composed of textual and paratextual elements. Literary theorist, Genette, popularised the term paratext and explains it as "The literary work…rarely appears in its naked state, without the reinforcement and accompaniment of a certain number of productions, themselves verbal or not, like an author's name, a title, a preface, illustrations" (Genette and Maclean, 1991: 261). Video game paratext, such as manuals and advertising text need to be localised in a way that appeals to the target user and have a similar look and feel to the original at the same time. Subtitles are classed under the textual category alongside codes and variables, and dialogue lines. Paratextual elements include cheat books, legal texts, manuals, promos, and teasers (Calvo-Ferrer 2020). Additionally, these assets are associated with different text types. As suggested by Bernal Merino (2006) and Vela-Valido (2011 cited in Bernal-Merino 2015: 110), the text types generated for a video game can be grouped into seven main categories:

> (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 of 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: printed or displayed, to advise buyers of their rights and duties as owners of the game product.

In-game text is mainly non-diegetic and generally makes up the principal text asset to be translated. This includes User interface (UI) text, such as menus, and help messages typically constrained to fit a pre-allocated space (O'Hagan and Mangiron 2013: 159), and sometimes given to the translator in spreadsheets without context. The main issue encountered is therefore the restricted space which results in truncation. Art assets include all the images and graphics that need to be redesigned by the graphic artist, such as maps, and signs, as they contain text that has to be localised (Mangiron 2006: 3). Textual graphics are likely to call for a pragmatic and function-oriented translation strategy, and for the most part having to deal

with limited space (O'Hagan and Mangiron 2013: 162). Audio and cinematic assets are increasingly prominent in recent video games where the sense of realism is augmented using the human voice for dialogues, and extended cutscenes which are then dubbed or subtitled. According to Egenfeldt-Nielsen et al. (2008: 176-177 cited in O'Hagan and Mangiron 2013: 151), cutscenes are used to: (1) introduce characters and set the scene; (2) control the narrative; (3) fill the time within the game world; (4) showcase cinematic techniques, and (5) provide the player with useful information. Cutscenes are therefore utilised for pragmatic and cosmetic purposes. Unlike in dubbing for cinema or television, where a dialogue list is provided for the translator, video game translators are usually given a spreadsheet with text rather than a dialogue list or script (Bernal Merino 2015: 120). Without being provided with the events and dialogues in the right order, the translations may end up misleading players. However, scripts are not always dubbed due to financial and time constraints and are instead subtitled to other languages. According to Bernal Merino (2015: 124), the same translation done for dubbing is used for subtitling. Subtitling has long been considered unimportant for the user to engage in interactive play, however, this attitude is changing since audio makes up a considerate amount of the video game (ibid.: 164). AVT norms are not usually respected, and in turn, the segmentation, length, and legibility of the subtitles are affected. Music, which contributes to the users' overall satisfaction, is nowadays often included in video games. Sometimes, a new song replaces the original instead of being translated, which does not always sit well with fans. Printed materials consist of paper material that accompany the game, such as, the packaging and the instructions manual (Mangiron 2006: 4).

Translation must react to these different assets and their purpose while considering the existing constraints. Mangiron (2006: 7-13) states that for a video game to be localised successfully, the translator must: (1) be familiar with the terminology of software and games platforms; (2) be familiar with features of screen translation; (3) master natural and idiomatic language; (4) be creative; (5) possess cultural awareness; (6) be familiar with games culture, and (7) be familiar with global pop culture.

Concerning the quantity of text that is subtitled, Mangiron (2013: 46-47) identifies three main levels of subtitling in video games:

1. Cutscenes

2. Cutscenes and in-game audio dialogue
3. Full subtitling: cutscenes, in-game audio dialogue, audio tutorials, and sound effects when available.

Localisation tailors the target product to the target market. According to Maxwell-Chandler and Deming (2012: 8-10) and O'Hagan and Mangiron (2013), there are four possible levels of localisation typically depending on marketing strategies:

1. No localisation: titles are sold as they are, without any changes made, in their original language, in additional countries. This is not commonplace, but may be the case with indie games, generally designed by individuals or smaller teams who do not receive the same financial support as in games with large budgets, known as AAA games.

2. Box and docs localisation: the packaging and the manual of the game are translated, while the language in the game itself stays unchanged. This was common for early games, or games that have little text, especially in the 1980s and 1990s. Nowadays, it is usually the case with video games that are projected to sell fewer copies, video games having little text, and video games to be sold in countries where users have a good level of English.

3. Partial localisation: the dialogue is subtitled in the target language, but not dubbed. In the game industry, dubbing is frequently called voiceover (VO).
   For languages where sales do not warrant the costs of audio localisation, interlingual subtitles are ordinarily used.

4. Full localisation: all the assets of the game are translated. This means that ingame text, VO assets, manual, and packaging are all translated so that immersion is facilitated. This is typical of AAA games due to their budget. This level of localisation is also referred to as "deep localisation" (McKearney 2007 cited in Maxwell-Chandler and O'Malley-Deming 2012) or "enhanced

> localisation" (Bernal Merino 2020), to indicate a high level of localisation beyond full localisation to increase the users' immersion through distinguishing features and story preferences.

Fernández Costales (cited in Esser et al. 2016: 184) refers to Venuti's (1995) notions of foreignisation and domestication. Foreignisation takes place when the 'foreign taste' of the source text is kept when the video game is translated for a foreign market. On the other hand, domestication occurs when the in-game elements are all translated and adapted to bring the game nearer to the target market. Video game localisation is associated with the domestication approach as generally, the main goal is to make the game feel fully natural to the target user. However, not all culture-specific content needs to be fully localised as cultural filtering of the source content may alienate the end players of a game who may be looking for an exotic feel by selecting foreign-made games. If allusion to customs and traditions of the original game, that are not familiar in the target culture do not pose any concern in relation to game reception and ratings, they can be kept in the localised version.

2.5 Interactivity

Apart from game assets and text types, Bernal-Merino (2015) lists four aspects that set apart the translation of video games from that of other products:

1. Story-building interactivity
2. The fragmentation of the source text
3. The translation of variables
4. The localisation of voice commands and gestures

Video games include an interactive aspect which makes them a particular kind of audiovisual text in which different modes (verbal language, images, sound, and touch), coexist to create meaning (Kokkola and Ketola, 2015 cited in Laura Mejías-Climent 2019: 27). The term 'audiovisual' entails the association of the visual channel with the auditory channel. As these two sensorial channels are merged, audiovisual text has been labelled as polysemitoic (Gottlieb 1997). In video games, a considerable amount of information is transmitted through the additional tactile channel, however it can also be transmitted through the visual channel

by means of the kinetic code, that is the users' movements and not solely by means of the movements of the characters, as is the case in cinema (MejíasCliment 2019).

Rather than being consumed passively like other media and forms of entertainment, video games are interactive. The industry also makes use of terms such as, 'interactive entertainment software' or "Multimedia Interactive Entertainment Software (MIES)" (Bernal Merino 2015). Aarseth (1997: 1) interprets interactivity as the user having to "make an effort to traverse the text, but also at constructing it". Mangiron and O'Hagan (2013), Bernal Merino (2015) and Mejías-Climent (2019) consider interactivity as a defining element of video games. Bernal Merino (2020: 300-301) claims that "the communication model between game-machines and players is, in contrast to passive media, necessarily bidirectional." While traditional media is passive and the storyline is not normally interfered with, in video games, participation is fundamental. Interactivity thus "empowers users and encourages them to become active agents in direct control of an adventure to an extreme never seen before in any medium" (Bernal-Merino 2014: 38). This distinctive feature found in video games is pertinent to translation as the link between the player and the game is achieved via language.

> 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. (ibid.)

Aarseth (1997: 51) denounced the concept of interactivity by maintaining that "it is a purely ideological term [that is] lacking any analytical substance", instead using the term 'ergodic' to mention that "non-trivial effort is required to allow the reader to traverse the text" (ibid.).

Due to interactivity in video games, playability and coherence are critical.

> Since all semiotic signs are semantically intertwined, lack of coherence between layers affects the pragmatic elicitation by players in what they think that they are doing and what they decide to act on, in other words, game localisation requires the concept of playability as a measurement of quality. (Bernal Merino 2020: 300).

Video games become deprived of playability when poor localisation decisions are taken, and the users become unable to complete a game. As Díaz-Cintas explains (Bogucki, Díaz-Cintas 2020: 13), even though audiovisual texts may seem straightforward due to our recurrent exposure to them, "audiovisual texts are very complex semiotic composites in which a variety of codes coalesce in order to create meaning" (ibid.). Therefore, semiotic signs are connected and when semiotic layers are fragmented, playability is broken. Cooperation amongst developers and translators is necessary, even more so than in passive media. As video game users take on a more active role than those consuming non-interactive audiovisual products, inadequate subtitles mean they are likely to have a negative gameplay experience. Good subtitling practices and establishing guidelines would improve playability. According to Bernal-Merino (2016: 247), the most prevalent drawbacks in localised video games can be arranged into four categories:

> language environment (spelling mistakes, lexical and syntactical calques, poor writing style of translation), sound environment (flat performance by actors, inappropriate music), visual environment (inadequate user interface font size and colour, confusing icons), cultural environment (culturally offensive graphics, taboo language, inappropriate body gestures).

Video games have evolved into complex audiovisual products which are multisemiotic and interactive. Having subtitling guidelines that take this into account would help address the shortcomings in subtitling which in turn affect playability.

2.6 Subtitles

AVT is a wide-ranging term that incorporates various translation modalities. Academics like Gambier (1994) and Díaz Cintas (1999) make a contrast between some ten distinctive ways of translating audiovisual programmes, there are three fundamental ones: dubbing, subtitling, and voice-over. Chaume (2012) gathers the two main AVT modalities namely, revoicing and captioning. Just like AVT, subtitling is a recent academic discipline in terms of research and the definitions of subtitling have hardly changed over the years. The initial scholars, (Titford 1982, Mayoral et al. 1988), characterised subtitling by its spatial and temporal constraints which were seemingly absent in other kinds of translation. However, this type of description

was criticised due to its negative implications (Díaz Cintas, Remael 2007: 11). Subtitling can be defined as:

> a translation practice that consists of presenting a written text, generally on the lower part of the screen, that endeavours to recount the original dialogue of its 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) (ibid. 2007: 8).

Subtitles integrate the spoken word and the image which must be in synchrony. Furthermore, subtitling has been defined as a 'diasemitoic' or an 'intermodal' type of audiovisual translation (Gottlieb 1997: 95) due to the transfer from a spoken to a written medium.

The beginnings of subtitling are traced to the twentieth century with intertitles, or title cards, which were drawn or printed on paper, filmed and placed between film sequences. They were used to convey dialogue and narrations (Díaz-Cintas and Remael 2007). In cinema, subtitling started in 1909, and on TV, it started in 1938 (Ivarsson, Carroll 1998). Following the arrival of sound films, subtitling turned into the "main translation modality in most countries around the world" (Romero-Fresco 2019: 62). Moreover, subtitling is central to providing accessibility for viewers with hearing loss and learning disabilities. In the European Union, the Audiovisual Media Service Directive urges media service providers within Member States to assure that their products are made more accessible to those with visual or hearing impairments, by way of subtitles and audio description (DIRECTIVE (EU) 2019/882). Subtitles are beneficial to a multitude of users, including those who are hard-ofhearing, or those who do not have an understanding of the original source language. Even if these barriers are present, subtitles are still useful for language learning, noisy conditions, small screens, and in case of video games, varying levels of hand-eye coordination.

In his renowned essay, *On Linguistic Aspects of Translation* (1959), Jakobson organised translations into three types: intralingual (or rewording), interlingual (or translation proper), and intersemiotic (or transmutation, from verbal to non-verbal sign systems). When categorising subtitles, a way of categorising them would be to aim attention at this linguistic aspect. Based on this classification, there are two types of subtitles as proposed by Díaz Cintas (2012): intralingual subtitles, and interlingual subtitles. Another type of subtitle is the bilingual

subtitle. Intralingual subtitles, also referred to as SDH (subtitles for the deaf and the hard-of-hearing) or closed captions in American English, are essential for accessibility when it comes to audiovisual programming. In the European Union, the European Accessibility Act (DIRECTIVE (EU) 2019/882), aims to address products and services that were deemed as important for persons with disabilities. This includes access to audiovisual media services. Intralingual subtitles are also known for their didactic benefit. As there is no translation from a source language to a target language in intralingual subtitling, at first, there was scepticism among translation scholars to include SDH within AVT (Zárate 2021: 4). Interlingual subtitling indicates the translation from a source language to a target language. Gottlieb (1994 cited in Díaz Cintas, Remael 2007: 17) calls this type of subtitling "diagonal subtitling" as there is a transfer of language and mode, from oral to written. Finally, bilingual subtitles are mainly seen in areas where two languages are spoken. For example, in countries such as Belgium, subtitles are added in two languages simultaneously. Dubbing is usually favoured in European countries where French, Italian, German, and Spanish (FIGS languages) are used, together with the Czech Republic, Slovakia, and Hungary. Poland, Russia, Ukraine, and the Baltic states are recognised for their voiceover work. Meanwhile, the rest of the countries prefer subtitling over dubbing or voice-over (Bogucki, Díaz-Cintas 2020). Subtitling is usually inexpensive and less time-consuming in comparison with dubbing, as expensive equipment is not required, and it can be done by a single translator. Subtitling is also chosen when consuming foreign content to have a more authentic experience. According to Bogucki and Díaz-Cintas (2020: 15), dubbing versus subtitling argument is now obsolete as academics consider both modes to be worthy translation practices.

The viewer performs several activities simultaneously: watching, listening, and reading. Since the source text soundtrack and the target text subtitles coincide, subtitling is described as "vulnerable translation" (Díaz Cintas 2003: 43-44). Subtitling can be differentiated from other modes such as literary translation and dubbing due to its unique position of having the translated text visible to the audience simultaneously as the original. Despite both languages existing side by side in interpreting and bilingual parallel texts, the response is not as instantaneous as it is with subtitling. This is known as the "gossiping effect" (Törnqvist 1995 cited in Díaz Cintas, Remael 2007: 55) or as the "feedback effect" (ibid.). Apart from being met with time and space constraints, the translator must keep in mind members of the audience

who understand the source text already and may reject the decisions taken by the translator. Similarly, in the case of intralingual subtitles, using translation strategies to help with the reading speed may not be appreciated by the audience, instead they may believe that the translator overlooked the word which was clearly audible on the soundtrack. This tension is heightened when the source language is English, the lingua franca spoken by many, or when the two languages in question have the same linguistic roots. Due to these constraints foisted by the medium itself, and since it diverges from the typical text translation, the activity of audiovisual translation is sometimes not considered as translation proper (Gottlieb 1991). Authors like Myers (1973 cited in Díaz Cintas, Remael 2007: 144), disregard subtitles as they are "adequate only for those who have mastered speed-reading or those who are only interested in looking at pretty shots".

According to Gottlieb (1992: 164), two types of constraints are linked to subtitling:

Textual constraints:

- Legibility of the characters
- Synchronization of the text
- Line-breaks

Formal constraints:

- Space
- Time factors

Additional constraints imposed on subtitling to ensure that the viewer has enough time to read the subtitles and watch the images include (Díaz Cintas, Remael 2008: 81-98):

- The segmentation of two subtitle lines according to linguistic criteria
- The pause between subsequent subtitles
- Avoiding displaying subtitles over shot changes

Similarly, Mangiron (2013) states that issues such as segmentation and alignment should also be considered alongside time and space constraints.

2.7 Subtitling guidelines

As observed by Foerster (2010 cited in Romero-Fresco 2019: 129), "subtitles have never been and will never be invisible – so we should try to make the best out of their presence instead of denying it". When conventions are followed and translation strategies are employed by the translator, the viewer should not feel as though they are missing anything by taking too much time reading the subtitles. Subtitles are expected to be synchronous and to convey the message faithfully, whilst satisfying the spatial and temporal requirements. These requirements are ordinarily presented as guidelines, intended both for hearing viewers and for viewers with hearing loss. These guidelines cover technical, linguistic, and semiotic elements of subtitling in great detail. Díaz Cintas and Remael (2007: 63-64) refer to subtitling guidelines as "almost universal". Zabalbeascoa, one of the initial academics to realise the importance of guidelines, states that:

> An essential part of the translator's reference material should be a specialised in-house stylebook, which could include all the information that the employer or firm can anticipate that the translator will need to know and use, including glossaries, television policies and translational normal […] along with a considerable number of practical examples of problems and strategies.
> (1996 cited in Díaz Cintas, Remael 2007: 79).

This statement can be applied to AVT in general. As subtitling gained traction, varied styles became discernible. This led to various attempts to standardise subtitling practices by presenting guidelines. Ivarsson and Carroll's *Code of Good Subtitling Practice* (1998), backed by the European Association for Studies in Screen Translation (ESIST), was the first presentation for action with regards to good subtitling practice. Professionals in the AVT field, such as Díaz Cintas and Remael (2007) consider it as the standard. In the same year, Karamitroglou (1998) also put forward a set of guidelines for the production and arrangement of European TV subtitles. With regards to subtitling in Spain, Díaz Cintas presented some proposals (2003), and Díaz Cintas and Remael devised proposals at a European level (2007). The Office of Communications, commonly known as Ofcom, is the UK's communications regulator, also proposes guidelines to ensure good subtitling practices. Although the information within these guidelines differ to some degree, they have shared features that are used and built upon by subtitling companies and professionals. Moreover, subtitling practices

differ from one country and one company to another, but these guidelines share common features and aim to set some standards concerning subtitling issues such as: layout, spotting, duration, and segmentation. As Díaz Cintas and Remael (2007: 103) point out, "the images and the soundtrack are the immediate co-text of the subtitles". This way, the images, and the soundtrack have to go up against the subtitles whilst supplementing each other. The translator thus must aid this experience by following the guidelines. However, the guidelines were not well-received by all and were perceived as exorbitant or inapplicable to certain cultures (Díaz Cintas, Remael 2007: 80). Furthermore, the translators' use of industry standards, particularly those which involve abridgement of the spoken language, "compromise the interpersonal pragmatics of subtitled dialogue" (Pérez-González 2014: 16). For example, when the translator does not subtitle repetition, this may take away from characterisation.

While AVT research prompted guidelines for intralingual and interlingual subtitles, these kinds of guidelines are not in place for video games. This is especially substantiated by Mangiron's (2013) study of prevailing subtitling practices which calls attention to the absence of consistency and the ad hoc subtitling approach, highlighting the need for standardisation. Although similarly to film subtitles, video game subtitles present dialogic text on screen, they do not observe a standardised system as is the case with films. Text on screen is displayed in any way deemed as acceptable in each game. Despite localisation being imperative in boosting sales globally, developers and publishers are still reluctant to incorporate good localisation practices in their workflow. As Bernal-Merino (2014: 123). affirms, 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.

Furthermore, several video games produced are still left without subtitles, showing the lack of consideration given both to subtitling in general and to accessibility issues. Although localisation is not always given the attention it is owed, even by major companies, the importance, and usage of subtitles is evident as some large-scale corporations, such as Microsoft and Sony, demand the use of subtitles in their video games. In addition, as the

PlayStation5, a home video game console, launched in November 2020, one of its new presets allows users to turn subtitles on by default when starting up a new game.

Mangiron (2013: 8) attributes this shortcoming in standardisation to:

> a) the young nature of the video game and the game localisation industries, which, in general, lack standardisation; b) the lack of awareness of the need for subtitles by game developers; c) the time pressures generally associated with the development phase of a new game, which means that some features must be prioritised over others, and accessibility may not feature top of the list, and d) the lack of training in AVT of some game translators, particularly in the case of interlingual subtitles.

Moreover, in contrast with DVD boxes, and streaming platforms providing information on subtitles, video games do not have any of these indications on the box. This kind of information together with the level of subtitling, specified upfront on video game boxes, in the descriptions of online shops, or on video game digital distribution services, would be advantageous for an array of users. Instead, video game users who prefer or need subtitles, have to rely on websites such as *Can I Play That*, and *Able Gamers* to review video games from an accessibility standpoint and even to know if intralingual subtitles are included.

