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## **Reception Studies in Game Localisation: Taking Stock<sup>i</sup>**

### **1. Introduction**

Video games have become a worldwide phenomenon and one of the main leisure options in the modern digital society. The success of the game industry can be attributed, to a large extent, to GILT (Globalisation, Internationalisation, Localisation and Translation) practices, which have made video games available in every corner of the world, customising them to suit the target territory preferences and localising them into the players' languages. The ultimate goal of game localisation is to provide target players with an engaging and immersive gameplay experience, similar to that of the original players. Therefore, video games are often highly customized to meet target players' preferences and expectations. However, despite the importance of gameplay and user experience intrinsic to game localisation, reception studies analyzing how localised games are perceived and received by target users are still relatively scant.

This chapter aims to provide an overview of the existing reception studies in the area of game localisation. After briefly outlining, the main characteristics of game

localisation and its focus on users and their player experience (PX), the reception studies that have been carried out within the framework of Translation Studies will be presented, outlining their objectives and methods, as well as tools used. The chapter concludes by highlighting the need for further reception studies in the area of game localisation and identifying future paths for research in this area.

## **2. Game localisation as user-centered translation**

Game localisation originated in the late 1970s, when the first Japanese video games, containing small amount of text, were translated into English (Bernal-Merino 2011, 13; O'Hagan and Mangiron 2013, 49). Since then, game localisation practices have continuously evolved in parallel with the technological advances of the game industry. Today, games are technologically sophisticated, multimedia, multimodal, audiovisual products resembling interactive movies. They contain different assets, such as the in-game text –menus, help messages, tutorials–, a script, textual graphics, and other associated materials, such as the box and the user manual, which often require translation into other languages in order to commercialise them in different territories.

There are three main levels of localisation, box and docs localisation, partial localisation and full localisation, usually determined by the market size (Chandler 2005, 12-14). Box and docs localisation involves translating the game box and the accompanying documentation, while partial localisation consists of translating all textual assets, but audio assets are left in the original language and subtitled into the target language. Full localisation involves translating the whole game into the target language, including the audio assets, and therefore it has been argued that it can provide a more immersive experience to target players (O'Hagan and Mangiron 2013;

Bernal-Merino 2016), as the game world is fully available to players in their own language.

Game localisation is a functional type of translation which aims to provide a similar gameplay experience for the players of the target version. Unlike other more traditional types of translation, where the emphasis lies on loyalty to the author and the original text, game localisation focuses on the user and their experience. For this reason, game localisers are often granted a degree of freedom and creativity that is unusual in other types of translation in order to make players feel that the game has been originally developed for them (Mangiron and O'Hagan 2006, 15).

Therefore, game localisation is a clear example of what Suojanen, Koskinen, and Tuominen denominate *user-centered translation*, which emphasizes "the central role of the user (...) in the translation process" (2014, 1). However, despite the emphasis given to the user both by the industry and the existing literature on game localisation, studies analysing players' preferences, their opinion about localised games and how they perceive them are still relatively few. The following sections present an overview of the reception studies carried out to date in game localisation, which have analysed aspects such as PX (O'Hagan 2009; O'Hagan 2016; O'Hagan and Flanagan forthcoming); the quality of localised versions (Mangiron 2014); users' perception of localised games (Geurts 2015; Fernández Costales 2016; Ellefsen 2016), and users' reception of game subtitles (Mangiron 2016).

### **3. Studies on player experience**

The first study on the reception of a localised game was carried out by O'Hagan in 2009. It was an exploratory empirical study in which a single subject played the localised version of the Japanese game *Ico* (2001). The objective of the study was to

assess the player's overall gameplay experience in order to obtain useful information that may inform crosscultural game design. The study used methodologies primarily based on observation. In order to collect qualitative data, the gameplay trajectory, as well as the player's hand movements and utterances while playing were recorded. In addition, the player was asked to fill in a game log and retrospective interviews were carried out face to face and via e-mail. The experiment took place in the subject's normal surroundings, with a total playtime of 11.5 hours, distributed over four days (p. 220).