Figure 1 Watch Dogs: Legion (Ubisoft, 2020) box for PS4 containing no information about subtitles.

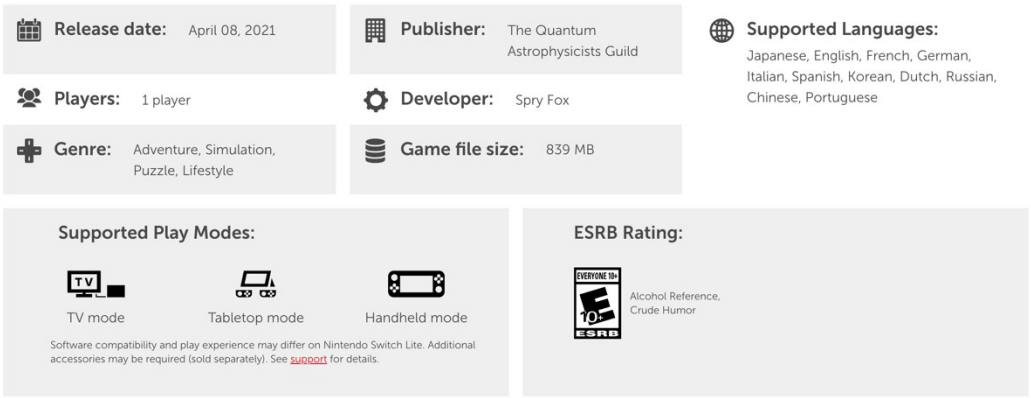


Figure 2 Information about a game in the Nintendo eShop. There is a list of supported languages, but no information about subtitles is provided.

The lack of uniformity in subtitles and the lack of awareness, together with a need for a standardised system is identified by several authors in the field of AVT:

> 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. (Bernal Merino 2014: 72)

> There are no specific professional standards or guidelines for game subtitling except for a proposal made by game designer and usability expert Griffiths (2009) in specialised industry journal Gamasutra. (Mangiron 2013: 52)

Griffiths (2009: 2-4 cited in ibid.) proposes a set of 16 guidelines for subtitles in video games, based on Ofcom's guidelines:

1. Use a simple, easy to read font.
2. Use a large font that is easily read.

3. Use a consistent font size and always in mixed case, to ensure readability, as this is easier to read than all capitals.
4. Subtitles must be visible in various output devices, such as standard and highdefinition TV sets.
5. Keep the line length under control by avoiding sentences that are too long.
6. Ensure there is enough space between words and lines.
7. Give the option to switch the subtitles on and off at any time.
8. Use a separate button to skip subtitles and to perform in-game actions, so that there is no overlap.
9. Give the player the ability to control the speed with which subtitles appear on the screen.
10. Choose the right colours for subtitles. Ideally white, yellow, cyan, or green against a solid black colour to provide good contrast. Different colours are to be used when there is more than one character on screen.
11. Stagger subtitles in a conversation and add the character's name to facilitate character identification.
12. Include sound effects and relevant non-speech information.
13. Always keep the text within the safe area, so that the bottom part of subtitles is not cut off on smaller screens.
14. Subtitles should match the spoken dialogue word for word.
15. Avoid using unusual speech, like slang, in case it will not be understood by all players.
16. Ensure the quality of the subtitles, so that there are no spelling or grammar mistakes.

These guidelines concern English intralingual subtitling, although they can be used for interlingual subtitling, except for the fourteenth guideline which opposes other established guidelines which do recommend some reduction. Griffith's list of guidelines is a reasonable foundation for establishing video game subtitles, however, they are vague in some places, such as, when simply stating to avoid sentences that are lengthy, or by not specifying the amount of space to be left between words and sentences. As recommended by Mangiron (2013), there is a need for a more detailed set of guidelines for video game subtitles, supported by descriptive and empirical studies. Mangiron and O'Hagan's (2013) study of current subtitling practices in games highlights this inadequacy when it comes to uniformity.

It also stresses the need for additional research regarding game localisation, through interviews, questionnaires, and even eye-tracking technology to establish a standard. Mangiron (2013) further points out the need for more research to establish a subtitling standard for video game localisation that factors in the user's viewpoint.

> Such standards would provide a benchmark and become a useful tool for game developers, localisers, and game localisation lecturers and students. They could contribute to the standardisation of game localisation practices, foster readability and accessibility, and ultimately lead to an enhanced gameplay experience across different locales (ibid.).

Díaz Cintas and Remael (2007: 81) group recommendations under spatial dimension, temporal dimension, and punctuation, and other conventions. With regards to subtitle layout, Mangiron (2013: 48) considers the following four parameters, as well as reduction and segmentation from a linguistic perspective:

a) subtitle length and duration; b) font type, size, and colour; c) character identification, and d) displaying sound effects and conveying emotions.

These four subtitling parameters are considered for the study in Chapter 4.

2.7.1 Subtitle length and duration

Subtitles are usually centred and limited to two lines placed horizontally at the lower part of the screen to limit interference with the action (Ivarsson and Carroll 1998, Karamitroglou 1998, Ofcom 2021, BBC 2019). Conventionally, subtitle placement tends to be the same globally, even for languages customarily written in vertical columns, or those read from right to left (Zárate 2021: 59). However, on occasion, the subtitle may be displaced to the top of the screen to avoid covering other information in the lower part of the screen, such as credits.

Generally, most languages have 39 characters per line, but the number of maximum characters per line differs according to alphabets: for example, 35 for Cyrillic languages and 12 to 14 for Japanese and Korean, and 14 to 16 for Chinese on DVDs (Díaz Cintas, Remael 2007: 85). For on-demand streaming services, such as Netflix, the number of maximum characters per line is raised to 42 (Netflix 2021). Characters take into account blank spaces

and typographical signs. It is not advisable to opt for a high number of characters per line, as the more characters per line are utilised, the more the image is covered by text or the smaller the font has to be, which also restricts legibility. This would result in the viewers having more to read in less time. There is little consensus when it comes to reading speed and different broadcasters (Zárate 2021: 55). For pre-recorded programmes, the BBC and Ofcom recommend 160 to 180 words per minute (BBC 2019, Ofcom 2021), but for live programming, the recommendation is up to 100 words per minute (Ofcom 2021). The streaming service Netflix is more adaptable in its guidelines by allowing reading speeds of 240 words per minute, or 20 characters per second (Netflix 2021). On one hand, when a subtitle stays on screen for a short period of time, it risks not being read by the viewer; on the other hand, if a short subtitle stays on screen too long, it risks being read repeatedly and interrupting reading rhythm and immersion. According to recent research involving hearing participants (Szarkowska and Gerber-Morón 2018 cited in Zárate 2021: 55), when viewers were familiar with the language, fast subtitle speeds of 20 characters per second are preferred to slower ones. When the language was unknown, the participants favoured slower speeds, although the researchers did not determine the preferred reading speed.

Figure 3 Long subtitle lines for We Happy Few (Compulsion Games, 2016).

Long subtitles cause the eye to travel more especially if a large screen is used (Díaz Cintas, Remael 2007: 100). Nonetheless, if a subtitle fits into one line, there is no need to use two.

Guidelines call for a maximum of two subtitles, even though three lines may sometimes be used as long as the image is not concealed or as a last resort (BBC 2019, Ofcom 2021, Netflix 2021). Three lines are mostly used for sound effects in SDH.

Due to interactivity, tastes, and ages, amongst other issues, video games vary from conventional TV programmes and cinema movies. Therefore, more empirical research through reception studies is necessary to establish an ideal reading speed for video games (Mangiron 2013). Concerning duration, video game subtitles do not have a fixed amount of time they appear on screen for, however, the time they are generally kept on screen for is inadequate. Interactivity should be considered in connection with duration as numerous games allow users to press a button when they are finished reading the subtitle which means that it is up to the player to manage subtitle speed (Griffiths 2009, Mangiron 2013).

2.7.2 Font type, size, colour

Subtitle presentation is ordinarily decided by broadcasters, DVD publishers, video-streaming operators, filmmakers, and subtitling companies (Zárate 2021: 57). However, with digital television and some video games, users can customise their subtitles by choosing the font size, typeface, and background colour.

Wide fonts without serifs, known as sans-serif, such as Helvetica and Arial, are favoured for reasons of legibility and the risk of word wrapping is minimised (Díaz Cintas 2007: 84). Nowadays, it is the norm for subtitles to be white, shadowed, or black contoured (RomeroFresco 2019, Díaz Cintas, Remael 2007). Subtitles can also be encased in grey or black boxes to prevent illegibility when appearing against light backgrounds by creating more contrast between the colour of the font and the background (Zárate 2021: 57). Subtitles limiting viewers from following important action or visual elements should be avoided. RomeroFresco (2019: 87) calls this “subtitling blindness”.

The use of capital letters is less common, especially since they take up more space and may be difficult to read. A particular instance where upper case letters are used is to translate on-screen text, such as newspaper headlines, in intralingual subtitling. Unlike capital letters, italics do not take up extra space and are useful in accentuating certain elements in the text.

Italics are reserved for specific instances, such as off-screen voices when the speaker is not in the scene, voices heard through a machine, sound effects, inner thoughts, and foreign words and phrases unfamiliar to the target audience rather than common lexical borrowings such as 'bric-a-brac'. When songs are concerned, several strategies are employed, however, most languages prefer to italicise subtitles (Díaz Cintas, Remael 2007: 127). No research has been conducted on the legibility of italics from a subtitling standpoint (Zárate 2021 :48), nonetheless esteemed web sources, such as the World Wide Web Consortium (W3C), oppose the use of blocks of text in italics since they are less legible and more difficult to read (W3C 2016).

These guidelines regarding font are not universally adopted but differ from one company to another. For example, italics or upper case are used interchangeably for emphasis. This is even more valid in video games where font type, size, and colour drastically vary and can be illegible. What is always recommended is that consistency is kept throughout the same product. Video game developers sometimes tend to deem subtitles as intrusive and prioritise aesthetics over readability. Subtitles thus end up in a font size that is too small to read or needlessly on top of the screen.

Figure 4 Subtitles from Mafia: Definitive Edition (2K Games, 2020) – very small font size with no background, and no option to customise.

Figure 5 Dragon Age inquisition (Electronic Arts, 2014) – small font, all capital letters, on top of the screen.

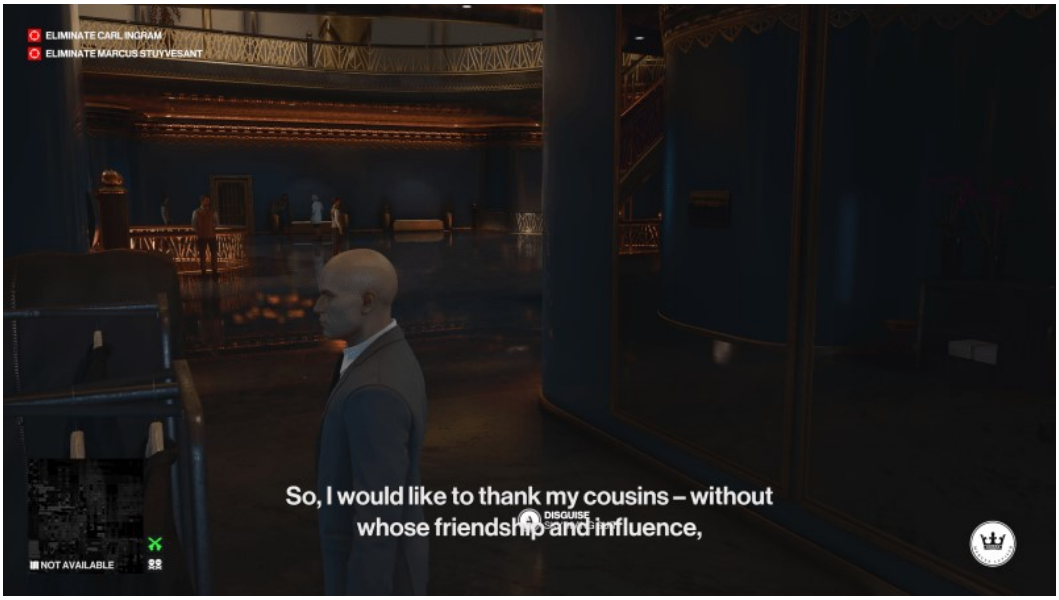


Figure 6 Hitman 3 (Square Enix, 2021) – although the subtitles are legible, poor placement of interaction prompts covered by subtitles.

It is critical to consider that numerous video games tend to be multiplatform, meaning that they can be played on different consoles and PCs (Mangiron 2013). As a result, players using a console connected to a television set will sit further away than those who play on a PC. The same font size cannot be used across all platforms, which is the case with a lot of video games, however, some video games have the option to customise subtitles according to the users' preferences.

Figure 7 Marvel's Spider Man (Sony Interactive Entertainment, 2018) – customisable subtitles.

Figure 8 The Last of Us Part II (Sony Interactive Entertainment, 2020) – users can turn on direction arrows on subtitles to indicate where the sound is coming from.

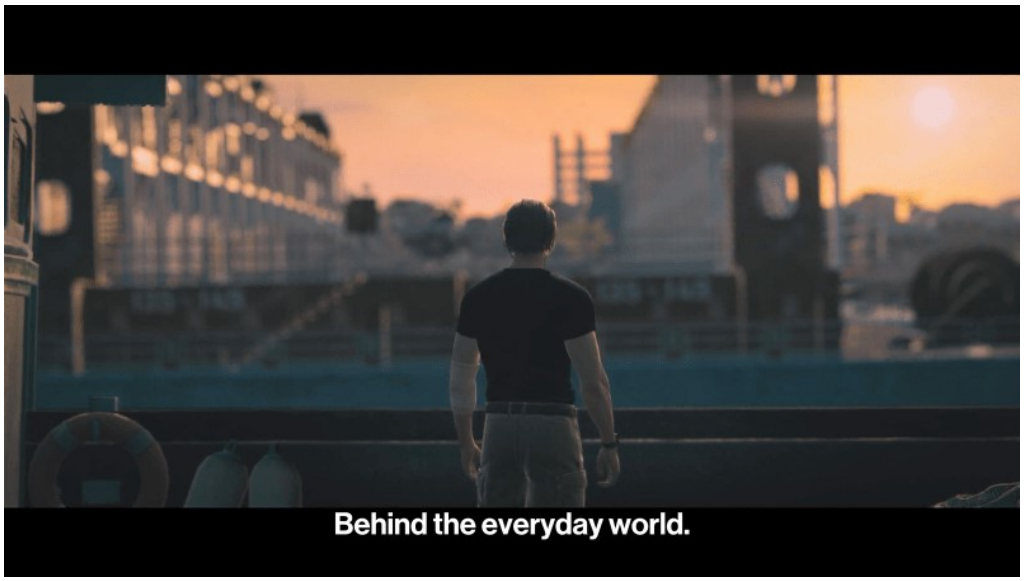


Figure 9 Hitman 3 (IO Interactive, 2021) – customisable subtitles set on the largest font size.

Video game subtitles use an array of fonts, including those with serifs. Moreover, some video game developers deem aesthetics as more important than legibility and create their own fonts. White is the most common font colour in video games, occasionally placed on a black box background or directly on the screen causing colour clashes (Mangiron 2013).

Figure 10 Portal 2 (Sony Interactive Entertainment, 2011) – letterboxing

By virtue of their interactive and ludic nature, there is more room for creativity and flexibility when it comes to subtitle presentation (Mangiron 2013: 50). For example, subtitles can be presented in speech bubbles. It is not likely that subtitles are constantly against a stark background, so the use of letterboxes helps subtitles be conspicuous without taking away from the action.

2.7.3 Character identification

According to Bernal-Merino (2015: 127), character labels are increasingly being used in story-based games, not only due to the many characters the players interact with, but also to include those with hearing loss.

Colours, in order of importance of the characters (white, yellow, cyan, and green) are used to identify characters in SDH subtitles (Romero-Fresco 2019: 103); however, the use of polychrome features is deemed as unnecessary in interlingual subtitling where one colour is used throughout. In broadcasts, the positioning of subtitles was used to determine the speakers. Depending on the position of the speakers on screen, subtitles would be leftaligned or right-aligned. This practice is now considered out-of-date as the use of colours and identifying labels are more pertinent (Zárate 2021: 59). However, it is important to keep in mind that using different colours to signify different speakers could alienate colour blind or dyslexic users. Alternatives include the use of name tags, adding the name of the character or using a small portrait to indicate who is speaking.

To distinguish who is speaking, hyphens, arrows, and chevrons are also used. Hyphens may be used to indicate two speakers in one subtitle. Video games sometimes make use of speaker portraits, although video games can also include the name of the character, or name tags. Name tags leave little room for doubt on who is speaking; however, they take up space by adding words to the subtitles and increase the time spent looking at them instead of at the image or action.

When subtitling a conversation, staggering the text makes it clearer. For example:

John: Can you see that?

Rob: Yes, I totally can!

Moreover, when a speaker is out of shot, an arrow may be added to show where the sound is coming from. Having options would be beneficial so that the user can choose the option that suits them the most. A few of these features, such as the different colour coding, are presently used for SDH, but generally not for conventional subtitling for TV, DVD, and the cinema (Mangiron 2013: 46).

Figure 11 Jenny LeClue: Detectivú (Mografi, 2020) Character portraits to identify speakers. Especially useful when there is more than one character can be seen, or when the narrator is speaking.

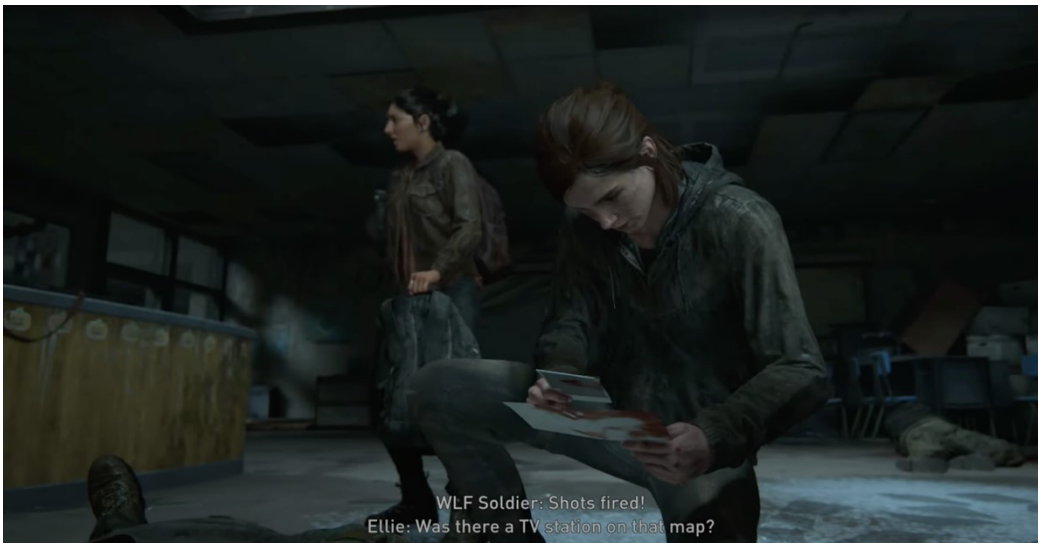


Figure 12 The last of Us Part II (Sony Interactive Entertainment, 2020) – name tags, especially useful when the character is offscreen and dialogue in quick succession

Spyro Reignited Trilogy (2018) developed by Toys for Bob and published by Activision is a compilation of remasters of the initial three games in the *Spyro* series. The initial enthusiasm was soon followed by user complaints as Activison alienated several users by not including subtitles in cutscenes. On social media, Activision maintained its decision by stating that since there is no industry standard for subtitles, they intended to keep the games faithful to the originals. The objections from fans show that subtitles are deemed as necessary and expected, and within four months, Toys for Bob released a patch so that subtitles were included in the game. The subtitles were colour-coded with the inclusion of speaker tags and letterboxing for additional clarity.