As acknowledged by O'Hagan, due to the small-scale of the experiment, the results cannot be considered representative (p. 229). In addition, the fact that the experiment took place in the subject's home environment, as opposed to a lab, may raise the question of data validity, although such a setting allowed the player to play in a more natural scenario (O'Hagan and Mangiron 2013, 316). In spite of these issues, this first pioneering reception study provided interesting qualitative data about the PX of the subject and paved the way for future reception studies in game localisation.

The study was followed by a larger scale study on PX, with a particular emphasis on players' emotions, and more specifically, the reception of humour, carried out by O'Hagan with the assistance of Flanagan (O'Hagan and Mangiron 2013; O'Hagan 2016; O'Hagan and Flanagan, forthcoming). The experiment combined the collection of biometric data by means of eye tracking, heart rate and galvanic skin response (GSR) measurements, as well as the recording of facial expressions and utterances via web cam, combined with post-task interviews. The casual game *Plants vs zombies* (2009), developed in the US, was used, and it was a condition that subjects had not played it before. In total, 21 participants took place in the experiment,

7 native speakers of English (although not American), 8 of German and 6 of Japanese. The experiment took place in a laboratory and it consisted of 40 minutes of gameplay, followed by the post-task interviews and a humour-styles self-assessment questionnaire.

With regards to the tools used, researchers found that eye tracking and the recording of facial expressions and utterances provided useful information, while the data obtained from heart rate and GSR measures were inconclusive in terms of a coherent alignment with the other data and were of questionable quality in the case of GSR due to a potential issue with the hardware (O'Hagan 2016, 91). Such issues illustrate the complexity of carrying out reception studies to measure immersion and PX and highlight the need for working in interdisciplinary teams, where translation scholars and psychologists experienced in the use of biometric tools can work together combining each other's strengths.

The results of the experiment indicated that the response elicited by humour in the subjects correlated to their degree of engagement, and that therefore humour can potentially be a useful indicator for measuring PX (O'Hagan and Flanagan forthcoming). However, no important differences were detected regarding PX for the different groups of users. Because of geographical reasons US participants could not be recruited, so native English speakers from another location were used. This may have had an influence on the reception of users of the original version, as speakers of the same language in different territories have different cultural backgrounds and a different sense of humour, such as British, Australian and American people (Martin and Sullivan 2013, 381). O'Hagan and Flanagan state that they were "mindful" of the fact that they could not recruit American subjects, but for practical reasons the experiment had to be carried out without them (forthcoming).

Another limitation of the study was the sample size, as well as the uneven distribution in terms of gender and gaming profile of the users, as acknowledged by the authors. However, despite its limitations, the study is groundbreaking in terms of the methodology used. While eyetracking technology is now relatively established in reception studies in audiovisual translation (AVT), particularly in subtitling,<sup>ii</sup> experimental studies using physiological measures are still relatively rare, due to the complexity of recruiting subjects, the specialised knowledge required to use the tools, and the complexity of analyzing the data.

#### **4. Study on the quality of localised versions**

Mangiron (2014) carried out a survey of the quality of the localised versions of the flash game *The Republica Times* (Lucas Pope 2013), which was used for the global non-profit game localisation competition LocJam<sup>iii</sup> in 2014. The game contained around 1,800 words and a localisation kit was made available to all participants, including the translatable files, instructions about how to proceed and the source code. Therefore, participants could implement their translations into the game and play the localised version in order to reproduce the quality assessment process performed in the industry.

In terms of game mechanics, the player is the editor of the newspaper of a communist country and their job consists of selecting the appropriate type of news items to include in the paper. The game had a strong ironic and humoristic component and it included a number of cultural references. Translators also faced space limitations, especially for the short headlines. There was also terminology related to newspaper editing, military jargon and impersonal, official language of the communist establishment, which needed to be reflected in the localised versions.

There were 483 valid entries in the competition (Dellepiane 2014), which consisted of localising the original English game into French, Italian, German, Castilian Spanish, Latin American Spanish, and Japanese.

There were two categories, one for professional translators and one for amateurs. The jury was made up of specialised game localisation vendors for the different languages in the competition, who had to pick what they considered the best translation according to their professional standards. Each vendor chose their favourite translation for each category. With the exception of four winners who were picked by two different vendors, winners varied across the judges. This seems to indicate that the criteria applied for selecting the best translations were different and implied a certain degree of subjectivity in the concept of *quality*. In order to find out more about the concept of *quality* in game localisation, the feedback from jurors to the winners, which was made available online (IGDA Localisation SIG 2014) was examined and a questionnaire was designed and sent to jurors. In addition, another questionnaire for members of the general public who had not participated in the competition was posted in the Facebook page of the International Game Developers Association Localisation Special Interest Group.

A small number of responses were received, 10 for the jurors' questionnaire and 10 for the users' questionnaire, which makes the sample size too small to make any statistical based generalisations. However, the study provided interesting information from a qualitative perspective. It revealed that the concept of *quality* varied slightly, both among jury members and users, depending on whether the translation had been done by professionals or amateurs. For jurors, a quality professional translation should not have any grammar, spelling or punctuation mistakes, and should have a natural and idiomatic style, so that it feels like an original



and maintains players' suspension of disbelief. It was also important to maintain the journalistic register in the translation, to be creative, to adapt cultural references when necessary and to reproduce the humour of the original in the translations. For non-professional entries, while correctness was not a deciding factor, creativity, humour, and being able to deal with space constraints and variables were considered the most important elements in a quality fan-localised version of a game.

Users' concept of *quality* in game localisation included correctness, fluent, natural language, creativity, the fact that the translation feels like an original, coping with technical issues, and reproducing humour. Seven of the ten respondents in the users' category had professional experience in the game localisation industry as translators, localisation coordinators or testers. For them, the quality of the professional translators was better, while two of the users with no experience in the industry did not feel that there was any significant difference in quality between the professional and the amateur winners of the competition. Another user with no professional experience felt that the quality of fan localisation was better because fan translators were more familiar with the game and therefore had more technical knowledge.

It should be highlighted that the study had several limitations. The main one, as already mentioned, is the small sample. In addition, responses from the general public included seven participants with experience in the game localisation industry, which is likely to have influenced their concept of *quality*. Further research with players with no links to the industry and without translation experience would be necessary to study what constitutes a good localised version. Nevertheless, the study seemed to indicate that despite the fact that there is a subjective element in the definition of *quality* in game localisation, respondents agreed on the need for a correct

and fluent style in the translations, the importance of creativity, and the fact that a localised version should feel like an original.

## **5. Studies on players' preferences**

More recently, three larger scale studies have been carried out on players' preferences and their opinion regarding localised games by Geurts (2015), Fernández Costales (2016) and Ellefsen (2016). In her MA dissertation, Geurts (2015) set out to study whether Dutch gamers prefer to play games in Dutch or English and what their opinion of existing translations was, focusing on dubbing and subtitling. She designed an online survey and distributed via Facebook in order to obtain the widest possible sample (2015, 22).

The survey sample consisted of 108 Dutch native speakers aged between 16-30, primarily university students. Participants under 16 were not included because their proficiency of English language was considered not good enough and older participants were not include because games would only have been available in English during their formative gaming years. As part of the questions designed for profiling the respondents, there were questions related to gaming frequency, designed to establish different categories of gamers and identify if there were differences in translation preferences in the different groups (p. 24).

The survey looked at issues such as respondents' preferred language for playing; their opinion on game localisation practices; their preferred mode of AVT for games, and in-game translation strategies for dubbing and subtitling and how they relate to the gaming experience. There were both closed and open questions, and closed questions were formulated using a five point Likert scale. In addition, respondents could add comments or thoughts at the end of questions. Specifically

there were two open questions at the end, one eliciting their opinion on dubbing and subtitling in games, and the other one giving respondents the opportunity to comment on any other aspect relating to the topic of the questionnaire.

Geurts's study revealed that all gamer types discussed in the dissertation preferred to play games in English and that they would not play more games in Dutch even if they were made available (p. 69), although the reasons for this remain unclear. Geurts hypothesises that this is probably due to current localisation strategies into Dutch rather than to a specific language preference, but there is no evidence in the dissertation to support this and more research would be necessary to confirm it.