Figure 13 The result of the added Spyro Reignited Trilogy (Activision, 2018) subtitles.

2.7.4 Displaying sound effects and conveying emotions

> Sound effects are diegetic (i.e., they take place within the world of the film or play) artificially reproduced sounds – other than dialogue exchanges, music and paralinguistic elements – aimed at creating a dramatic effect in an audiovisual programme or play (Zárate 2021: 80).

The translator must decide which sounds are to be subtitled. Namely, it is the sound effects that have storytelling significance that are usually subtitled. Sound effects that are immediately obvious, such as an onscreen gunshot, do not need to be subtitled as the subtitle would be redundant. Likewise, in the case of unknown songs, the translator has to determine what is to be subtitled, especially when there is a song written especially for the programme, in which case its worth is proportionate to speech (BBC 2019).

In relation to the image, the sound can be synchronous and non-synchronous. In any case, it is important to be very specific and consistent. It is not necessary to subtitle sounds that are immediately obvious and can be seen on screen. From a linguistic point of view, the subtitle

structure to describe a sound effect is subject + active, finite verb (BBC 2019, Romero-Fresco 2019: 117). For example: baby crying. If the sound is coming from an unknown source, nouns or present participles are employed. Italics are generally used to signify that the sound is off-screen. For example: *murmurs*. Priority should be given to the narrative and to the image to ensure that the audience or user does not turn into a reader who misses out on the action.

As a medium, video games are ludic in nature, therefore alternatives in subtitling practices, such as onomatopoeia, or animations to illustrate certain sounds could help improve gameplay experience, albeit this is not a commonplace practice. In place of descriptive labels, onomatopoeias or transcriptions may be used to convey sounds, especially if a product is aimed at young children. This maintains the playful tone. For example, instead of 'car horn', the subtitle 'beep beep' is used (Zárate 2021: 81). Intralingual transcription is useful when the original sound needs to be reproduced, for example in the case of a tongue twister. If more creative freedom is granted, the source of the sound could be indicated by an image in the form of an icon (ibid.). Icons and emoticons can be displayed as discussed by AVT scholars Neves (2005), Civera and Orero (2010), although this has not been amply adopted for subtitling for traditional media (Mangiron 2013). For example, the symbols (?) and (!) are utilised to signify irony or sarcasm, or after questions or statements (BBC 2019). In subtitles, lyrics are sometimes represented by a quaver (♪), to be differentiated from dialogue (Zárate 2021: 51).

A distinctive characteristic of video games is having audio cues to convey critical information with regards to gameplay. However, some video games only provide subtitles for cutscenes and when major characters are speaking, but do not subtitle background chatter and ambient noise that are potentially relevant to the plot. For example, in *Hitman* (Square Enix, 2016), guards, considered as non-playable characters (NPCs), tell the player if they can enter certain areas, yet this information is never subtitled. Some video games offer subtitling options in menus, where the user can find some forms of closed captioning. This provides users with sounds relevant to gameplay and even melee sounds.

Figure 14 Watch Dogs: Legion (Ubisoft, 2020): Ambient sounds such as 'birds singing' are displayed via displaced subtitles, whereas sounds relevant to gameplay are indicated with an arrow.

Even though some of these characteristics, such as name tags, are comparable to SDH for different audiovisual products, and some video games offer some closed captioning, as pointed out by Mangiron (2013), there is no SDH in video games.

2.7.5 Reduction, Condensation, Segmentation, and Spotting

Apart from following the extensive guidelines to ensure the reading speed is reasonable, reduction is also useful to enhance the readability of subtitles without changing the meaning. As Díaz Cintas and Remael (2007: 149) state, there are no rules on when to condense, reformulate, or omit as each instance is different from the last. The need for reduction and condensation of the message transmitted via audio is found in subtitling guidelines. In the context of interlingual subtitling, Díaz Cintas and Remael (2007), and Kovačič (1994), call the elimination and reformulation of what is not pertinent to the comprehension of the overall meaning, reduction. As quality is thus favoured over quantity, Díaz Cintas and Remael (2007: 145) argue, "subtitling can never be a complete and detailed rendering. And neither should it, for that matter". Text reduction is especially necessary when speech rates surpass suitable reading speeds, so enough time must be given to register and comprehend the subtitles.

Reduction is also indispensable as subtitles are normally limited to two lines. In the context of subtitling, where there is a shift from the oral mode to the written mode, characteristics typical of speech such as; hesitation, fillers, and repetition, can be excluded from the subtitle without changing the overall meaning of the message. However, these characteristics are to be included in the subtitle if they provide characterisation and have diegetic value. According to Díaz-Cintas and Remael (2007: 146), there are two classes of text reduction: partial and total reduction. Partial reduction is carried out through condensation of the ST, whereas total reduction involves the omission of lexical items. Namely, the translator eliminates or reformulates what is not relevant. Condensation and reformulation can take place at word level or clause or sentence level
(ibid.).

As Díaz Cintas and Remael (2007: 148) point out "one could say that the subtitler must act on the principle of relevance". Originated by Sperber and Wilson, the central premise of the relevance theory (1986) is that the human cognitive system works in such a way as to maximise relevance with respect to communication. It is an extension of Grice's Relevance Maxim. Gutt (2000) was the first to connect the relevance theory to the theory of translation. Kovačič (1994) proved its purpose in the study of subtitling. Levy's 'minimax' strategy (1967/2000), where minimal effort should result in maximum effect is in accordance to Gutt's (2000: 37) claim that translation must be done "in such a manner that it yields the intended interpretation without putting the audience to unnecessary processing effort". Although Gutt (ibid.: 390) discusses the minimax effect within an interpreting framework, this is also relevant for subtitling:

> since the stream of speech flows on, the audience cannot be expected to sit and ponder difficult renderings – otherwise it will lose the subsequent utterances; hence it needs to be able to recover the intended meaning instantly.

The issue of relevance relates to the issue of verbatim or near-verbatim subtitles, where speech is transcribed or not edited enough. Although adding or removing from the source text may be bothersome to hearing users, elimination or reformulation specifically consider the needs of the target audience. Rather than viewing the subtitles as inferior to the source text, editing helps to achieve the desired effect. Reduction and condensation aid with

comprehension and reading speed, however in video games, developers commonly ask for intralingual subtitles to be verbatim. Even in interlingual subtitles, there is only a small amount of reduction (Mangiron 2013).

Furthermore, when a subtitle has to be segmented, "[...] lines should be divided in such a way that words intimately connected by logic, semantics or grammar are written on the same line whenever possible" (Ivarsson 1998: 77). According to BBC guidelines (2019), "subtitles and lines should be broken at logical points". For example, a first name should not be separated from a last name. Regarding line segmentation and readability, for aesthetical reasons, the top line should be shorter than the bottom one. However, "[...] the segmentation of the text should follow syntactic and grammatical considerations rather than aesthetic rules, e.g., having lines with a symmetrical layout." (Díaz Cintas, Remael 2007: 172). As stated by the BBC guidelines (2019), there should be a compromise between linguistic and geometric considerations, with priority given to linguistic considerations. In video game subtitles, these guidelines are not followed and as a result, sense blocks and grammatical blocks are not retained, and the first line of a subtitle is longer.

Figure 15 Destiny (Activision, 2014) – sense blocks not preserved.

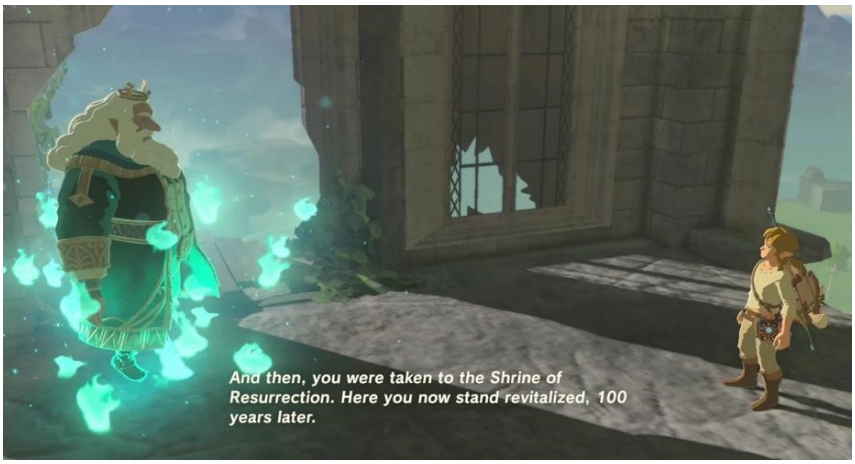


Figure 16 The Legend of Zelda: Breath of the Wild (Nintendo, 2017) – arbitrary line breaks.

As sound cues and visual cues both direct attention to the subtitle area, synchronisation a critical element of subtitling, which industry guidelines agree with. Spotting, also known as timecoding, or cueing, involves detecting when a subtitle should appear and disappear, according to spatial and temporal parameters (Díaz Cintas, Remael 2007: 88). The translator must establish the time code in, the time code out, the duration, and the reading speed. As a general rule, subtitles must ideally be in temporal synchrony with the utterances and the visuals. Thus, subtitles corresponding to the dialogue must not appear before it has even been spoken. Moreover, the translator must be respectful of prosodic features such as interruptions and pauses. The translator therefore must not anticipate what is going to be said by not respecting the rhythm. In contrast to oral speech, written texts like subtitles are presented consecutively. When there is more than one speaker and dialogue overlaps, the translator must decide which information to present. With regards to shot changes, two divergent views emerge. The literature written by AVT professionals advise to avoid displaying a subtitle over a shot change. Commonly, there is a 2-frame gap between successive subtitles so that the viewer registers the new subtitle. However, companies may leave no gap or have up to 6 frames (Díaz Cintas, Remael 2007). The subtitle should also end before the shot change, when possible. Leaving a subtitle over a shot change causes rereading which leaves less time to look at images (Romero-Fresco 2019: 63). On the other hand, recent research involving eye movement indicates that viewers do not tend to reread subtitles that cross shot changes, although the researchers do emphasise that it is troublesome to the viewer's reading experience (Krejtz, Szarkowska and Krejtz 2013 cited in Zárate 2021: 56). Nevertheless, it is

sometimes unavoidable to overrun shot changes as linguistic considerations are favoured over regard for shot changes. Text segmentation and spotting are crucial to subtitling as the goal is to enhance readability, respect the maximum reading speed, and guarantee synchronisation, by including an entire idea in each subtitle when it is viable. Furthermore, too much text on the screen may prevent the user from reading subtitles altogether.

Introduced in 1817 by Samuel Taylor Coleridge, the concept of 'suspension of disbelief' refers to temporarily accepting events or characters that would usually seem as marvellous in order to appreciate a work of literature exploring exceptional ideas. This notion has also been used for film and AVT (Bucaria 2008). Furthermore, it is applied to subtitling by Pedersen (2001: 22) who calls it a "contract of illusion". Chaume (2013:187) defines suspension of disbelief as a term referring to the reader/viewer's ability or desire (or both) to ignore, distort or underplay realism to feel more involved with a video game, a film, or a book. It might be used to refer to the willingness of the audience to overlook the limitations of the medium (for example, that a film is dubbed) so that these do not interfere with the acceptance of these premises. Moreover, Chaume mentions "the threshold of acceptability" (2013: 15 cited in Romero-Fresco 2019: 50) that should not be encroached. Although this is in reference to dubbing, it could also be applied to subtitling where coherence between what is heard and what is seen, and compliance with synchronisation norms are equally important.

2.8 Creative subtitles, integrated titles, fansubbing

As Romero-Fresco (2019: 129) points out "the invisibility of subtitles is favoured over their creative potential". Conventional subtitles are sometimes still seen as "a blemish on the film screen" (Díaz Cintas, Remael 2007: 82) that have the potential to become a reading experience, especially in countries where subtitling is not the norm. What can help to surmount the constraints discussed previously, is the creative potential of subtitles. Experimental subtitles made by fans, known as fansubs, or subtitles made by 'romhackers' (Muñoz Sánchez 2009) serve as inspiration for creative subtitles (Foerster 2010, McClarty 2012), or integrated titles (Fox 2018), which enrich the experience rather than being a distraction or potentially being alienating. Apart from potentially being less tedious to the average viewer, as this approach favours interaction with the action, the subtitles serve a

purpose for foreign language learners and the aurally impaired. Mangiron (2009) refers to these activities as user-generated translation (UGT). Filmmakers and video game developers who believe that subtitles take away attention from the action may experiment with font, size, position, pace, layout, and colours to design a desired aesthetic. Due to digital technology, and inspiration from user-generated online audiovisual content, collaboration between the translator and the creative team, the gap between the original and the translated product could decrease. As pointed out by Romero-Fresco (2019: 151), most importantly, integrated titles should not only be comprehensible but also consistent.

Fox (2017) was the first to carry out an eye-tracking study on creative/integrated titles. The data showed that although viewers took a little longer to find integrated subtitles, in contrast with standard subtitles, the reading time was generally reduced. One of the main subtitling requirements is using a legible size, however, this could also be experimented with and put to creative use in integrated titles. According to Romero-Fresco (2019: 131) the majority of research relating to subtitle readability only included some standard typefaces when different types of fonts carrying their own meanings and connections may be used. For example, font psychology is concerned with the subjective connotations associated with different fonts and their effect. However, character designs, known as glyphs, must still be legible, and have a high-contrast potential as letters are mostly displayed against various images rather than blank back backgrounds. Therefore serifs, narrow strokes, and big counters should still be avoided in subtitling, which should be distinctive, uniform, and make use of high-contrast glyphs. Furthermore, subtitle fonts must have good spacing. (RomeroFresco 2019:132). The placement of creative subtitles is distinctive. The intention is to position subtitles in a nonconventional way in order to avoid subtitle blindness, aid with legibility, and character identification, rather than to use alternative placement at all costs (Fox 2018). Therefore, the aim is not to find exceptional positions to put the subtitles in but to offer a better experience, when necessary.

Thanks to better connectivity and access to freeware, virtual communities instantly have access to an assortment of tools to engage with other fans to produce and distribute content. Bogucki and Díaz Cintas (2020: 20), and Pérez-González (2014: 233) call this the “democratisation” of technology. From the literature, two principal reasons emerge to justify

fan activity: to make up for translations deemed as poor, or to make up for video games that are not made available in some locales. Although nowadays video games are not normally rife with flagrant errors, sometimes fans still claim that official localisation is of inferior quality (O'Hagan, Mangiron 2013: 309). Pérez-González (2014: 233) writes about "participatory audiovisual translation" where the involvement of non-professionals means there is a certain resistance towards "the enforcement of assimilationist translation practices or even the occasional decision not to translate certain texts" (ibid.). Preferably, video game localisers should be game literate, and well versed on the video game they are working on; however, this is not always the case. The insight of dedicated gamers paired with the collective knowledge of fan communities usually contrasts with the knowledge of professional translators. Disadvantageous circumstances, such as the time available to attain high-quality results and internal communication issues, prevent the translators from researching the video games, as highlighted by studies (Mangiron 2006, Muñoz Sánchez 2009, O'Hagan 2009).

For example, *Mother 3* (2006), the third game in the *Earthbound* series, was never released outside of Japan, however, it still had a large following as it is referenced in other video games by Nintendo. As a result, a group of fans took it upon themselves to produce an English version. This fan translation spurred over 100,000 downloads solely in the first week of its release (Parkin 2008 cited in O'Hagan and Mangiron 2013).

Figure 17 Mother 3 (Nintendo, 2006), fansubbed. A disclaimer given to the user about the game translation not being an official version.

Figure 18 Mother 3 the original (Nintendo, 2016).

Figure 19 Mother 3, the fansubed version.

In literature, fansubbing, or amateur subtitling is discussed under different headings (Díaz Cintas and Muñoz Sánchez 2006, Massidda 2015, Pérez González 2007). "Subtitling by fans for fans" (Bogucki, Díaz Cintas 2020: 20) goes back to the 1980s as Japanese anime started to be subtitled, although it took off in the 1990s with the onset of inexpensive computer software and free subtitling equipment (ibid.). "Fansubbing [...] seeks to redress the shortage and cultural insensitivity of commercial translations" (Pérez-González 2014: 17). Burn (2006: 88) argues how such fan work can both hold the original text in high regard, by looking to remain as faithful to it as possible, and simultaneously remodel the original text, modifying it to direct it to the particular interests of the fan or fan group. Modifications range from a faint

superficial change to a reconstruction of the original game. This practice brings to the foreground the blurring boundary between the producer and the consumer (O'Hagan 2009).

Although fansubbing is not a recent occurrence, fansubs only started being recognised in the field of TS recently (Munday 2008) for the most part by scholars in the field of AVT (Díaz Cintas, Muñoz Sánchez 2006, O'Hagan 2009, O'Hagan, Mangiron 20, Pérez González 2006). What sets fansubs apart from 'traditional' subtitles, is their experimental nature associated with "abusive subtitles" (Nornes, 1999/2004, 2007 cited in O'Hagan 2009) concerning the experimental translation strategies applied. Nornes (ibid.) claims that this kind of subtitling challenges the commonplace constraints linked to subtitles. The result and quality fluctuate from one fan subtitling project to another, however, the fans' knowledge of particular video games, and their theories on certain aspects, make up for the lack of formal translation skills. Studies on fansubs in TS (Díaz Cintas, Muñoz Sánchez 2006) highlight the fluctuating quality of fansubs and their effect on AVT norms.

3. Methodology

This study aims to gather feedback from video game users to explore possible subtitling strategies to reflect their preferences while taking into consideration the unique characteristics of the medium.

This chapter provides an account of how the data and information were accumulated, recorded, and examined. To find out users' level of satisfaction with subtitles and their preferences, subjective data was collected through a questionnaire. The strengths and weaknesses of the questionnaire are discussed in this chapter.

3.1 Defining terms

According to Matthews and Ross (2010: 201 cited in Saldanha, O'Brien 2013: 151), a questionnaire is:

> (1) a list of questions each with a range of answers; (2) a format that enables standardized, relatively structured, data to be gathered about each of a (usually) large number of cases.

Langdridge and Hagger-Johnson (2009: 88 cited in ibid.), make a distinction between the terms questionnaire and survey as "[t]he term 'survey' is used to describe a study design where the questionnaire is the primary focus". This research necessitates the participation of human beings who provided their consent. Reference is made to 'participants' or 'respondents'. A participant or respondent is "any person who responds to the questionnaire or to questions presented" (Saldanha, O'Brien 2013: 150).

The distinction between empirical and conceptual research is derived from that traditional debate between hermeneutics, the science of interpretation, and positivism, based on empirical observation and experiment (Williams, Chesterman 2002: 58). Empirical research is data-driven and so it can be substantiated by observation (naturalistic inquiry) or experiment (experimental inquiry)" (Pérez-González 2014: 146). In the case of data gathered via a questionnaire, the research is empirical as it explores new data and information from the

observation of the data collected. Distinguished by its focus on users, empirical research started making its way into AVT in the 1980s (Bogucki, Deckert 2020: 50).

The study is thus an empirically supported user study that investigates users' responses, in addition to subjective data collected through questionnaires. Questionnaires are a type of quantitative research. According to Williams and Chesterman (2002 :65), "quantitative research seeks to measure things, to count, and to compare statistically". However, questionnaire data can produce data that can be analysed both qualitatively and quantitatively.

3.2 Reception Studies in AVT

As Mangiron (2018) states, video games are customised to suit the expectations and preferences of the target users, yet reception studies are still somewhat lacking in number. Gambier (2009: 19 cited in O'Hagan, Mangiron: 312) states:

> Very few studies have dealt with the issue of reception in AVT, and even fewer have looked at these issues empirically, even though we continually make references to readers, viewers, customers, users, etc.

Although the contribution of reception studies to AVT has been recognised since the 1990s (Pérez-González 2019: 367), there is an increased need for further reception studies in video game localisation and for paving the way for additional research in this area. Mangiron's study (2013) also calls for reception studies to establish a video game localisation subtitling standard by considering the interactive essence of the medium and involving the user's viewpoint. This would not only equip localisers, but also video game developers with a better understanding of user preferences to create subtitles that are not merely functional but can also be enjoyed by the users. Conducting reception studies to have a subtitling standard for video games would lead to a better gameplay experience for a variety of users. Kovačić (1995 cited in Pérez-Gonzáles 2019: 367) brought to attention the value of understanding how viewers receive subtitled content. Additionally, based on the research of Kovačič (1995 cited in ibid.) and Chesterman (2007 cited ibid.), Gambier (2009 cited in O'Hagan, Mangiron 2013:312),

proposes that translations cause reactions, responses, and repercussions. This model of the 3 Rs is regularly cited by scholars pursuing reception studies in AVT. These studies aim to identify effective AVT strategies from users' perspectives and the same user-focus direction can be applied to game localisation research.

Part of the adversity in operationalising reception studies is on account of the range of variables in relation to users along with types of audio-visual categories. The audience with differing ages, preferences, and abilities, in addition to that of audiovisual content, all impact reception. Gambier (2009 cited in O'Hagan, Mangiron) proposes 3 types of reception based on the works of Kovačić (1994: 245-252), and Chesterman (2007: 171-183): response, reaction, and repercussion. The objective of these studies is to establish adequate AVT strategies from users' perspectives.

3.3 Tool used to gather data

The principal tool used to gather data for this study was that of a questionnaire. Questionnaires are predominant in sociological research; however, they are not limited to sociology but have also been widely used in TS. The questionnaire was specifically designed to reach the aims of the study and then shared online to reach as many local gamers as possible. Details on how the study was carried out will be given later in this chapter.

3.4 Questionnaire design

Developed and managed using Google Forms, the questionnaire was designed to first get the participants' consent and then gather demographic data about the respondents' including gender, age group, and level of English for both reading and listening. This allows the researcher to collect data on characteristics that affect the outlook of the participant and thus affect the result. The rest of the questionnaire was devised to find out about the participants':

- Video gaming preferences
- Use of subtitles and reasons for/against use
- Subtitling preference with regards to the seven video clips.

These questions were designed to answer the research questions. Most of these questions were multiple-choice questions to collect quantitative data. Some questions were designed so that the participants could choose more than one suitable answer, including an 'other' option which allows the participants to add a textual response to the predefined answers which adds a qualitative element to the study. Furthermore, using conditional logic, some questions were automatically skipped, depending on how the participants responded. For example, if the participant answers 'no' to the question 'Do you play action-adventure games?', the subsequent question 'How often do you play action-adventure video games?', would not be displayed as it is not relevant. Additionally, Likert scale questions were included to collect further quantitative data. To collect qualitative data, optional openended question was included to finish off the questionnaire, should the participants have any further comments to add.

The participants were presented with seven short video clips in English with intralingual subtitles, taken from action-adventure video games, accompanied by questions. The video clips were selected to gauge the participants' preferences, based on Mangiron's subtitling parameters a) subtitle length and duration; b) font type, size, and colour; c) character identification, and d) displaying sound effects and conveying emotions (2013: 48). Each clip was therefore intended to present the participants with concrete examples to find out their preferences, to reach the research aim, namely that of suggesting subtitling strategies based on local users' feedback.

With regards to the language used, the questions were phrased unambiguously to avoid leading the participants in believing there is a right or wrong answer that the researcher is looking for. Moreover, the researcher phrased questions or statements in a way as to avoid leading the participants to implicit assumptions, this ensured that the answers truly reflect the views of the participants.

Care was taken to ensure that a balance was found that ensures that the required data was gathered from the questionnaire without the questionnaire being lengthy or repetitive. The video clips chosen were concise in order not to discourage participants with the amount of

time required to fill in the questionnaire, the approximate time required was indicated at the start of the questionnaire, together with a progress bar at the bottom present throughout the process.

3.5 Strengths and weaknesses of the questionnaire

The questionnaire includes both closed and open-ended questions. Apart from fact-finding demographic questions such as those about gender, and age, closed questions restrict the participants to answer, 'yes' or 'no'. The participants could add further options to some of the closed questions. Although the 'Any further comments?' open question does not directly provide answers to the research question, it gives the participants a level of satisfaction to communicate their thoughts (Saldanha, O'Brien: 157). Open-ended questions allow the respondents to contribute by sharing their individual viewpoints or by providing more detailed information. Both kinds of questions have advantages and disadvantages associated with them. Closed questions prompt structured data that can be interpreted quantitatively, but they reduce the opportunity to express distinct thoughts. Providing the option to write more under 'other', reduces the risk of a participant selecting the wrong response because none of the ones provided are accurate for them. On the other hand, open-ended questions may be skipped as they increase the time taken by the participant to answer the questionnaire. Although the questionnaire limits the respondents to answer briefly, and its design may be time-consuming, it is not time-consuming as a means of efficiently collecting structured and relevant data on a substantial scale.

Apart from closed and open questions, the 'Likert scale' was used to gauge the participants' opinions on subtitles. The 'Likert scale', developed by the American psychologist Rensis Likert, is a commonly used tool in questionnaires (Saldanha, O'Brien 2013: 157). Likert scales are primarily used to elicit opinions rather than facts (Pérez-González 2014: 157). The use of a Likert scale in this questionnaire gave the participants five options ranging from strongly disagree to strongly agree. The Likert scale was used so that the participants are not constrained with just yes or no answers, and a more accurate depiction of their opinion can be recorded. This way quantitative data that can later be analysed is obtained. The main

disadvantage of using this method is having an odd-numbered scale where participants can select the mid-point which can prove problematic as it limits a definite answer to the research question.

3.6 How the study was carried out

The questionnaire was created using a cross-sectional and self-administered design to gather mainly quantitative and some qualitative data. It was done using Google Forms, a survey administration software that is used for questionnaires to be easily distributed and filled out anonymously online.

The questionnaire was aimed at local gamers and was open for responses for a 15-day time window. It was shared on the Facebook page of the University of Malta's Department of Translation and Interpreting Studies, as well as on the Facebook page of 'Subtitles Now Malta', who actively campaign for the use of subtitles in the local scenario. An email was sent to Mr Jasper Schellekens, a research officer at the Institute of Digital Games at the University of Malta, who shared the questionnaire with the department's alumni and current students. The questionnaire was also sent to the Foundation for Information Technology Accessibility (FITA) who work to make information communications technology accessible in Malta.

3.7 Research Ethics

The research conforms with the University of Malta Research Code of Practice and the University of Malta Research Ethics Review Procedures. Participants were informed at the start of the questionnaire that participation was voluntary and completely anonymous. Furthermore, the participants were made aware that their consent to participation could be withdrawn at any time without having to give a reason, and without any repercussions. As underlined by Saldanha and O'Brien (2013: 43), informed consent is central to ethically designed research, and information needs to describe the research and its objectives in plain language. It was stated who is conducting the research alongside the contact details of the researcher, the names of the academic supervisors as well as information on the University

and department. Therefore, it was ensured that the participants understood what they were consenting to. The participant was allowed to continue only once they provided consent.

Research conducted through the means of the Internet is termed Internet-mediated Research. From this type of research, two principal questions arise: are the participants aware that they are being studied? and are they identifiable? (Saldanha and O'Brien 2013: 48). In this case, the participants were asked to select 'yes' if they wanted to take part after the purpose and nature of the study were explained. The participants were made aware that their responses will be used and what they will be used for.

4. Findings and Discussion

This chapter will provide the findings of the questionnaire, based on the previously discussed methodology. The data obtained from each question will be represented graphically. This data will assist in determining the preferences of the participants towards video game subtitles, and later discussing the pertinent issues that emerge, and suggestions are put forward for subtitling guidelines based on the input of users.

4.1.1 Participant profile

Before filling in the questionnaire, the participants were provided with background information on the research. The questionnaire then started by asking them for their consent. By answering 'yes', 183 participants confirmed that they would like to participate in the study.

The next two questions were intended to collect basic demographic data. With regards to gender, out of the 'male', 'female', 'prefer not to say', or 'other' options, 50.8% of the participants were male, and 49.2% of the participants were female.

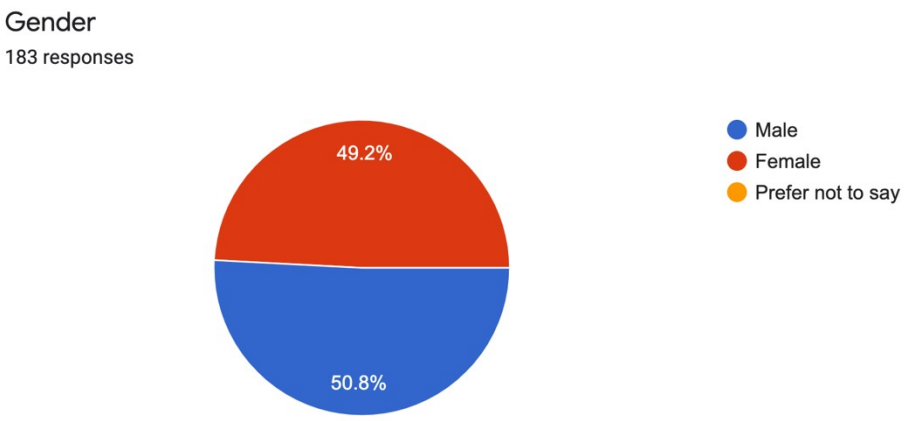


Figure 20 Gender (Q2)

Most of these participants were in the 25-34 age group (35%). Listed in descending order, the rest of the participants' belonged to the:

- 35-44 age group (24.6%)
- 18-24 age group (15.6%)
- 45-54 age group (13.1%)
- 55-64 age group (9.3%)
- 65 and over age group (2.7%)

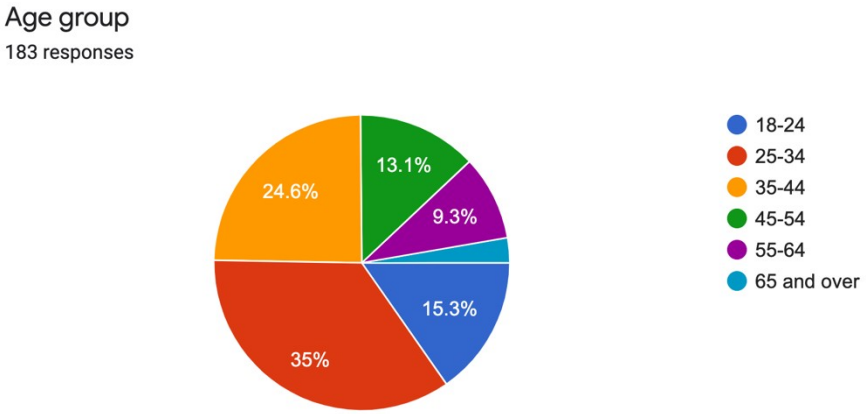


Figure 21 Age group (Q3)

To continue building on the profile of the respondents, Q4 was designed to find out how many hours they spend gaming on average per week. This question regarding gaming habits can be used to differentiate between 'casual' and 'serious' players.

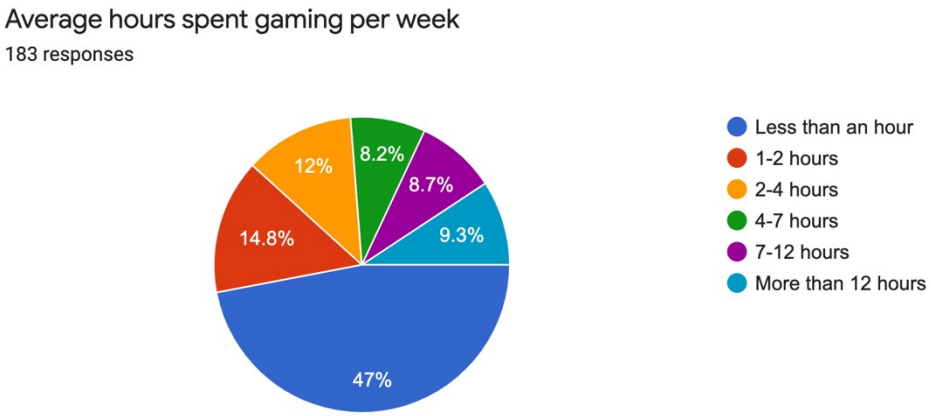


Figure 22 Average hours spent gaming per week (Q4)

The following two questions (Q5 and Q6) were asked to find out about the level of English reading and listening skills of the participants. These questions were asked since the respondents' level of English listening and reading skills could influence subtitle usage.

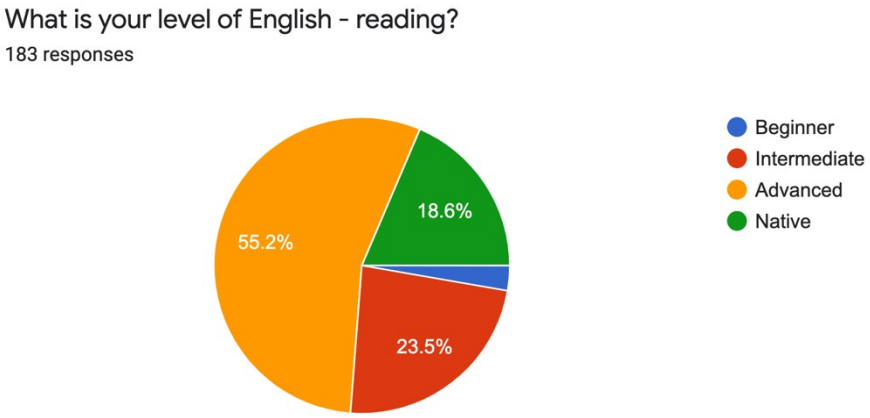


Figure 23 What is your level of English - reading? (Q5)

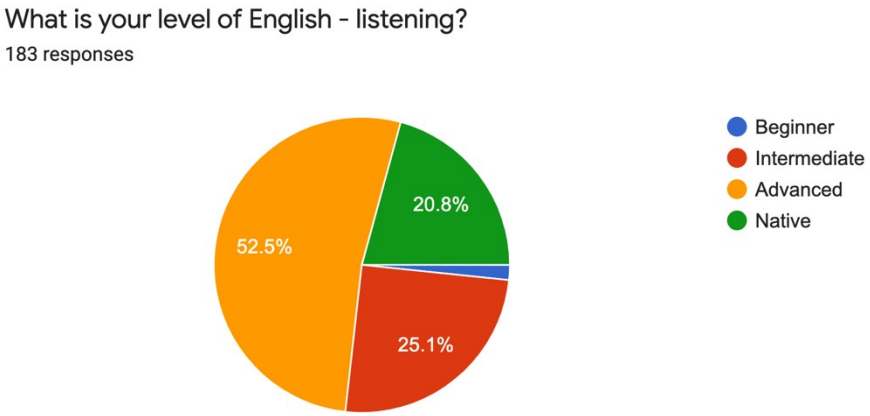


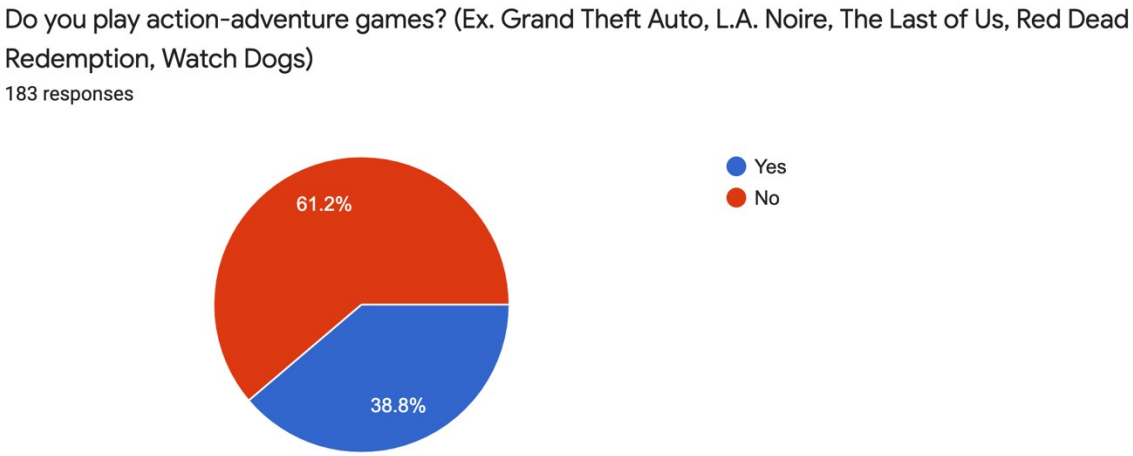
Figure 24 What is your level of English - listening? (Q6)

	Reading	Listening
Beginner	2.7%	1.6%
Intermediate	23.5%	25.1%
Advanced	55.2%	52.5%
Native	18.6%	20.8%

Table 4.1 Percentages juxtaposing the participants' level of English reading and listening

4.1.2 Gaming preferences

Since the literature review focuses on action-adventure games, and the subsequent video clips were taken from action-adventure games, the respondents were asked if they play action-adventure games. Examples of well-known video action-adventure video game titles were given for the participants to be able to identify the genre. 71 of the participants



(38.8%) answered 'yes', meaning they do play action-adventure games.

Figure 25 Do you play action-adventure games? (Ex. Grand Theft Auto, L.A. Noire, The Last of Us, Red Dead Redemption, Watch Dogs) (Q7)

If the respondents answered 'yes' to Q7, they were then asked how often they play actionadventure video games.

- 39.4% play action-adventure video games 2-3 times a week
- 21.1% play action-adventure video games once a month
- 15.5% play action-adventure video games every day
- 14.1% play action-adventure video games less than once a month
- 9.9% play action-adventure video games once a week

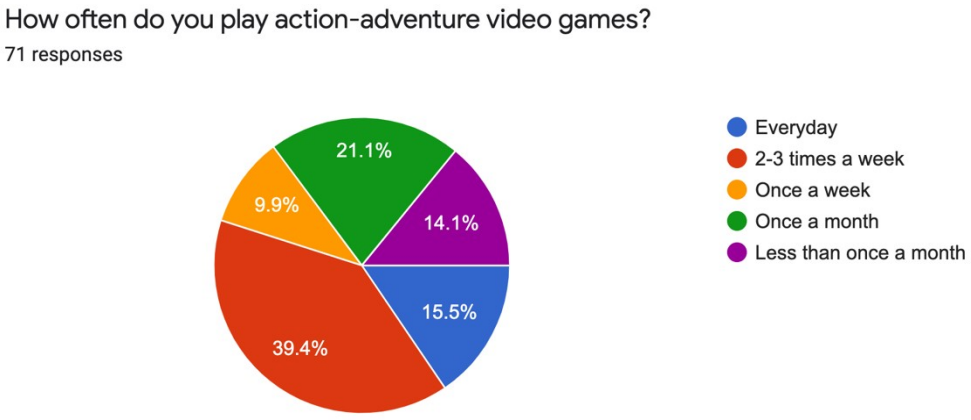


Figure 26 How often do you play action-adventure video games? (Q8)

Next, all the respondents were asked which platform/s or console/s they tend to use. For this question, the respondents could choose more than one option. This question was asked to determine which platforms or consoles the participants prefer since this influences subtitle usage. A gamer who sits further away from the big screen is more likely to find subtitles beneficial than someone playing a casual game with no narrative on a mobile or tablet.

Accumulating 129 responses, the 'mobile or tablet' option was selected the most. The 'PC' and 'home console' options both received 51 responses apiece, while 18 participants chose the 'handheld console' option.