Regarding respondents' general view about game localisation, half of the survey respondents thought it was a good development that more games were being translated into Dutch, as this makes games more accessible to the general public, especially children (p. 56). In terms of the preferred AVT mode for localised games, 77% of respondents favoured subtitling over dubbing because the original soundtrack is kept intact and because they were used to subtitling in television (p. 69-70). Also, there seemed to be a general consensus that the Dutch voice acting was inferior to the English one (p. 62). However, some respondents also had some issues with current subtitling practices in games, such as poor segmentation, the fact that subtitles sometimes contain errors and unidiomatic expressions, the fact that they distract them from the action in the screen, the fact that they take too long or too little to disappear from the screen, and the fact that the font is often too small.

As acknowledged by Geurts, the study has some limitations, such as the fact that it was limited to a particular age group. She suggests that the sample should be widened to include more age groups in future studies (p. 72). Indeed, in order to obtain relevant information that may help the game industry decide on the best level

of localisation for The Netherlands (including no localisation or box and docs localisation only), all age groups should be accounted for in order to obtain a global overview of the Dutch market. In addition, as pointed out by Geurts, the fact that most respondents were university students with more than an average knowledge of English language may have also been the reason for their preference for playing the original versions of games in English (p. 72). Also, the survey did not distinguish between different type of game genres or platforms, nor between mainstream or indie games, which may have had an influence on the results (p. 73). Another limitation of the study identified by Geurts is the fact that it only focused on dialogues, and did not account for other types of text present in a game (p. 74). Also, due to the fact that the survey did not differentiate between English or Dutch subtitles, it is unclear whether respondents were referring to the original or the localised versions when talking about subtitles (p. 74). Furthermore, from a methodological perspective, the author states that Survey Monkey was used for the online survey, but no more detailed information about how data analysis was done from a statistical perspective is presented.

Despite the limitations of the study, it represents a breakthrough in game localisation research, since it is the first reception study analyzing users' preferences about game localisation with a relatively large-scale sample size. The study provides interesting quantitative and qualitative data pointing out future research avenues, such as the relationship between the prevalent AVT mode in a territory and players' preference for full localisation (including dubbing), partial localisation (subtitling the dialogues), box and docs localisation, or even no localisation. In addition, despite the fact that it is widely believed in the game industry that full localisation fosters players' immersion in the game (O'Hagan and Mangiron 2013; Bernal-Merino 2016), the survey showed a clear preference for subtitling, so the relationship between the AVT

mode used in localised versions with the degree of immersion is another potentially interesting aspect to study in the future.

Fernández Costales (2016) carried out a study of Spanish players' perception on the translation of video games and their habits and attitudes as regards language when playing and interacting with video games paratext, such as visiting official websites or watching trailers. His main two hypotheses were that players prefer games to be translated with a foreignisation strategy, keeping the "look and feel" of the original, and that many users code-switch from Spanish into English when playing games or interacting with their paratexts (p. 185).

In order to test these hypotheses, Fernández Costales designed an online questionnaire about the translation of video games, language preferences, and users' habits as regards video game websites, official videos, and advertising. The sample consisted of 94 native Spanish speakers from the Faculty of Education at the University of Oviedo and the results were analyzed using Statistical Package for the Social Sciences (SPSS). 55% of respondents were aged between 20 and 30, 20% were 30 to 40, and 17% were under 20. Thus, 79% of the sample would fall in the same age group as participants in Geurts study (2015), which were aged 16 to 30, and are aligned with statistics that establish that most players in Europe fall between the ages of 25 and 44 (ISFE 2012).

Most participants' level of English was upper-intermediate (76% had a level of B2 or higher according to the Common European Framework of Reference for Languages; 17% a B1 level and 7% a A1 or A2) (p. 189). In relation to gaming habits, there were three categories of participants, equally distributed in the survey: those who play very frequently (33%), those who played frequently (33%), and occasional gamers (34%).

After the questions for profiling the respondents, the questionnaire was divided in two sections. First, there were ten questions about users' perception on the translation of video games, the quality of localisation, and the impact translation might have on the gaming experience. The following ten questions focused on gamers' habits regarding game websites and their language preferences when playing games. Questions were closed and a Likert scale from 1 to 4 was used, in order to avoid respondents not giving a clear answer to a question by resorting to "neutral" in their answers. In order to confirm the internal consistency of the survey, Alpha Cronbach tests<sup>iv</sup> were used (p. 190).