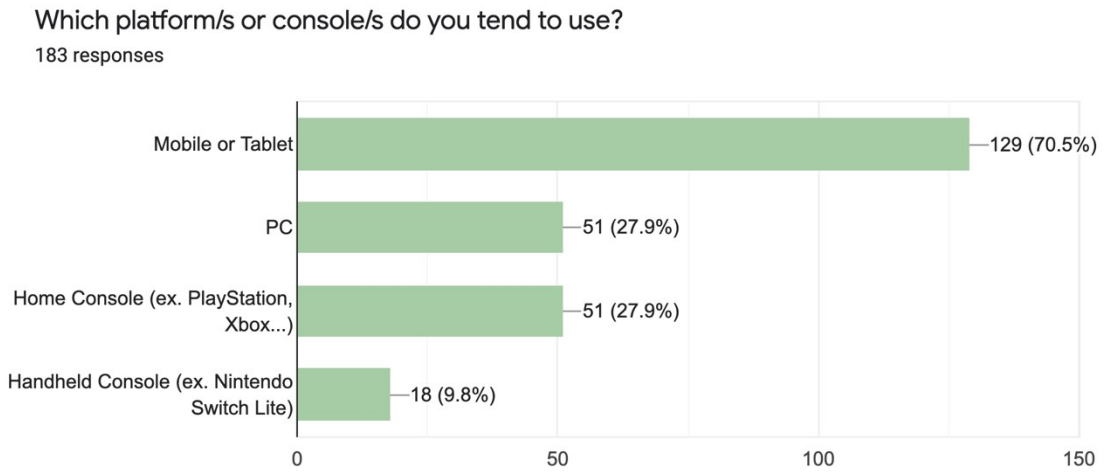


Figure 27 Which platform/s or console/s do you tend to use? (Q9)

4.1.3 Subtitling experience

The participants were then asked if they play with subtitles on.

- 33.9% answered 'Yes, I always make sure subtitles are on'
- 32.8% answered 'Never'
- 21.9% answered 'Sometimes'
- 11.5% answered 'Only if they are enabled by default'

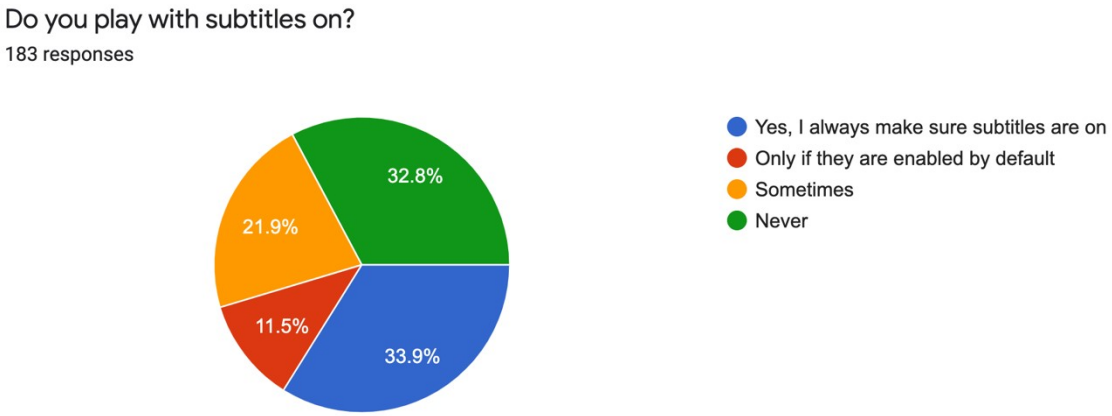


Figure 28 Do you play with subtitles on? (Q10)

In total, 123 participants answered with 'Yes, I always make sure subtitles are on', 'Sometimes', or 'Only if they are enabled by default' and were taken to Q11 (Figure 30), which asked why they find subtitles helpful. The participants could choose more than one response. There were 8 options given by the researcher, classified below:

Option	Number of responses
I play in a sound sensitive environment	26
Hearing Loss	9
English is not my native language	14
To understand the story better	71
I don't want to miss out any crucial information	76
For instructions	48
To understand accents or characters who speak too quickly	53
Music or background noise overpowers dialogue	29

Table 4.2 Number of responses to Q10

Aside from these 8 options, an ‘other’ option was available for those participants who wanted to add another reason apart from the ones already listed:

- I always turn on subtitles even with movies. Should I miss any piece of dialogue for any reason, I can always refer to the subtitles. I also read the subtitles all the time for this reason.
- I find them useful when I keep the volume low while my kids are sleeping.
- I feel it helps me engage with the game better.

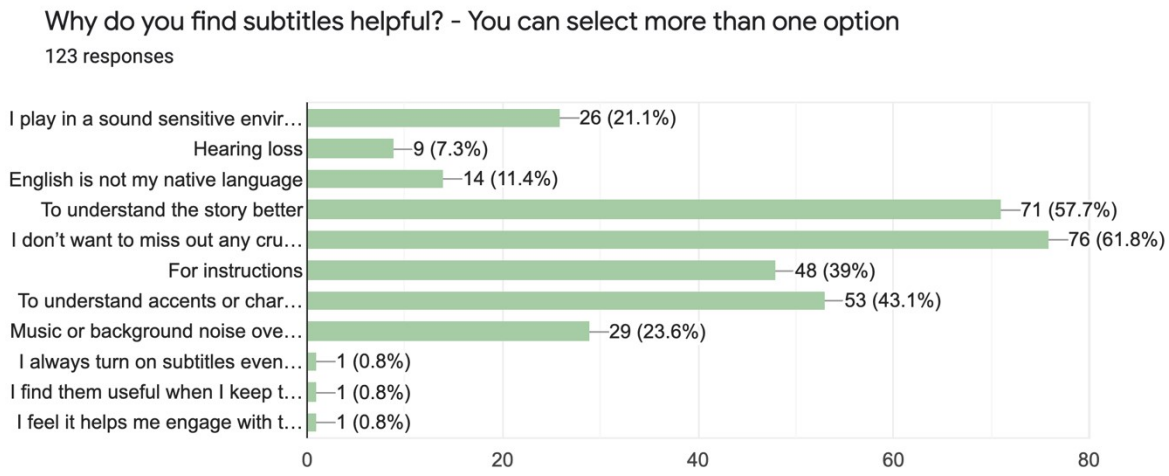


Figure 29 Why do you find subtitles helpful? - You can select more than one option

The remaining 60 participants who answered ‘Never’ to Q10, were taken directly to Q12 (Figure 31) so that the researcher could find out why they don’t use subtitles. Multiple options could be chosen. 5 options were given:

- I do not need them (26 responses)
- They are not readily available in the games I play (12 responses)
- I find them distracting (16 responses)
- I find them difficult to read (2 responses)
- The games I play do not have substantial dialogue (17 responses)

An ‘other’ option was available for those participants who had other reasons for not using subtitles, apart from the 5 listed:

- Sometimes, they anticipate the actual dialogue in the game, and I don't like that.
- I don’t play games.

The most chosen options were ‘I do not need them’ and ‘The games I play do not have substantial dialogue’, which can be related as those players who play video games containing little dialogue, are less likely to view subtitles as necessary. One of the 16 respondents who never use subtitles, and indicated that they find subtitles distracting, also commented on subtitles anticipating the dialogue. Lack of synchronisation, determined by spotting, is enough for a user to never want to use subtitles when playing video games.

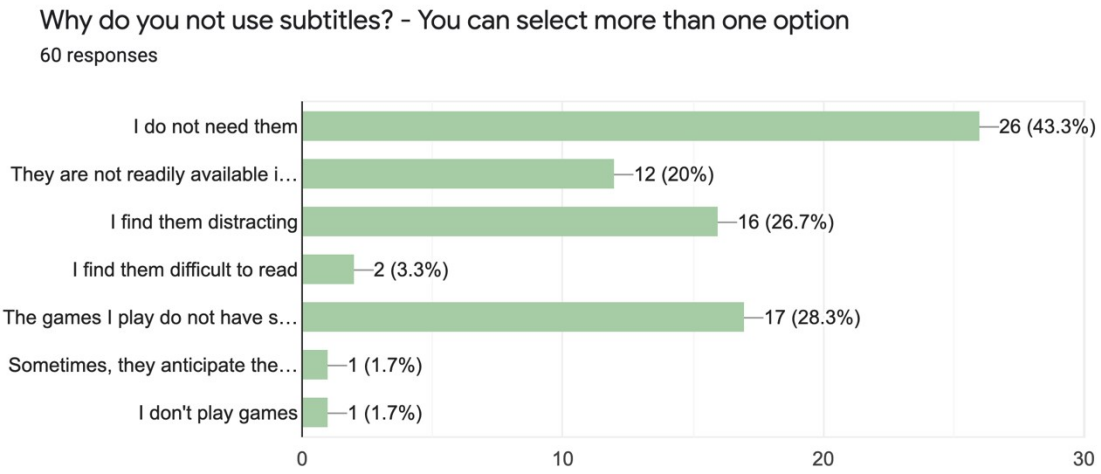


Figure 30 Why do you not use subtitles? - You can select more than one option (Q12)

All the participants were asked if subtitles ever hindered them from enjoying a game. Of the 183 participants, 27.3% answered ‘yes’, and 72.7% answered ‘no’. Those who answered ‘yes’, were taken to Q14, asking how subtitles hindered them from enjoying a game. Those who answered ‘no’, were not asked this question as it is not relevant.

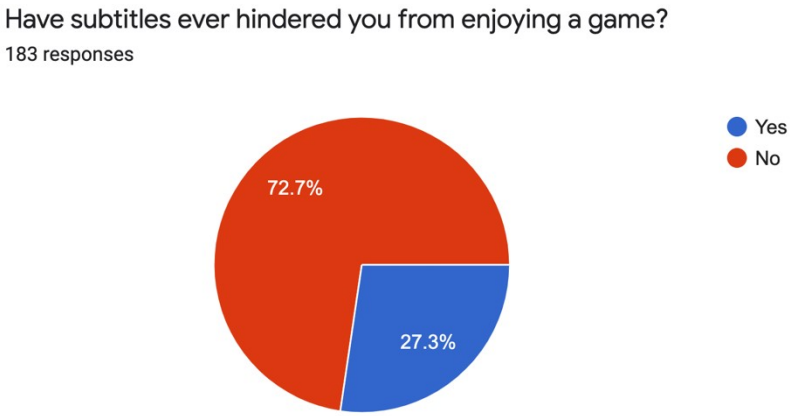


Figure 31 Have subtitles ever hindered you from enjoying a game? (Q13)

When asked 'HOW have subtitles ever hindered you from enjoying a game?', 11 respondents chose to not write anything or simply wrote 'yes'.

Most respondents expressed that they find subtitles distracting as they divert their focus from the video game. This is in line with eye tracking research sustained by Romero Fresco (2019: 75) which shows that when our eyes are automatically drawn to subtitles when they are displayed, whether they are needed or understood.

- Distracts my attention
- Distract
- Distracting
- Distractive
- Act as a distraction
- Very distracting
- Subtitles distract my attention
- Well, sometimes it diverts the focus
- I tend to lose focus when subtitles are displayed
- Because I look too much at the subtitles and not at the picture
- Concentrate more on the subtitles rather than the game
- Get my attention to the subtitles instead of the game

- I concentrate more on subtitles
- By focusing only on them
- I would be too focused reading the subtitles
- You're focusing on the game but at the same time the subtitles take your attention
- Affects my concentration
- No concentration
- They interfere me while playing
- They obstruct the playing screen
- They attract my attention too much
- They get in the way of what I am doing
- They interrupt you

Some commented that they cannot enjoy a video game as they deemed the subtitles as unsuitable due to the font, background, not having name tags, and not being well-timed. This is in line with the position taken by scholars, found in the literature review, such as Mangiron's (2013) study which highlights the absence of consistency and the ad hoc approach to subtitling.

- Font too small, not indicating which character is speaking, white background and white font, speaking quickly
- Presented too small or not accurate to dialogue, white background
- Illegible - do not help
- Not clear enough
- Being too small and not matching the narrator
- Wrong font, difficult to understand and follow for talking quickly, not indicating which characters are speaking, no sound effect
- Not clear enough, not indicating characters, narrator not compatible with timing subtitles
- They are too slow

The rest of the participants answered as follows:

- They take away from paying attention to the characters' voices and sometimes, reveal the action before it happens.
- Very good and better sometimes to understand more what you are playing
- I like watching in full screen ● It's a part of the game.
- They sometimes come up on the screen and interfere with my game.
- To be on top of the screen

A considerable number of participants have been prevented from enjoying a video game due to subtitles. This demonstrated the need for better subtitling practice in video games, as subtitles should aid the users and provide a better gaming experience, rather than hinder them.

All the participants were then asked to read the following three statements:

1. Subtitles are available for the games I play
2. I find subtitles helpful
3. My gameplay experience is better when subtitles are available

For each of these three statements, they had to select the option they most agree with amongst:

- Never
- Rarely
- Sometimes
- Often
- All of the Time

The results are tabulated in Table 4.3.

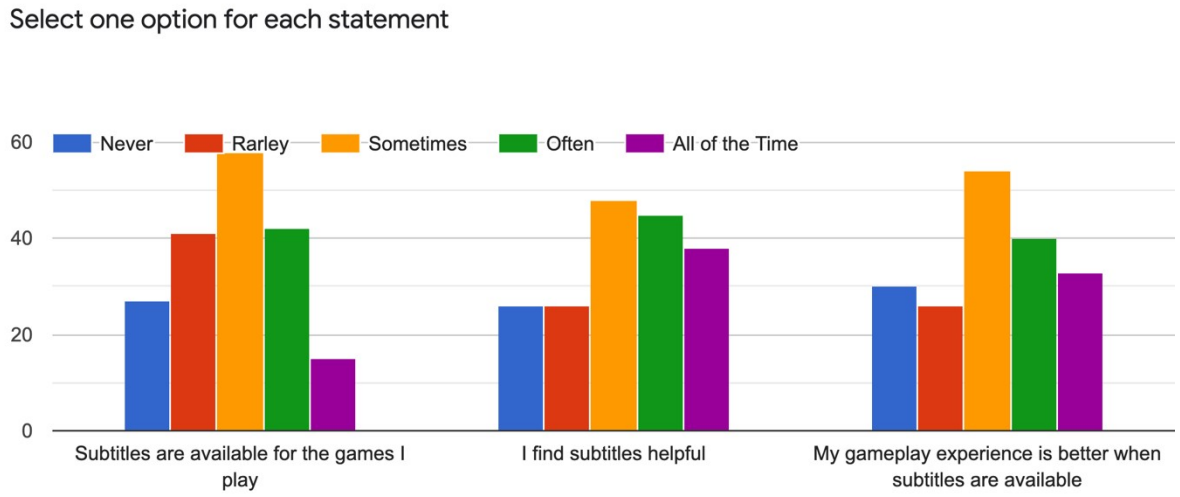


Figure 32 Select one option for each statement (Q14)

	Never	Rarely	Sometimes	Often	All of the Time
Subtitles are available for the games I play	27	41	58	42	15
I find subtitles helpful	26	26	48	45	38
My gameplay experience is better when subtitles are available	30	26	54	40	33

Table 4.3 Number of responses to Q14

In total, 126 participants indicated that subtitles are never available, rarely available, or sometimes available, for the games they play. Therefore, apart from subtitles not being up to scratch in some video games, occasionally they are not available altogether. Apart from time pressures associated with the development process, this implies a lack of awareness from video game developers. Although many respondents answered the three statements by choosing to answer with 'sometimes', a notable amount find subtitles helpful and find their gameplay experience is better when subtitles are available.

For Q15 (Figure 34), the participants were presented with two statements:

1. There needs to be a standard that ensures subtitles are well presented
2. I would like to see different ways of portraying speech and sound in video games.

The available responses included:

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

As seen in the table below, most of the respondents agreed or strongly agreed with these two statements. This helps in confirming the need for better subtitling standards in video games by the users themselves. Nonetheless, a significant number of participants answered 'undecided' for both statements which could indicate a lack of knowledge or awareness on the subject.

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
There needs to be a standard that ensures subtitles are well	12	10	42	84	35
presented					
I would like to see different ways of portraying speech and sound in video games	11	13	50	80	29

Table 4.4 Number of responses to Q15

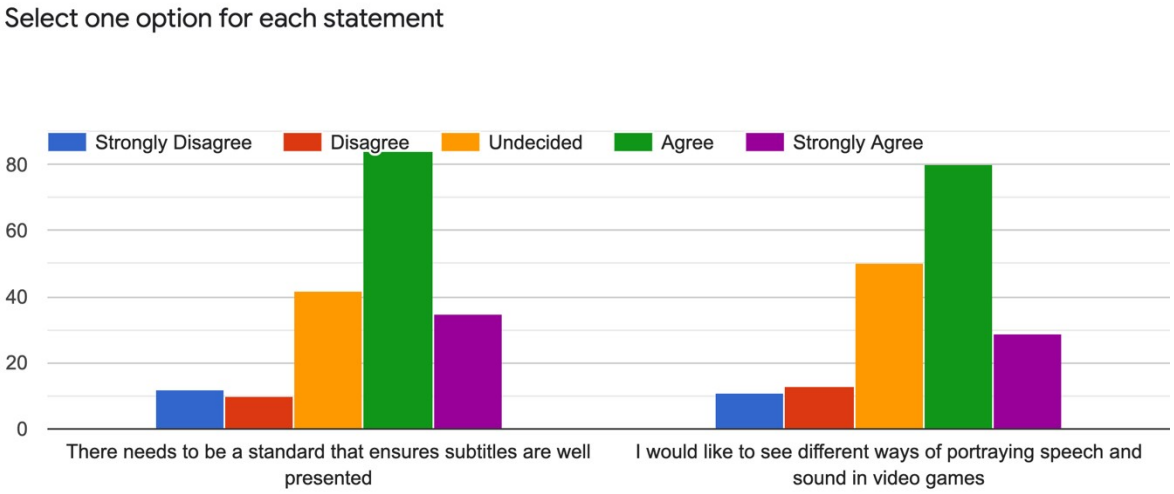


Figure 33 Select one option for each statement (Q15)

The participants were then asked to watch a clip from the video game *L.A. Noire* (Rockstar Games, 2011), and answer with 'yes' or 'no' to 'The subtitle font is clear' and 'the timing of the subtitles is accurate' (Figure 36). This clip was presented as although the font was legible, it was still small, and the timing of subtitles was not always in sync with the narrator's speech. Assuming most participants filled out the questionnaire on a mobile device, tablet, or PC, it is tricky to ask about the subtitle size. Most of them did indeed answer 'yes' to 'The subtitle font is clear' (119 participants). 105 participants deemed the timing of the subtitles as accurate, while 78 participants did not agree.

Figure 34 A screenshot of the clip from L.A. Noire (Rockstar Games, 2011)

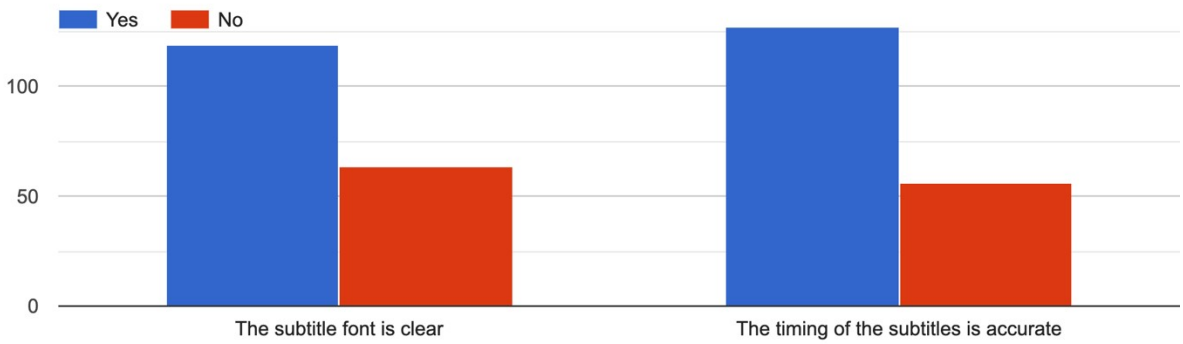


Figure 35 Watch the clip and then answer by selecting yes or no (Q16)

The participants were asked to watch a clip from *Wolfenstein II: The New Colossus* (Bethesda Softworks 2017). The clip was chosen as the font size is minuscule and clashes with the background which made it very difficult to read (Figure 37). Most participants answered 'no' to 'The subtitles are legible' and to 'The font size is adequate'.

Figure 36 A screenshot of the clip from Wolfenstein II: The New Colossus (Bethesda Softworks 2017)

It is not uncommon for video game subtitles to be so minuscule as the image or aesthetics are prioritised over the subtitles. In this case, the control instructions are larger than the subtitles. This demonstrates a lack of awareness for those users who rely on subtitles to follow the narrative of the game. Apart from being a suitable size, fonts must have high contrast potential so that they can stand out against different backgrounds (Romero-Fresco 2019: 132). Out of 183 participants, 123 participants use subtitles and find them helpful for various reasons, especially not to miss out on any crucial information and to understand the story better. Having legible subtitles would greatly benefit these users.

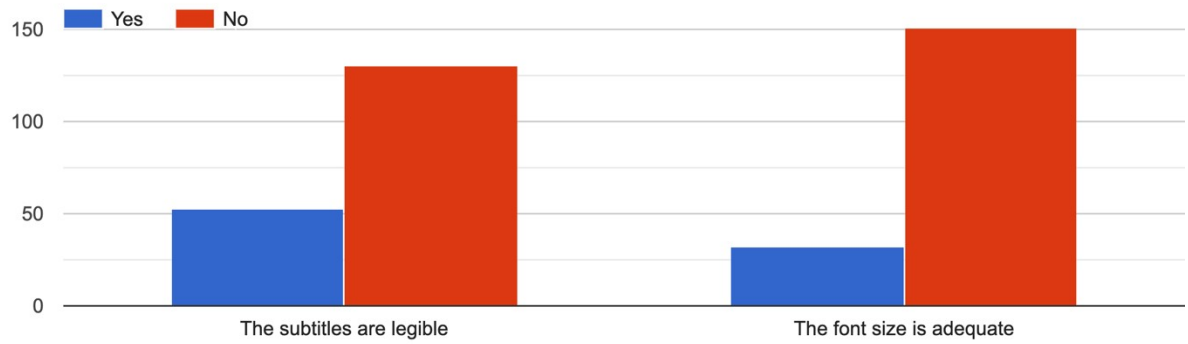


Figure 37 Watch the clip and then answer by selecting yes or no (Q17)

The participants were then asked to watch a clip from *Assassin's Creed Syndicate* (Ubisoft, 2015). This clip was chosen as without character identification included in the subtitles, it is difficult to tell which character is uttering the speech presented in the subtitle (Figure 39). Although a box to provide the players with character information is briefly shown (Figure 39), when Rebecca, the character in question, starts speaking, she has her back turned and the player does not see her lips moving. This question was especially relevant to those users who mostly rely on subtitles, rather than on audio alone, to receive information. After watching the clip, the respondents had to answer with 'yes' or 'no' to 'From the subtitles alone, it is clear that Rebecca is speaking towards the end of the clip'. 94 of the participants answered 'yes', very closely followed by 89 participants who answered 'no' (Figure 40).

Figure 38 A screenshot of the clip from Assassin's Creed Syndicate (Ubisoft, 2015)

From the subtitles alone, it is clear that Rebecca is speaking towards the end of the clip.

183 responses

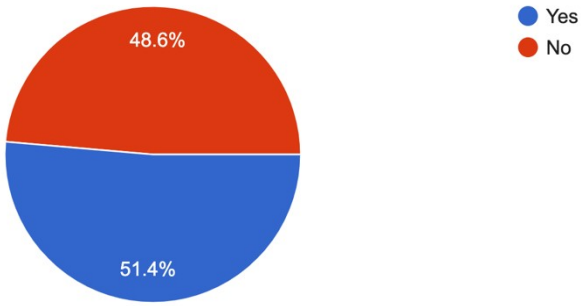


Figure 39 Watch the clip and then answer by selecting yes or no (Q18)

The participants were then asked to watch a clip from *Hellblade: Senua's Sacrifice* (Ninja Theory 2017). In this example presented in Q19, the subtitle is long and stays on screen for about 20 seconds. After watching the clip, the respondents had to answer, 'yes' or 'no' to each of the following statements: 'The length of the subtitles bothers me' and 'The timing of the subtitles is accurate'. Most participants chose 'yes' as a response to both remarks.

Figure 40 A screenshot of the clip from Hellblade: Senua's Sacrifice (Ninja Theory 2017)

119 of the 183 participants were bothered by the length of the subtitles in this clip (Figure 42). A comment previously echoed by the participants is that they find subtitles distracting. Having longer subtitles will cause the eye to travel (Díaz Cintas, Remael 2007: 100), and may result in the user potentially rereading the same subtitle. Although most respondents (105) deemed the subtitles' timing as accurate, this is not enough for an enjoyable user experience. Employing the appropriate subtitle length and duration will make their gameplay more pleasant if they choose to play with subtitles switched on.

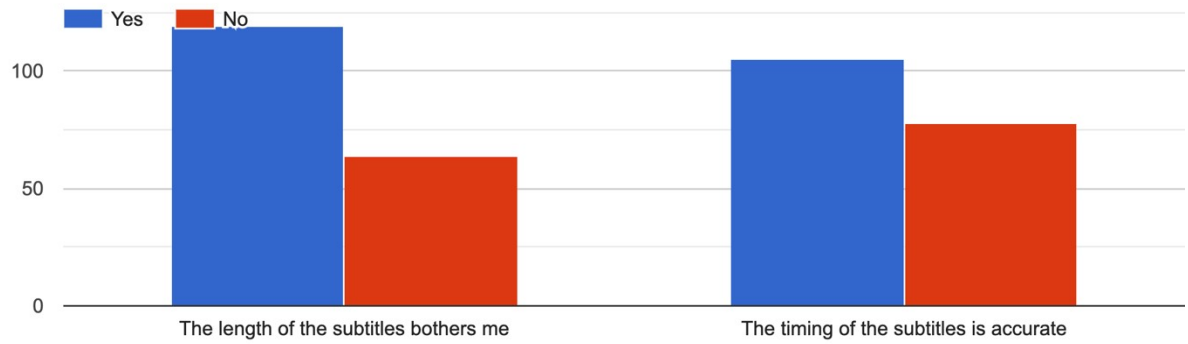


Figure 41 Watch the clip and then answer by selecting yes or no (Q19)

The participants were asked to watch a clip from *Watch Dogs: Legion* (Ubisoft, 2020). This clip was used as the subtitles are legible and encased in a black box, with the speaker's name included each time (Figure 43). Additionally, in this clip, there is a character, Ben, speaking, but then there is also an offscreen voice of an artificial intelligence assistant. For those users who rely on subtitles to follow the storyline, having the option of name tags to differentiate between speakers may be helpful. The respondents had to choose between 'yes' or 'no' to answer the following: 'The subtitles are legible', 'The subtitles spoil immersion', and 'The name of the speaker included in the subtitle is helpful'. Most participants considered the subtitles legible, not spoiling immersion, and found the name of the speaker helpful (Figure 44).

Figure 42 A screenshot of the clip from Watch Dogs: Legion (Ubisoft, 2020)

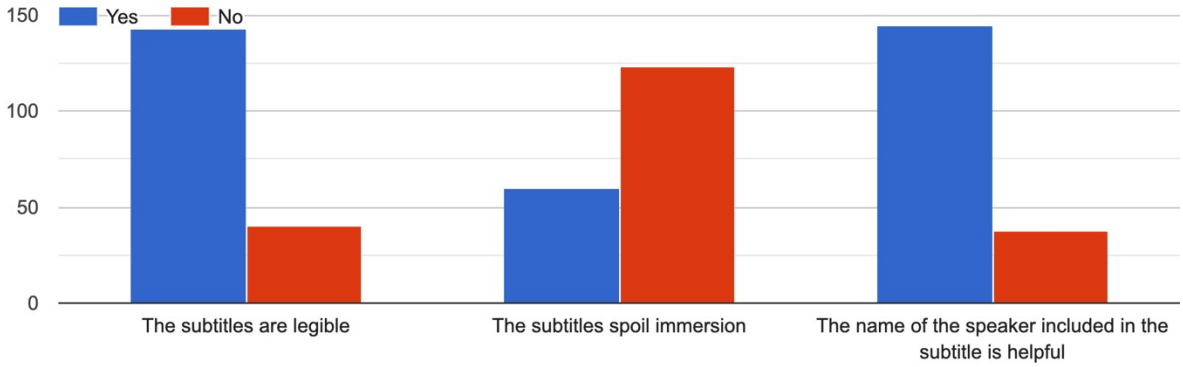


Figure 43 Watch the clip and then answer by selecting yes or no (Q20)

Finally, the participants were asked to watch two clips and then answer with ‘yes’ or ‘no’ (Figure 45 and 46). The clips were chosen to contrast with each other so that the researcher can find out the preferences of the participants. The first clip, taken from *Red Dead Redemption 2* (Rockstar Games, 2018), had two male characters, one of whom was speaking offscreen. The subtitles were verbatim. In the second clip, taken from *Watch Dogs: Legion* (Ubisoft, 2020), there are sound effects, and character names included.

Figure 44 A screenshot from Red Dead Redemption 2 (Rockstar Games, 2018)

Figure 45 Screenshot from Watch Dogs: Legion (Ubisoft, 2020) indicating name tag.

Figure 46 Screenshot from Watch Dogs: Legion (Ubisoft, 2020) indicating sound effects.

The five statements the participants had to answer, and the corresponding results are tabulated below:

	Yes	**No**
Having the name of the speaker included in the subtitles of 'clip 2' is helpful	138	45
Captions describing the sound effects (car horn, tires screeching) and arrows indicating where the sound is coming from are helpful for gameplay	112	71
I noticed something lacking in 'clip1'	77	106
I noticed the sound effects in 'clip2'	135	48
I noticed the names of the speakers in 'clip 2'	114	69

Table 4.5 Number of responses to Q21

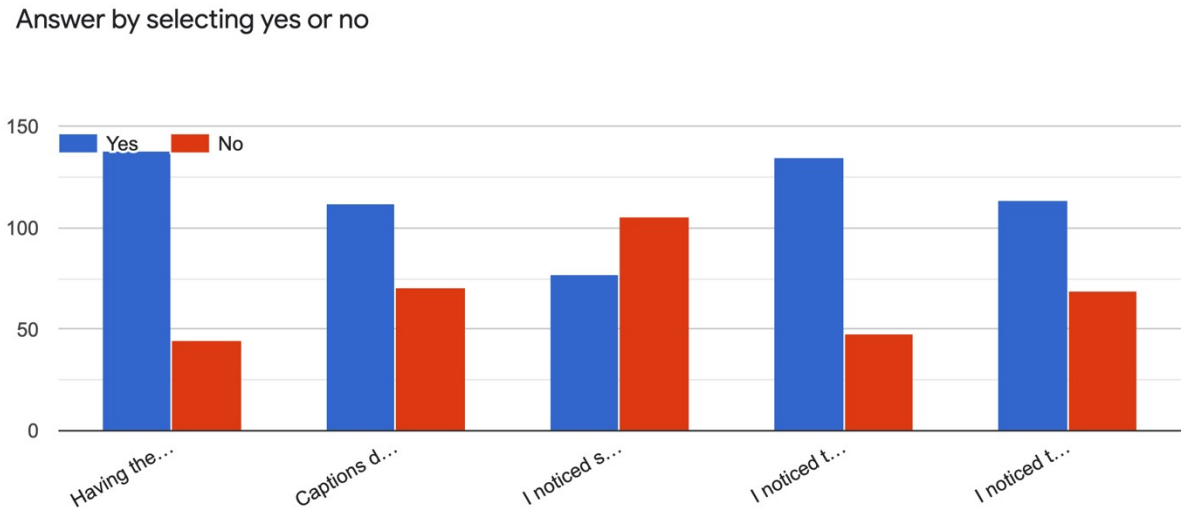


Figure 47 Watch the following 2 clips, and then select your preferences – Answer by selecting yes or no (Q21)

Although most respondents did not notice anything lacking in the first clip, they still found the name of the speakers, and the sound effects, to be helpful in the second clip.

4.1.4 Other comments

At the end of the questionnaire, the participants were asked if they had any further comments. This open-ended question provided them with the opportunity to make any additional observations about the subject being explored.

Some respondents commented on hearing loss awareness:

- So glad that awareness about people with hearing loss are giving a voice in this questionnaire. When playing video games, we encounter a lot of problems that for people without hearing loss are nothing. For example, font too small or without subtitles or even sound effects. These all help us lot to enjoy the game. Very wellpresented questionnaire. Would like to recommend that final findings will be forwarded to our association to work on it. Good luck.

- Very interesting topic. Enjoyed doing it. Wish something is done for us, people with hearing loss to help us enjoy more playing video games like for example standard that ensures subtitles are legible and well-presented and together with different ways of good speech and sound effects in video gaming. Good luck.

- Subtitles are very important for people suffering from hearing loss, but they should be legible with good standard font and background and indicating which character is speaking together with sound effects Very well-presented questionnaire, enjoyed myself filling it out.

Participants expressed why they find subtitles useful:

- In general, I hate subtitles (even in films). However, I appreciate them when the characters speak in a language I cannot understand for immersive purposes (e.g., if I'm not mistaken, in GTA 4, there are dialogues in Russian because the main character comes from that part of the world. I don't understand Russian so having English subtitles in that case, helps without breaking the immersion). Also, I guess when things like tyre screeches of horns are indicated in the subtitles, they could be helpful for gamers with a hearing impairment.

- Very interesting and presented questionnaire. From the captions provided, I realized how important are legible subtitles with adequate font and dialogue timing. I find subtitles extremely helpful as when I return home from work, I put my headphones on so that I don't disturb other members of my family and I enjoy the game, even more, when names of characters and video sound effects are present.

- I prefer subtitles, makes it more difficult to lose information.

- I'm a foreigner and feel it is very useful and relaxing to have subtitles all the time.

- In my opinion, subtitles are good to track your task.

Others expressed what they dislike about video game subtitles:

- I prefer to have legible subtitles in my games.

- My problem with subtitles is twofold…font size and type, colour…sometimes you start the scene with a white font on a black background and the scene suddenly changes to a lighter colour making the subtitles hard to read.

Additional comments received were:

- My opinion: The GUI of Subtitles should be easily readable and distinctive from the background colour but at the same time should not be a distraction to game immersion. Instead of focusing on vibrant text, if the subtitles are displayed on a shape which is of an off-tone colour that is subtle, the text would pop up. When subtitles are incorporated in a very creative way with visual storytelling in mind, they can create a very cool effect for the narrative and can aid further immersion. What can aid subtitles is the text visuals found in the game environment, that can aid to set the scene, therefore there will be less content to include in subtitles to set the scene and in script. An example of blurred background on subtitles is found in Last of Us 2 and Evil Within 2. An example of a game that comes to mind is "What remains of Edith Finch", which cleverly includes subtitles in a narrative style occupying the gamespace, displayed in a mixture of 3D shapes, on 2D surfaces, and as text on game objects. I feel that this kind of subtitles do work when it comes to some form of game styles such as adventure, mystery and distinctive and creative game styles but would not work for all genre unless subtitles should be an option for players who would like to understand the story through text, and off for those who prefer to rely on dialogue and audio cue. Another option for subtitles should be available that can offer audio description in the subtitles as a description of sounds for gameplay mechanics and sound environments of the

scene, this will help hearing-impaired players receive visual cues to time their actions effectively in gameplay and that they
can build an idea/image of the audioscape that their gameplay character is occupying. An interesting article with regards to the audio cue of a visually impaired player relying on audio cues to play the game mechanics. To conclude, I feel that many gaming companies focus on the visual design of the game components but overlooks the importance of subtitles and in-game text that helps the narrative and to reach a broader gaming audience with different sensory capabilities.

- I'd argue that subtitles during cutscenes have a different function than during gameplay. The player does not pay as much attention, treating them as bullet points instead of reading the whole text.

- Certain video games need specialised computers to be truly enjoyed.

- The subtitles were too small.

- This is the first time I've seen a questionnaire like this. Very interesting topic. Well done. Enjoyed myself doing it. Good luck for your thesis.

- A very interesting survey and meticulously planned.

- It was very interesting.

The rest of the participants skipped this question or indicated they have no further comments to make.

4.2 Summary of Results

From the above data, the importance of subtitles in video games is evident as most participants find subtitles helpful. According to the responses provided, it is apparent that,

when available, video game subtitles are used by a wide range of users, for various aims, to improve their gaming experience. Additionally, most participants agreed that there needs to be a standard that ensures subtitles are well presented. When presented with questions and examples, the participants indicated their preferences, so that suggestions for subtitling guidelines based on the input of users can be put forward. These results are concurrent with the research on subtitling conventions in the literature review.

Based on Mangiron's descriptive study (2013), the video clips in the questionnaire were chosen to determine video game users' subtitling parameters preferences:

> a) subtitle length and duration; b) font type, size, and colour; c) character identification, and d) displaying sound effects and conveying emotions.

4.3 Subtitle length and duration

Accounting for blank spaces, and typographical signs, apart from letters and numerals, the maximum number of characters per line could be kept at around 40 for the Roman alphabet in concordance with recommendations by Díaz Cintas and Remael (2007). Having longer subtitles would result in the image being covered by text, potentially ruining immersion especially in action-adventure video games where there tends to be a storyline. Furthermore, because of longer subtitles, legibility is sacrificed as the subtitle font also tends to be smaller so that less of the image is covered. When the same subtitle stays on screen for longer than the utterance, the subtitle tends to be reread which breaks the reading rhythm, and leaves video game users with less time to take in the other semiotic channels. Likewise, short subtitles that appear for a very short amount of time should be avoided as they risk not being read by the viewer. Concerning spotting, ideally, subtitles should be in temporal synchrony with the utterances, appearing when a character starts speaking and disappearing when they stop speaking (Díaz Cintas, Remael 2007: 88) Spotting should also respect pauses, interruptions, and other characteristics of speech. Poor temporal synchrony lessens the user's experience, as it is not only bothersome, but also does not help the user determine who is saying what.

Additionally, regarding the physical distribution of text, a balance between aesthetics and legibility must be struck. Typically, unless the maximum characters per line are exceeded, one line is used, rather than two. However, the first line does not have to be full for a second line to be used. If there is a need for a subtitle to be segmented, sense blocks and grammatical blocks should be given more importance than aesthetics (Mangiron 2013, Díaz Cintas, Remael 2007). In any case, clarity and legibility are favoured over symmetry.

When it comes to video game subtitles, the interactivity parameter is worthy of attention. Giving players the option to press a button once they finish reading the subtitle, would be beneficial for users in general and would also increase accessibility (Griffiths 2009, Mangiron 2013). Optional user-controlled subtitle speed could resolve the issue of subtitles staying on the screen for too long or not long enough, as not every player reads at an identical speed. Moreover, this interactive option makes it possible to skip certain parts of a longer dialogue.

Subtitles are normally placed horizontally at the bottom of the screen. To prevent the image or textual information from being obstructed, such as when extensive action is taking part in the lower section of the screen, subtitles can be displaced to the top or at the centre of the screen. For video games, this is especially important as subtitles are often an afterthought and clash with information, commands, and menus that can often be found in various places on the screen. Just as Romero-Fresco (2019) promotes the integration of AVT into the filmmaking process, it would be beneficial for video game users and developers alike, to take subtitles into account during the game design process. Promoting better game design from the outset, as O'Hagan and Mangiron suggest (2013: 293), means that, game developers do not have to face expensive modifications and players have a seamless playing experience.