The study showed that 88% of participants agreed that good game translation implies that players are not aware that the product has been designed for a different locale (p. 191). Respondents also felt that the quality of Spanish localised versions of games was good (65%), and more than 71% stated that translation has an impact on the gaming experience (p. 191-192). As for translation strategies, respondents preferred a foreignising strategy that kept original cultural references (87%), and names and locations untranslated (over 75%) (p. 192). As pointed out by Fernández Costales, this preference for games to be localised using a foreignising strategy seems contradictory with the answer to the first question, where most participants felt that good game translations are those in which users do not realise they are playing a localised game. Fernández Costales argues this could be explained due the concept of *social desirability* that is often applied to survey respondents, who do not always say what they really think, but rather what they think is expected of them or is more suitable or socially desirable (p. 192).

As far as the translatability of humour is concerned, 60% of participants felt that humour, such as jokes and puns, cannot be translated effectively. The study also

found out that respondents were in general satisfied with the quality of dubbing and subtitling of video games into Spanish, with 61,43% disagreeing or fully disagreeing with the statement "I do not like how games are dubbed into Spanish". However, in the open ended question at the end of the survey for general comments, some respondents drew attention to the poor quality of dubbing in some games in Spanish (p. 196). Subtitling received higher values, despite the fact that this is not the prevalent AVT mode in Spain, although the specific values are not detailed in the paper.

The second part of the survey focused on users' language preferences when interacting with games paratext, such as games websites, as well as their language preferences when playing games. The study revealed that 81% of participants accessed game's websites in English; only 28% liked watching game trailers in Spanish, and up to 50% thought that game advertisements sounded better in English. Interestingly, 51% of respondents thought that games should not be translated into Spanish (p. 194), despite the fact that in previous questions they had stated that the quality of translations into Spanish was good. In addition, 78% of participants did not think that games should be translated into minority languages. According to Fernández Costales this could be due to the fact that Bable, the regional language spoken in Asturias, does not have an official status in Spain, and only 30% of the population speaks it (p. 194). 68% of gamers also stated that they liked playing games in English, which according to Fernández Costales suggests that the pervasiveness of English today may be altering users' habits and gaming patterns around the globe (p. 195). Finally, the last item of the survey also revealed that 80% of participants stated that they prefer to watch movies and TV programmes in English, which is aligned with their attitudes towards language in games.

The main conclusions of the study are that users prefer foreignisation strategies in the translation of video games and that they use English to visit websites or watch official videos. According to Fernández Costales, analysing the reasons for this was outside the scope of the study and deserves further scholarly attention. One of the possible reasons could be the association of English language with a "particular and cosmopolitan lifestyle" (p. 196). Fernández Costales also calls for further investigation regarding translation strategies for video games to be released in the Spanish market, as the study hints that users may prefer partial localisation with subtitles as opposed to full localisation with dubbing (p. 197). Also, while industry practices tend towards domestication, by means of adaptation and recreation of cultural humour, respondents favoured a foreignising approach.

Fernández Costales acknowledges a number of limitations of the study, such as the fact that the sample group is not representative of the whole Spanish territory and the fact that subjects were university students (p. 196). Indeed, responses may have been different if the level of education or the level of English of participants would have been different. A wider scale study including users from different regions of Spain, different levels of education and a more balanced distribution of English proficiency would provide more information to confirm whether Fernández Costales's results can be generalized in the Spanish context. Another limitation was the fact that all questions were closed, except the open one at the end, unlike in Geurt's study, so respondents did not have the option to add extra information or explain their choices. However, the study reveals interesting information about users' opinion of localisation and is pioneering in the Spanish context and highlights future research lines in reception studies, such as the reception of different translation strategies and the reception of cultural references and humour.



Fernández Costales's research was followed by a study by Ellefsen (2016), who did his masters' dissertation on a quantitative study of language preferences in video games of French-speaking players in France, Belgium, Switzerland, and Canada. Ellefsen's hypothesis was that multilingual markets would prefer the English version of a game because they have a better awareness of content from a culture that is different from their native culture (p. vi). As in the previous two studies, the tool used was an online questionnaire distributed through social media and forums. Data were subsequently analysed according to regions, in order to detect the differences between the territories regarding language preferences when playing games. As in Fernández Costales's study, the results of the survey were analyzed with SPSS (p. 11).