4.4 Font type, size, and colour

White subtitles, with an edge and a drop shadow, or black contoured for contrast aid legibility (Romero-Fresco 2019, Díaz Cintas, Remael 2007). However, in video games, it is common for

colour to be used to highlight information such as hints pertinent to gameplay. In this case, a legible colour such as yellow could still be used. Additionally, to avoid confusion, the subtitles need to be distinctive from the rest of the textual information on the screen. It is not likely that subtitles constantly appear against a stark background, so encasing them in solid or somewhat translucent grey or black boxes would help subtitles be conspicuous without taking away from the action (Zárate 2021). Furthermore, although some video game developers choose or devise fonts to match a specific aesthetic, opting for fonts without serifs, such as Arial, Calibri, Helvetica, or Verdana, means that the subtitles are not distracting and therefore more legible (Díaz Cintas 2007, Griffiths 2009). Uppercase letters and italics should be consistently reserved for specific instances, such as to call attention to a detail in the text or off-screen utterances, as they take up space or restrict legibility.

A basic requirement for subtitles is for a legible size to be used (Romero-Fresco 2019: 143). In video games, the user is sometimes given the option to customise the look of the subtitles, by choosing the font size, typeface, and by adding a background colour, out of a provided menu. However, even if options are given, it must still be ensured that there are suitable choices for an array of users. This is especially practical as different platforms or consoles require different subtitle sizes due to resolution, keeping in mind the font of video game subtitles and that many video games are multiplatform. Although it is common for video games to be released as exclusive titles bound to a single platform as a marketing strategy, many games called 'cross-platform games' or 'multiplatform games' are released for more than one platform (O'Hagan, Mangiron 2013: 113-114). It is therefore recommended to be mindful of cross-potability from the start. The font size is for the most part dependent on the screen resolution and viewing distance. A font size that is appropriate for a handheld console, is likely too small to be displayed on a TV set. Typically, the text and UI elements depend on resolution, the higher the resolution, the smaller the UI. For example, a video game with subtitles meant to be played on PC where the user typically sits in front of the computer screen, cannot simply be ported to consoles where the user sits further away from the screen. A notable amount (27.9%) of the participants use home consoles to play video games. The console must be connected to a display device, typically a television where the user is sat at a distance. Having small or long subtitles which cause the eye to travel or eye strain is not ideal, this is valid for both cutscenes that are essential to understand the storyline and/or an

interactive sequence that requires the user to take in the aural, visual, and tactile channels at once.

Moreover, white subtitles contrasted against grey or black boxes prevent the subtitles from becoming illegible when they are against certain backgrounds, such as lighter backgrounds, or certain patterns. Most participants (123 participants) did not consider this kind of subtitles as detrimental to immersion. Some participants did comment on subtitles becoming hard to read as the scene changes to a different background. Although boxes may be deemed as aesthetically invasive by the developers and some users, giving the users the option to have the subtitles in boxes can help resolve this issue faced by video game users by making the subtitles conspicuous against any background without missing out on the action.

4.5 Character identification

To identify the speaker, especially when the context makes it difficult to do so, the speaker's name is included in the subtitle, normally in brackets or capital letters. Noticeably most participants agree that having the name of the speaker included in the subtitle is helpful, and also agreed on wanting to see different ways of portraying speech and sound in video games. Besides name tags, different colours could be used for character identification. Romero-Fresco (2019: 87) encourages the use of colours in subtitles while ensuring that the bottom of the screen is not cluttered as this could lead to subtitle blindness. However, according to Bernal-Merino (2014: 129), unlike in television and cinema, colours do not have a standardised role in video game subtitling. In video games, colours are usually utilised to show statistics and scores, rather than for the purpose of character identification. In both instances, consistency is key, and the chosen way to identify characters should be used throughout.

The playful element in video games can be used to the subtitler's advantage by using less conventional ways of identifying characters. For instance, speaker portraits, or avatars can accompany subtitles (Mangiron 2013). Speech bubbles may also be used to indicate which character is speaking. Another option to aid with character identification and legibility is to displace subtitles as in creative subtitles (Fox 2018 cited in Romero-Fresco 2019: 144).

4.6 Displaying sound effects and conveying emotions

Apart from the dialogue and character identification, both diegetic and non-diegetic sounds can be included in the subtitle. Ford Williams (2009 cited in Romero-Fresco 2019: 112), advises that "any relevant sound that is not immediately obvious from the visual action should be subtitled". Therefore, only sounds that are crucial to the user's comprehension need to be subtitled. Sounds are rendered into words and music may also be described, depending on relevance. These descriptions can be represented using nouns ('guitar', 'explosion'), verbs ('scoffs', 'women laughing'), and gerunds ('murmuring' 'squawking'). When the product is geared towards children, onomatopoeia (such as 'beep' instead of 'car horn') can be used. In video games, sound effects may be accompanied by directional audio visualisation (arrows), to indicate where the sound is coming from, with the intent of assisting players.

When it comes to describing music, it is important to set this apart from the rest of the subtitles, for example by displacing the subtitles, adding a character beforehand, or enclosing the description in square brackets: ! ominous synth music playing, [suspenseful music playing]. By doing so, apart from being able to follow the dialogue, the players can appreciate the mood set by the video game.

4.7 Summary of Suggested Subtitling Strategies

To reiterate, based on the preferences expressed by the participants together with research, the possible strategies to take into consideration when subtitling video games are:

1. Maximum of 40 characters per subtitle line.
2. Subtitles should be centre justified horizontally at the bottom of the screen or displaced when necessary.

3. Subtitles should match the duration of the audio and not be left on-screen for shorter or longer than necessary while respecting prosodic features of speech.
4. Preserve sense blocks and grammatical blocks when the subtitle is segmented.
5. Subtitles should be white, with an edge and a drop shadow, or black contoured, and/or encased in a box.
6. Use sans serif font.
7. Consider identifying the speaker especially when the context makes it difficult to do so.
8. Distinguish sound effects, emotions, and music.

These suggestions are mostly in line with subtitling and SDH norms for audiovisual content mentioned in the literature review (Neves 2005, Díaz Cintas, Remael 2007, Romero-Fresco 2019, Zárate 2021). Nevertheless, subtitling for video games is different than subtitling for more traditional media as video games require interaction between the product and the user, who is less passive. Overall, it is not only recommended to employ subtitling strategies that ameliorate the gameplay of the users but also to be consistent. Video game users are not a homogenous group but have different ages, skills, and expectations. Mangiron et al. (2014: 26) call attention to "the myth of the average player", where video game designers take a one size fits all approach which leads to groups of players being excluded. Therefore, when possible, it would be practical to present the user with predefined options so that players can choose a font they deem suitable, and whether they want character identification and sound effects to be displayed.

5. Conclusion

This chapter gives an overview of the research carried out by referencing the aims specified in the introductory chapter. Additionally, it addresses the strengths and weaknesses of the research carried out. Finally, further research avenues are explored.

5.1 Overview, results, and contribution

Whilst AVT research in the late 1990s to the mid 2000s gave rise to guidelines for intralingual and interlingual subtitles, these kinds of guidelines are not in place for video games. Although subtitling parameters for film and video games can overlap, as Bernal Merino (2015) points out, nowadays video games are complex audiovisual products. Research to establish guidelines that seek to address the specific characteristics of video games is thus required.

Many action-adventure video games contain an increasing amount of spoken dialogue, however, there is a lack of consensus on good subtitling practice. Those video games which do include subtitles, often show an ad hoc approach to subtitling as little attention is given to legibility. In current subtitling practices, the lack of uniformity is evident as there is no standardisation, as there is in film (Mangiron 2013). This means that video games could risk becoming unplayable for some users. Research on video game subtitles benefits a whole range of users such as those who play in noisy conditions preventing them from hearing dialogue and sound effects, players who do not want to miss out on anything, and even players with various degrees of hearing loss. Further research on the reception of video game subtitles, from a TS perspective, would strengthen the development of better subtitling practices while improving accessibility for all players. Although by expressing their preferences, players are not necessarily providing proof of adequacy, by participating, they are actively engaged in promoting improvements that would benefit them.

Hinging on the lack of uniformity in video game subtitling, together with the absence of research in the local context, the study was intended to gather feedback about subtitles from local players to propose subtitling strategies that can be built upon. The reception study

considered that video game users are individuals with subjective attitudes and preferences. The study thus sought to explore:

1. What is the impact of subtitles in video games on the end-user?
2. When there is dialogue, does the average user find subtitles helpful or distracting?
3. How often does a game become unpleasant to complete due to subtitle presentation? and how could this be overcome?

The aims of the study were reached by gathering data through an online questionnaire. The gathered data was then broken down and analysed, in the previous chapter, before using the findings, as well as research from the literature review, to discuss the possible subtitling parameters. Obtaining data through the questionnaire was essential to answer the research questions, and therefore to reach the aims of the study. Quantitative and qualitative data pointing at future research avenues, were obtained through the questionnaire. Additional research, such as qualitative research by means of focus groups, and interviews would further enhance the study. By engaging players through such reception studies, translation practices in video games, such as subtitling, could be standardised to provide a better gaming experience.

As highlighted by scholars and authors in the literature review (Gambier 2009, Mangiron 2013, Bernal Merino 2014), and illustrated by the scarcity of studies in the local context, additional research is required. The results of this study can serve as a starting point for further research on the topic of subtitling strategies for video games. The results of the questionnaire, as well as research made it possible to propose strategies to take into consideration when subtitling video games. Mainly, the parameters that were considered are: subtitle length and duration; font type, size, and colour; character identification, and displaying sound effects and conveying emotions (Mangiron 2013). It is less likely to alienate potential players when having subtitling guidelines, especially ones based on the preferences of video game users. As marked by the findings of the questionnaire, both useability and adaptability are key.

5.2 Strengths, limitations, and scope for further research

This research offers useful insights on possible video game subtitling strategies that take players into consideration. The questionnaire was limited to a local audience due to the lack of research in the local scenario. However, the video game clips were in English and were not localised specifically for a target audience. Therefore, replicating the reception study and not excluding anyone from participating, could yield a higher response rate. Additionally, the respondents that filled out the questionnaire may not be indicative of all the gamers in Malta. Several variables, such as age, language skills, and gaming habits, also come into play. Furthermore, although the online questionnaire is a straightforward way of collecting a substantial amount of data in a short amount of time and allowed participants to answer questions immediately after viewing video clips, those who are less inclined to browse social media, check their emails, or want to answer online questionnaires in general, have their opinion excluded. However, 183 responses were accumulated which allowed for hypotheses to be put forward.

Although by filling out the questionnaire, the participants indicated their preferences and were given the opportunity to comment, by watching the video clips alone, they were not interacting with the video games. Video games are interactive and not consumed passively like other kinds of media which means that video game users take on an active role. Therefore in this study, playability was not entirely tested. Good subtitling practices fostered by subtitling guidelines would ameliorate playability. To consider playability and user experience even more, future reception studies could consist of a few minutes of gameplay followed by interviews and a questionnaire. However, this implies a smaller, and less evenly distributed number of participants.

To get better insights on players' attitudes towards subtitles in video games, future studies could integrate qualitative and quantitative methods, whilst having a balanced spread of countries, genders, and gaming habits. Future research could be done with a larger sample size. Additionally, to gain even more insight about players' preferred subtitling strategies, the questionnaire could be supported with some qualitative interviews or focus groups that

produce less generalisable information (Di Giovanni, Gambier 2018: 81). Rather than having to ask the participants questions individually, a focus group is a useful way for spontaneous discussion to come about as participants share their views with each other. Studies on video game subtitles may also be supported by eye tracking, which "has become a mainstream research method in the study of translation process and products" (ibid: 97). Eye tracking integrated with questionnaires, would allow the research to obtain more objective quantitative data on subtitling parameters. Eye tracking would allow the researcher to track the gaze of the participants and record the response to gain insight into how subtitles are perceived by the participants. More complex reception studies could be carried out using the right technology for experimental methods, which are quite scarce in video games. Using a mixed-method approach means that one method will make up for the other method's shortcomings, as far as possible. Another field of AVT that would benefit from such reception studies would be video game accessibility, often overlooked by video game developers and publishers. As some participants pointed out themselves, there is still work to be done in this area. Asking players about their needs and being mindful of including more name tags, and sound effects, especially when they cannot be identified visually, would be a good starting point.

References

Books

PÉREZ-GONZÁLEZ, L., 2019. *The Routledge Handbook of Audiovisual Translation*. New York: Routledge.

AARSETH, J.E., 1997. *Cybertext: Perspectives on Ergodic Literature*. Baltimore and London: John Hopkins University Press.

BASNETT, S., 1991. *Translation Studies*. New York and London: Routledge.

BERNAL MERINO, M. Á., 2020. Key Concepts in Game Localisation Quality. In: BOGUCKI, L. and DECKERT, M., eds, *The Palgrave Handbook of Audiovisual Translation and Media Accessibility.* Switzerland: Palgrave Macmillan, pp. 297-314.

BERNAL MERINO, M. Á., 2015. *Translation and localisation in video games.* New York and London: Routledge.

BERNAL MERINO, M. Á., 2014. *Translation and Localization in Video Games: Making Entertainment Software Global*. New York and London: Routledge.

Bogucki, L. and Deckert, M., 2020. *The Palgrave Handbook of Audiovisual Translation and Media Accessibility*. Switzerland: Palgrave Macmillan.

BRIFFA, C., 2015. *Aspetti tat-Traduzzjoni Maltija*. Qormi: Horizons.

BUCARIA, C., 2008. Acceptance of the norm or suspension of disbelief? The case of formulaic language in dubbese. In: D. CHIARO, C. HEISS, C. BUCARIA, eds, *Between Text and Image: Updating research in screen translation*. Amsterdam and Philadelphia: John Benjamins, pp. 149-163.

BURN, A., 2006. Reworking the Text: Online Fandom. In: D. CARR, D. BUCKINGHAM, A. BURN AND G. SCHOTT, eds, *Computer Games: Text, Narrative and Play*. Cambridge: Polity Press, pp. 88-102.

CHANDLER MAXWELL, H., 2005. *The Game Localization Handbook*. Massachusetts: Charles River Media.

CHAUME, F., 2012. *Audiovisual Translation: Dubbing*. Manchester: St. Jerome Publishing.
Chesterman, A., 2007. *Bridge concepts in translation sociology; Constructing a Sociology of Translation*. Amsterdam and Philadelphia: John Benjamins.

CIVERA, C. and ORERO, P., 2010*. Listening to Subtitles Subtitles for the Deaf and Hard of Hearing*. Vienna: Peter Lang.
DÍAZ CINTAS, J. and NEVES, J., 2015. *Audiovisual Translation: Taking Stock.* Newcastle upon Tyne: Cambridge Scholars Publishing.

DÍAZ CINTAS, J. and REMAEL, A., 2007. *Audiovisual translation: Subtitling*. Manchester: St. Jerome Publishing.

DÍAZ CINTAS, J., 2003. Audiovisual translation in the third millennium. In: G. Anderman and M. Rogers, eds, *Translation Today. Trends and Perspectives*. Bristol: Multilingual Matters, pp. 92-204.

D'HULST, L. and GAMBIER, Y. (eds), 2018. *A History of Modern Translation Knowledge*. Amsterdam and Philadelphia: John Benjamins.

ESSER, A. BERNAL-MERINO, M. and SMITH, R. (eds), 2016. *Media Across Borders: Localising TV, Film, and Video Games.* New York and London: Routledge.

FAWCETT, P., 1996. Translating film. In: G. T. Harris, ed, *On translating French literature and film*. Amsterdam: Rodopi, pp. 65-88.

FERNÁNDEZ-COSTALES, A., 2016. *Media Across Borders: Localising TV, Film and Video Games*. New York: Routledge.

FOERSTER, A., 2010. Towards a creative approach in subtitling: a case study. In: *New Insights into Audiovisual Translation and Media Accessibility*. Leiden: Brill, pp. 81-98.

FOX, W., 2018. *Can integrated titles improve the viewing experience? Investigating the impact of subtitling on the reception and enjoyment of film using eye tracking and questionnaire data*. Berlin: Language Science Press.

GOTTLIEB, H., 1997. *Subtitles, Translation & Idioms*. Copenhagen: Center for translation studies University of Copenhagen.

GOTTLIEB, H., 1992. Subtitling - a new university discipline. In: C. DOLLERUP and A. LODDEGAARD, eds, *Teaching Translation and Interpreting.* Amsterdam and Philadelphia: John Benjamins, pp.161.

HERTZ, J. C., 1997. *Joystick Nation*. London: Abacus.

IVARSSON, J. and CARROLL, M., 1998. *Subtitling*. Simrishamn: Transedit.

JAKOBSON, R. 2013. On Linguistic Aspects of Translation. In: R. BROWER, ed, *On Translation*. Cambridge and London: Harvard University Press, pp. 232-239.

JUUL, J., 2010. *A Casual Revolution: Reinventing Video Games and Their Players*. London: MIT Press.

JUUL, J., 2005. *Half-Real: video games between real rules and fictional worlds*. London: MIT Press.

Kent, S. L., 2001. *The Ultimate History of Video Games.* New York: Three Rivers Press.

Kovačić, I., 1994. Relevance as a factor in subtitling reductions; Teaching Translation and Interpreting 2: Insights, aims and visions. In C.DOLLERUP and A. LINDEGAARD, eds, *Teaching Translation and Interpreting 2*. Amsterdam and Philadelphia: John Benjamins, pp. 245-252.

Mangiron, C., O'Hagan, M. and Orero, P., 2014. *Fun For All*. Pieterlen: Lang, Peter Bern.

MASSIDDA, S., 2015. *Audiovisual Translation in the Digital Age: The Italian Fansubbing Phenomenon*. London: Palgrave Pivot.

MAXWELL-CHANDLER, H. And DEMING, S. O'M., 2012. *The Game localization handbook*. Sudbury, Massachusetts: Jones & Bartlett Learning.

MÉNDEZ GONZÁLEZ, R. and CALVO-FERRER, J. R., 2017. *Videojuegos y [para]traducción: aproximación a la práctica localizadora*. Granada: Comares.

MUNDAY, J., 2008. *Introducing Translation Studies: Theories and Applications.* London and New York: Routledge.

NEWMAN, J., 2004. *Video games*. London: Psychology Press.

O'HAGAN, M. and MANGIRON, C. 2013. *Game Localization*. Amsterdam and Philadelphia: John Benjamins.

PÉREZ-GONZÁLEZ, L. 2014. *Audiovisual Translation Theories, Methods and Issues*. London and New York: Routledge.

ROMERO-FRESCO, P., 2019. *Accessible Filmmaking Integrating translation and accessibility into the filmmaking process*. New York: Routledge.

SNELL-HORNBY, M., 1995. *Translation Studies: An Integrated Approach*. Amsterdam and Philadelphia: John Benjamins.

SPERBER, D. and WILSON, D., 1986. *Relevance: Communication and Cognition*. Cornwall: Blackwell Publishing.

VENUTI, L., 1995. *The Translator's Invisibility*. London and New York: Routledge.

WOLF, M.J.P. and Perron B., 2014. *The Routledge Companion to Video Game Studies*. New York: Routledge.

WOLF, M.J.P., 2008. *The Video Game Explosion*. USA: Greenwood.
ZÁRATE, S., 2021. *Captioning and Subtitling for d/Deaf and Hard of Hearing Audiences*. London. UCL Press.

ZIMMERMAN, E., and SALEN, K., 2003. *Rules of play: Game design fundamentals*. Boston: MIT Press.

Journals

CHAUME VARELA, F., 2002. Models of Research in Audiovisual Translation. *Babel International Journal of Translation*, 48 (1), pp. 1-13.

APPERLEY, T. H., 2006. Genre and game studies: Toward a critical approach to video game genres. *Simulation & Gaming*, 37(1), pp. 6-23.

BERNAL MERINO, M. Á., 2006. On the Translation of Video Games. *The Journal of Specialised Translation*, 6, pp. 22-36.

BERNAL MERINO, M. Á., 2016. Creating Felicitous Gaming Experiences: Semiotics and Pragmatics as Tools for Video Game Localisation. *Signata, Annales de Sémiotiques* 7, pp. 231-253.

DÍAZ CINTAS, J. and MUÑOZ SÁNCHEZ, P. 2006. Fansubs: Audiovisual Translation in an Amateur Environment . *The Journal of Specialised Translation*, 6, pp. 37-52.

DÍAZ CINTAS, J., 1999. Dubbing or subtitling: The eternal dilema. *Perspectives*, 7(1), pp. 3140. DOI:10.1080/0907676X.1999.9961346.

FOX, W., 2017. A proposed set of placement strategies for integrated titles Based on an analysis of existing strategies in commercial films. *InTRAlinea*, Special Issue, np.

GAMBIER, Y., 1994. La retraduction, retour et détour. *Meta*, 39(3), pp. 413-417.

GENETTE, G., and MACLEAN, M., 1991. Introduction to the Paratext. *New Literary History*, 22(2), pp. 261-272. DOI:10.2307/469037.

GOTTLIEB, H., 1994. Subtitling: Diagonal Translation. *Perspectives* 2(1), pp. 101-121. DOI:10.1080/0907676X.1994.9961227.

JUUL, J., 2001. Games Telling stories? - A brief note on games and narratives. *Game Studies*, 1(1).

KARAMITROGLOU, F., 1998. A Proposed Set of Subtitling Standards in Europe. *Translation Journal*, 2(2), pp.1-15.
MANGIRON, C. and O'HAGAN, M., 2006. Video Game Localisation: Posing New Challenges to the Translator. *Perspectives* 14 (4), pp. 306-317.

MANGIRON, C., 2006. Video Game Localization: Posing New Challenges to the Translator. *Perspectives* 14(4), pp. 306-317.

MANGIRON, C., 2013. Subtitling in game localisation: a descriptive study, *Perspectives*. 21(1), pp. 42-56.

MAYORAL, R., KELLY, D. and GALLARDO, N., 1988. Concept of Constrained Translation. NonLinguistic Perspectives of Translation. *Meta*, 33(3), p. 356-367.

MCCLARTY, R., 2012. Towards a multidisciplinary approach in creative subtitling. *MonTI: Monografías De Traducción E Interpretación*, (4), pp. 133-153.

MEJÍAS-CLIMENT, L., 2020. La evolución de las tecnologías en la confluencia de la interacción y el cine: El doblaje en una aventura gráfica. *InTRAlinea,* 23, np.

MUÑOZ SÁNCHEZ, P., 2009. Video Game Localisation for Fans by Fans: The Case of Romhacking. *The Journal of Internationalization and Localization,* 1(1), pp. 168-195.

O'HAGAN, M., 2009. Evolution of User-generated Translation: Fansubs, Translation Hacking and Crowdsourcing. *The Journal of Internationalization and Localization*, 1(4), pp. 94-121. DOI:10.1075/jial.1.04hag.

PEDERSEN, J., 2001. On the subtitling of visualised metaphors. *The Journal of Specialised Translation*, 23, pp. 162-180.

PÉREZ GONZÁLEZ, L., 2007. Intervention in new amateur subtitling cultures: a multimodal account. *Linguistica Antverpiensia,* 6, np.

TITFORD, C., 1982. Subtitling: constrained translation. *Lebende Sprachen* 27(3), pp. 113-116.

Dissertations

NEVES, J. 2005. Audiovisual Translation: Subtitling for the Deaf and Hard-of-hearing. [PhD dissertation, Roehampton University].

Mejías Climent, L., 2019. LA SINCRONIZACIÓN EN EL DOBLAJE DE VIDEOJUEGOS: ANÁLISIS EMPÍRICO Y DESCRIPTIVO DE LOS VIDEOJUEGOS DE ACCIÓN AVENTURA. [Doctoral dissertation, Escuela de Doctorado de la Universitat Jaume I].

PAGANO MARIANO, P., 2020. Aspects of video game localisation in the Maltese scenario [Master's dissertation, University of Malta].

Conferences and Presentations

Calvo Ferrer, J. (2020). VIDEO GAME LOCALISATION: Dubbing and subtitling (and more). Presentation, University of Malta.

AARSETH, E. and CALLEJA, G., 2015. The Word Game: The Ontology of an Undefinable Object. 10th International Conference on the Foundations of Digital Games, California.

Online Resources

ABLE GAMERS [Online] Available: https://ablegamers.org/ [June 26, 2021].

CAN I PLAY THAT [Online] Available: https://caniplaythat.com/ [June 26, 2021].

DIRECTIVE (EU) 2019/882 [Eur-Lex] [Online] Available: https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=CELEX%3A32019L0882 [June 26, 2021].

OFCOM, 2021-last update. Ofcom's Guidelines on the Provision of Television Access Services [Ofcom] [Online] Available: https://www.ofcom.org.uk/__data/assets/pdf_file/0025/212776/provision-of-tv-accessservices-guidelines.pdf [June 26, 2021].

BBC, 2019-last update. Subtitle Guidelines [BBC] [Online] Available: https://bbc.github.io/subtitle-guidelines/ [June 26, 2021].

Netflix, 2021-last update. English Timed Text Style Guide [Netflix] [Online] Available: https://partnerhelp.netflixstudios.com/hc/en-us/articles/217350977-English-Timed-TextStyle-Guide [June 26, 2021].

ADAMS, E., 2009-last update. The Designer's Notebook: Sorting Out the Genre Muddle [Gamasutra], [Online]. Available: https://www.gamasutra.com/view/feature/132463/the_designers_notebook_sorting_.php [June 26, 2021].

CORLISS, J., 2007-last update. All Your Base Are Belong to Us! Video game Localization and thing theory [Columbia University], [Online]. Available: http://www.columbia.edu/~sf2220/TT2007/web-content/Pages/jon1.html [June 26, 2021]

GRIFFITHS, G., 2009-last update. Subtitles: Increasing game accessibility, comprehension [Gamasutra], [Online]. Available: http://www.gamasutra.com/view/feature/3922/subtitles_increasing_game_.php. [June 26, 2021].

CHANDLER, R., 2005-last update, Organising and formatting game dialogue [Gamasutra], [Online]. Available: http://www.gamasutra.com/view/feature/2464/organizing_and_formatting_game_.php [June 26, 2021].

THE ECONOMIST, 2020-last update, Playing video games in lockdown can be good for mental health [The Economist] [Online]. Available: https://www.economist.com/graphicdetail/2020/11/27/playing-video-games-in-lockdown-can-be-good-for-mental-health [June 26, 2021].

THE MALTA INDEPENDENT, 2017-last update, The gaming sector Contributes €1.2 billion to Malta's Economy; 12% of GDP – Mallia [The Malta Independent] [Online]. Available: https://www.independent.com.mt/articles/2017-03-30/local-news/The-gaming-sectorContributes-1-2-billion-to-Malta-s-Economy-12-of-GDP-Mallia-6736172320 [June 26,2021].

Videos

Alessia, 2021-last update [Youtube], [Online]. Available: https://youtu.be/u9lPH2KFND8 [June 26, 2021]

Alessia, 2021-last update [Youtube], [Online]. Available: https://youtu.be/N3-r_JbwQAs [June 26, 2021]

Alessia, 2021-last update [Youtube], [Online]. Available: https://youtu.be/h6OeArVBjt4 [June 26, 2021]

Alessia, 2021-last update [Youtube], [Online]. Available: https://youtu.be/3lVXeXhRPMI [June 26, 2021]

Alessia, 2021-last update [Youtube], [Online]. Available: https://youtu.be/cnH89tRZcoE [June 26, 2021]

Alessia, 2021-last update [Youtube], [Online]. Available: https://youtu.be/heqMWgvERkA [June 26, 2021]

Alessia, 2021-last update [Youtube], [Online]. Available: https://youtu.be/XoWAzv4Sec8 [June 26, 2021]

Video Games

Animal Crossing: New Horizons' (Nintendo, 2020)

Assassin's Creed Syndicate (Ubisoft, 2015)

Destiny (Activision, 2014)

Dragon Age: Inquisition (Electronic Arts, 2014)

God of War (Sony Interactive Entertainment, 2018)

Grand Theft Auto V (Rockstar Games, 2013)

Hellblade: Senua's Sacrifice (Ninja Theory 2017)

Hitman (Square Enix, 2016)

Hitman 3 (IO Interactive*, 2021)*

Jenny LeClue: Detectivú (Mografi, 2020)

L.A. Noire (Rockstar Games, 2011)

Mafia: Definitive Edition (2K Games, 2020)

Marvel's Spider Man (Sony Interactive Entertainment, 2018)

Mother 3 (Nintendo, 2006)

Pac-Man (Namco, 1980)

Portal 2 (Sony Interactive Entertainment, 2011)

Red Dead Redemption 2 (Rockstar Games, 2018)

Shadow of the Tomb Raider (Square Enix, 2019)

Spyro Reignited Trilogy (Activision, 2018)

The Last of Us (Naughty Dog, 2013)

The Last of Us Part II (Sony Interactive Entertainment, 2020)

The Legend of Zelda: Breath of the Wild (Nintendo, 2017)

Watch Dogs: Legion (Ubisoft, 2020)

We Happy Few (Compulsion Games, 2016)

Wolfenstein: The New Order (Bethesda Softworks, 2014)

Appendices

Appendix A – Ethics and Data Protection Forms

UNIQUE FORM ID: 8661_02052021_Alessia Sciberras
No self-assessment issues ticked. Submitting to FREC for records.

ETHICS & DATA PROTECTION

PART 1: APPLICANT AND PROJECT DETAILS

1. Name and surname: Alessia Sciberras

Email Address: alessia.sciberras.15@um.edu.mt

2. Applicant status: UM student
3. Faculty: Arts
4. Department: Department of Translation, Terminology and Interpreting Studies

If applicable

5. Principal supervisor's name: Dr Giselle Spiteri Miggiani
6. Co-supervisor's name: Dr Laura Mejías Climent
7. Name of Degree and Study-unit code: Master in Translation and Terminology Studies TIS5090
8. Student number: 323595M

9. Title of research project: Establishing guidelines for video game subtitling: an empirical study
10. Research question/statement & method: To collect data by means of a questionnaire, and discuss the findings to explore possible subtitling strategies.
11. Collection of primary data from human participants?

Yes/Unsure (PLEASE ANSWER NEXT QUESTION)

12. If applicable, explain: Anonymous questionnaire to be distributed online. Number of participants is unknown. A question about age and gender is included in the questionnaire. Participation is voluntary. No compensation.

PART 2: SELF-ASSESSMENT Human Participants

1. Risk of harm to participants: 2. Physical intervention:
3. Vulnerable participants:
4. Identifiable participants:

5. Special Categories of Personal Data (SCPD): 6. Human tissue/samples:
7. Withheld info assent/consent:
8. Opt-out consent/assent:

9. Deception in data generation: 10. Incidental findings:

L-Università ta' Malta

UNIQUE FORM ID: 8661_02052021_Alessia Sciberras
No self-assessment issues ticked. Submitting to FREC for records.

Unpublished secondary data

11. Was the data collected from human participants?
12. Was the data collected from animals?
13. Is written permission from the data controller still to be obtained? **Animals**

14. Live animals out of habitat: 15. Live animals, risk of harm: 16. Dead animals, illegal:

General considerations

17. Cooperating institution: 18. Risk to researcher/s: 19. Risk to environment: 20. Commercial sensitivity 21. Other potential risks:

Self-assessment outcome: No self-assessment issues ticked. Submitting to FREC for records. PART 3: DETAILED ASSESSMENT

1. Risk of harm to participants:
2. Physical intervention on participants:
3. Vulnerable participants:
4. Identifiable participants:
5. Special Categories of Personal Data (sensitive personal data):
6. Collection of human tissue/samples:
7. Withholding information at consent/assent:
8. Opt-out consent/assent:
9. Deception in data generation:
10. Incidental findings:
11. Unpublished secondary data - human participants :
12. Unpublished secondary data - animals:
13. Unpublished secondary data - no written permission from data controller: 14. Lasting harm to animals out of natural habitat:
15. Risk of harm to live animals :
16. Use of non legal animals/tissue:
17. Permission from cooperating institution:
18. Risk to researcher/team:
19. Risk of harm to environment:
20. Commercial sensitivity:

UNIQUE FORM ID: 8661_02052021_Alessia Sciberras
No self-assessment issues ticked. Submitting to FREC for records.

21. Other issues
21a. Dual use and/or misuse:
21b. Conflict of Interest:
21c. Dual role:
21d. Use research tools:
21e. Collaboration/data/material collection in low/lower-middle income country: 21f. Import/export of records/data/materials/specimens:

21g. Harvest of data from social media: 21h. Other considerations:

PART 4: SUBMISSION

1. Which FREC are you submitting to? : Arts

2. Attachments: Consent forms (adult participants)*, Data collection tools (interview questions, questionnaire etc.) 3. Cover note for FREC :
4. Declarations: I hereby confirm having read the University of Malta Research Code of Practice and the University of Malta Research Ethics Review Procedures., I hereby confirm that the answers to the questions above reflect the contents of the research proposal and that the information provided above is truthful., I hereby give consent to the University Research Ethics Committee to process my personal data for the purpose of evaluating my request, audit and other matters related to this application. I understand that I have a right of access to my personal data and to obtain the rectification, erasure or restriction of processing in accordance with data protection law and in particular the General Data Protection Regulation (EU 2016/679, repealing Directive 95/46/EC) and national legislation that implements and further specifies the relevant provisions of said Regulation.
5. Applicant Signature: Alessia Sciberras
6. Date of submission: 02052021
7. If applicable data collection start date:
8. E-mail address (Applicant): alessia.sciberras.15@um.edu.mt
9. E-mail address (Principal supervisor): mspit12@um.edu.mt
10. Conclude: Proceed to Submission

Appendix B – Questionnaire

Questionnaire

You are being invited to participate in a research study related to video game subtitles. It is being conducted as part of my master's degree in Translation and Terminology Studies within the Faculty of Arts at the University of Malta, supervised by Dr Giselle Spiteri Miggiani and co-supervised by Dr Laura Mejías Climent.

Based on the lack of subtitling guidelines for video games, the aim is to collect data and discuss the findings to explore possible subtitling strategies, by taking into account the perspective of video game users.

You will be asked to watch some short video clips drawn from video game playthroughs. The clips are used solely for didactic purposes and are accessible only to those who complete the questionnaire.

Participation is voluntary and the questionnaire is anonymous in nature.

The questionnaire will take around 10 minutes to complete.

I can be contacted on:
alessia.sciberras.15@um.edu.mt

*Required

1. I confirm that I have read and understood the purpose of the study and give my consent to take part. I understand that I am participating voluntarily and can stop my participation at any time without having to provide any reason and without any repercussions. By selecting YES, I confirm that I would like to participate in this study. *

Tick all that apply.

☐ YES

2. Gender *

Mark only one oval.

- ◯ Male
- ◯ Female
- ◯ Prefer not to say
- ◯ Other: _____

3. Age group *

Mark only one oval.

- ◯ 18-24
- ◯ 25-34
- ◯ 35-44
- ◯ 45-54
- ◯ 55-64
- ◯ 65 and over

4. Average hours spent gaming per week *

Mark only one oval.

- ◯ Less than an hour
- ◯ 1-2 hours
- ◯ 2-4 hours
- ◯ 4-7 hours
- ◯ 7-12 hours
- ◯ More than 12 hours

5. What is your level of English - reading? *

Mark only one oval.

- ◯ Beginner
- ◯ Intermediate
- ◯ Advanced
- ◯ Native

6. What is your level of English - listening? *

Mark only one oval.

- ◯ Beginner
- ◯ Intermediate
- ◯ Advanced
- ◯ Native

7. Do you play action-adventure games? (Ex. Grand Theft Auto, L.A. Noire, The Last of Us, Red Dead Redemption, Watch Dogs) *

Mark only one oval.

- ◯ Yes
- ◯ No *Skip to question 9*

8. How often do you play action-adventure video games? *

Mark only one oval.

- ◯ Everyday
- ◯ 2-3 times a week
- ◯ Once a week
- ◯ Once a month
- ◯ Less than once a month

9. Which platform/s or console/s do you tend to use? *

Tick all that apply.

- [ ] Mobile or Tablet
- [ ] PC
- [ ] Home Console (ex. PlayStation, Xbox...)
- [ ] Handheld Console (ex. Nintendo Switch Lite)

10. Do you play with subtitles on? *

Mark only one oval.

- ◯ Yes, I always make sure subtitles are on
- ◯ Only if they are enabled by default
- ◯ Sometimes
- ◯ Never
  Skip to question 12

11. Why do you find subtitles helpful? - You can select more than one option *

Tick all that apply.

- [ ] I play in a sound sensitive environment
- [ ] Hearing loss
- [ ] English is not my native language
- [ ] To understand the story better
- [ ] I don't want to miss out any crucial information
- [ ] For instructions
- [ ] To understand accents or characters who speak too quickly
- [ ] Music or background noise overpowers dialogue
- [ ] Other: _____

Skip to question 13

12. Why do you not use subtitles? - You can select more than one option *

Tick all that apply.

- [ ] I do not need them
- [ ] They are not readily available in the games I play
- [ ] I find them distracting
- [ ] I find them difficult to read
- [ ] The games I play do not have substantial dialogue
- [ ] Other: _____

13. Have subtitles ever hindered you from enjoying a game? *

Mark only one oval.

- Yes
  Skip to question 14
- No
  Skip to question 15

14. HOW have subtitles ever hindered you from enjoying a game?

15. Select one option for each statement *

Mark only one oval per row.

	Never	Rarley	Sometim
Subtitles are available for the games I play	◯	◯	◯
I find subtitles helpful	◯	◯	◯
My gameplay experience is better when subtitles are available	◯	◯	◯

16. Select one option for each statement *

Mark only one oval per row.

	Strongly Disagree	Disagree	Undeci
There needs to be a standard that ensures subtitles are well presented			
I would like to see different ways of portraying speech and sound in video games			

17. *

Mark only one oval per row.

	Yes	No
The subtitle font is clear	◯	◯
The timing of the subtitles is accurate	◯	◯

Watch the clip and then answer by selecting yes or no

L.A. Noire (2011) - You can click on the video to expand it

http://youtube.com/watch?v=u9IPH2KFND8

18. *

Mark only one oval per row.

	Yes	No
The subtitles are legible	◯	◯
The font size is adequate	◯	◯

Watch the clip and then answer by selecting yes or no

Wolfenstein 2: The New Colossus (2017) - You can click on the video to expand it

http://youtube.com/watch?v=3lVXeXhRPMI

19. From the subtitles alone, it is clear that Rebecca is speaking towards the end of the clip. *

Mark only one oval.

- ◯ Yes
- ◯ No

Assassin's Creed Syndicate (2015) -
You can click on the video to expand it

http://youtube.com/watch?v=N3-r_JbwQAs

20. *

Mark only one oval per row.

	Yes	No
The length of the subtitles bothers me	◯	◯
The timing of the subtitles is accurate	◯	◯

Watch the clip and then answer by selecting yes or no

Hellblade: Senua's Sacrifice (2017)-
You can click on the video to expand it

http://youtube.com/watch?v=h6OeArVBjt4

21. *

Mark only one oval per row.

	Yes	No
The subtitles are legible	◯	◯
The subtitles spoil immersion	◯	◯
The name of the speaker included in the subtitle is helpful	◯	◯

Watch Dogs: Legion (2020) - You can click on the video to expand it

http://youtube.com/watch?v=cnH89tRZcoE

Watch the following 2 clips, and then select your preferences

For Clip 2, the video game's audio and language settings were accessed to enable closed captions.

Clip 1: Red Dead Redemption 2 (2018) - You can click on the video to expand it

http://youtube.com/watch?v=heqMWgvERkA

Clip2: Watch Dogs: Legion (2020) - You can click on the video to expand it

http://youtube.com/watch?v=XoWAzv4Sec8

22. Answer by selecting yes or no *

Mark only one oval per row.

	Yes	No
Having the name of the speaker included in the subtitles of 'clip 2' is helpful	◯	◯
Captions describing the sound effects (car horn, tires screeching) and arrows indicating where the sound is coming from are helpful for gameplay	◯	◯
I noticed something lacking in 'clip1'	◯	◯
I noticed the sound effects in 'clip2'	◯	◯
I noticed the names of the speakers in 'clip 2'	◯	◯

23. Any further comments?