The research sample was large, with 726 participants from the above-named countries. The survey was composed of 24 questions and it was divided into five sections. The first section asked about personal information, including nationality. The second section was about the linguistic profile, that is the native language, the level of English, and whether participants worked in the language industry. Ellefsen wanted to separate language professionals from the rest of respondents as their linguistic abilities would probably impact their views regarding the consumption of audiovisual and textual material in the original language, as well as their particular views about localisation. However, results were very similar for the language professional group and the other one (p. 40). The third section examined respondents' language and linguistic preferences for audiovisual and textual content, in order to correlate them with linguistic preferences in video games. The fourth section was about their gaming habits and language preferences when playing games, and the fifth one consisted of a series of questions with a five point Likert scale, where respondents

could express their opinion about specific statements regarding game localisation (p. 12-13).

As regards the sample, there was an overrepresentation of Canadians (40.2%), as this is the nationality of the researcher and where he had more contacts, both personal and professional. This was followed by 37.3% French respondents, 14.6% Belgian respondents and 7.9% Swiss respondents. Since the study analyses the different countries in terms of proportions, this was not deemed an issue for the study (p. 14), but it was considered one of its limitations (p. 53).

The gender distribution of the sample was also unbalanced, with only 20% of female participants, a much inferior number to that provided by gaming industry statistics, which places the presence of female gamers in the industry somewhere between 44% and 52%, depending on the country (p. 14). According to Ellefsen, this is not problematic because previous studies on the topic showed that there is no substantial difference in attitude between male and female players when it comes to their language preferences in video games. However, he only refers to Fernández Costales study (2015), which was a smaller scale study with only 96 participants, 33% of which were female, so more studies with a wider sample would be required to confirm this.

In terms of age, most respondents fell into the 25-34 category (51.2%), while 34.4% respondents were in the 18-24 category, so the biggest sample falls in the same category as the previous studies by Geurts (2015) and Fernández Costales (2016).

As regards the level of English as judged by the participants, the average was 7.7 out of 10, with 71.2% of Canadian participants stating that their level of English was 10 out of 10. In terms of the gaming profile of the respondents, Ellefsen wanted to differentiate between casual and "serious" gamers, using not only the amount of

time they play as a defining criteria, as in the previous two studies, but also other factors such as the type of games they play, the platform in which they play, the money they spend in gaming per month, and the correlation between the frequency of gaming and the amount of money spent monthly. Based on all these criteria, 508 respondents were labelled as "serious gamers", although the study finally showed that the differences between the two groups were minimal (p. 21). It should be mentioned that the term *serious gamer* is not defined by Ellefsen. Despite the fact that its definition may seem intuitive and from the study it becomes clear what it refers to, using another term or at least providing a definition would have been advisable in order to avoid misinterpretation. There is also a game genre named *serious games*, which are those games designed with educational, therapeutic, etc. purposes beyond entertainment, and one could easily assume that the term *serious gamers* refers to this group.

Regarding the main findings of the study, it proved that the original hypothesis was partially true, since most Canadian respondents preferred consuming books, games and other AVT products in English if this was the original language, probably due to the predominance of this language in the North American context (p. 46). Interestingly, however, an ever greater percentage supported the claim that all video games should be localised into French (43%), possibly due to the fact that Canadian French speakers are used to the idea that all content should be translated into French, as enforced by Canadian legislation. On the other hand, francophone respondents from the other two multilingual territories, Belgium and Switzerland, preferred playing the localised French versions, even in a higher proportion than the respondents from France. Ellefsen relates this to the lower level of confidence in English proficiency in these territories, which was lower than the global average (p. 45).

The survey also revealed that gamers, including Canadians, usually prefer playing the game in the original language, so if the game is developed in French, they prefer to play it in this language. Thus, the choice of language does not seem to be purely based on a linguistic preference, but rather on a desire to play the original version of the game. In addition, respondents preferred to play a game in a language that befits the context in which the narrative takes place (p. 46).

As far as the preferred AVT mode for games, the survey revealed a tendency to favour subtitles over dubbing in all territories (p. 23), although there was a significant range of answers within different countries regarding preferences for subtitles or dubbing. Ellefsen argues that to cater for this, more levels of linguistic customisation should be provided to the end-user in order to suit the need of every type of language consumer (p. 47) and provide them with a more immersive experience (p. 50). Interestingly, 40.1% of Canadian participants favoured viewing foreign audiovisual content in languages other than English with English subtitles. Ellefsen believes this could be attributed to a higher proficiency in English by this population, as well as "as a refusal to accept the predominance of the continental variety of French in translation" (p. 24). This latter hypothesis is worthy of further exploration in future research about the reception of games in territories that speak different varieties of the same language. For example, it has been reported that Spanish-speakers of different locales also tend to dislike versions made in other regional variations, particularly in the case of dubbing (Skoog 2013). It would be interesting to collect their views on versions translated into different regional varieties and see how this affects their immersion and PX.

Ellefsen's study also showed that a clear majority of participants favoured foreignisation rather than domestication, preferring that proper names and cultural

references were left untranslated, like participants in Fernández Costales study (2016), and unlike the respondents of Mangiron (2014) small-scale study who favoured adaptation and creativity. Also, they almost unanimously disagreed with the application of censorship to games (p. 51). Ellefsen concludes by making three main recommendations to the industry: (1) engage players in the development process, to be able to harness their feedback and take it into account in the development process; (2) standardise subtitling, dubbing, and translation practices in general, in order to provide a better gaming experience; (3) allow for the personalisation of linguistic settings and the level of localisation, so that players can choose whether they want to play a fully dubbed localised version or a partially localised subtitled and they can also choose among any of the languages in which the game has been released (p. 51-52).

Ellefsen acknowledges a number of limitations in the study, such as the already mentioned overrepresentation of Canadian nationals, and the fact that only native speakers were included, while immigrants living in the target countries may have different views regarding localisation. Also, the fact that social media and discussion groups in the Internet were used meant not all the members of the gaming community were accessed (p. 53). He also outlines the need for qualitative research in future studies, in order to understand the reasons for the results obtained, as well as increasing the sample group and extending the research to languages of territories such as Japan or the Middle East, where users are likely to have different attitudes towards localisation, different proficiency levels in English, and a more distant cultural background (p. 53). Finally, as suggested by Ellefsen and also acknowledge by Geurts (2014), future studies would benefit from taking into account different types and genres of games when assessing gamers' preferences, as, for example,

strategy games require different translation strategies than movie-like story-driven games (p. 54).

Despite the limitations acknowledged by Ellefsen, his study represents an important step forward in reception studies in game localisation, primarily because a sample size of 726 users is quite large in comparison with the previous reception studies in AVT. Also, it is innovative because it analysed gamers attitudes from different French speaking countries, including multilingual territories where French is not the majority language, such as Canada and Switzerland. Further studies like this will contribute to a better understanding of users' linguistic preferences when playing games and their attitude towards localisation and the use of English in today's digital world.

## **6. Study on the reception of game subtitles**

Research in game localisation to date has paid scant attention to the audiovisual and multimodal features in games and how they are dealt with during the localisation process. Mangiron (2013) carried out a descriptive study of subtitling practices in games, which concluded that standard subtitling practices are not applied. The adhoc subtitling methods applied by game companies, such as long subtitles that appear on the screen for too short a period, bad segmentation, and lack of synchrony, not only can hinder readability, but also playability, and therefore can have a negative impact on PX. In addition, as is frequently the case, not all audio assets in a game are available through intralingual subtitles, whereby posing an accessibility issue for deaf and hard of hearing players.

This descriptive study was followed by a small-scale exploratory study focusing on the reception of game subtitles both by hearing and deaf players

(Mangiron 2016). Its main objective was to determine what type of subtitles would be most suitable for video games, given their interactive and ludic nature. As regards the tools used for the experiment, the study combined a pre-task and a post-task questionnaire with eye tracking technology, in order to combine information provided by users about their preferences regarding subtitles in games with more "objective" quantitative data provided by the eyetracker. The study focused on six subtitling parameters: (1) subtitle presentation; (2) alignment; (3) reading speed; (4) difference in reading speed for one-liners vs two liners; (5) character identification, and (6) sound effects (p. 73).

The sample consisted of 12 hearing users and 13 deaf participants (11 prelocutive and 2 postlocutive deaf subjects), with a predominance of female respondents (66.6% in the hearing group and 61.5% in the deaf group). A more balanced distribution would have been preferable, especially considering that the population of gamers in Spain is 47% female and 53% male (Aevi 2014). In addition, 33.3% of participants in the hearing group stated that they had never played games, while all respondents in the deaf group played games. A more balanced distribution, with more regular players in both groups, would be desirable in future studies, to obtain a more representative sample, as well as a more balanced distribution between prelocutive and postlocutive deaf participants.

The stimuli used was the demo of a game called *Haunted House* (2011), developed by students at the Masters in Video Game Creation at the Universitat Autònoma de Barcelona as their end of year project. Because it was necessary to manipulate the subtitles in order to test the different parameters, commercial games were not useable, as the code of a commercial game would have had to be hacked in order to manipulate it, with the ethical implications this would have. The demo lasted

ten minutes and included two cinematic scenes of two minutes each, which were voiced in Spanish by volunteer dubbing actors and then intralingually subtitled verbatim, following the conventions of the game industry (p. 77). Each character was assigned a different subtitle format. Participants were asked to play the game for approximately 5 minutes, which included watching the first cinematic and then doing some free play for 3 minutes.

The pre-test questionnaire asked participants about personal information, gaming habits and their opinion of game subtitles, while the post-test questionnaire asked the same questions about game subtitles, to check whether their opinion had changed after playing the game. Due to the exploratory nature of the experiment, only one variable, fixation duration, was used with the eye tracker, which measures the length of time the eye is still in a certain position and is the most frequently used measure in eyetracking research (Holmqvist et al. 2011). The eyetracking study only focused on four parameters: (1) reading speed; (2) difference in reading speed for one-liners vs two liners; (3) character identification, and (4) representation of sound effects. In order to analyse this, two conditions were created for the eye tracking test and randomly applied to 50% of participants in each group (p. 78).

The study revealed that preferences for subtitle presentation were varied, with hearing users favouring more creative subtitling formats, such as a speech bubble, while deaf users preferred subtitles to be projected directly on to the screen, without a box, as is done in other media. In addition, all users preferred subtitles to be centered in the screen, although current game subtitles are left-aligned by default. Regarding reading speed, it was faster for hearing participants than for deaf participants, as observed in previous studies in other media (e.g. Arnáiz 2015; Kruger, Szarkowska,



and Krejtz 2015). Also, participants from both groups read two-line subtitles slightly faster than one-liners (p. 87).

As regards character identification, speaker portraits did not prove efficient, as most users did not notice them, possibly because all subtitles included a name tag, which made the portraits slightly redundant. Further studies should include either a name tag or the portrait, as well as colour identification, which this time was not tested, in order to be able to assess more accurately different methods and see which approach is preferred by users for character identification in games (p. 88). In relation to the representation of sound effects, comic-style pop-up onomatopoeias were more effective and the preferred choice by participants, so they may be a more appropriate method to describe sounds in games, given their interactive nature.

Mangiron acknowledges several limitations to the study, such as the small sample size and the short duration of the experiment, which are not sufficient to establish generalisations about the perception of subtitles in games (p. 88). In the future, larger scale reception studies would be required with more participants in order to obtain more representative data. Additionally, in order to collect more accurate information about reading speed, it would be necessary to test other variables with the eye tracker, such as time to first fixation, fixation count, shifts between the image area and the subtitle, and regressions. It would also be interesting to try to measure other parameters, such as comprehension and attention, as video game users often have to respond to several stimuli to be able to progress in the game and having to read subtitles while performing other actions may impact on their progress (p. 88). Furthermore, the fact that the stimuli was a demo developed by master students also had an impact on the study, as there were synchrony issues with the subtitles, the audio, and the movements of the character's mouths.

However, despite the limitations of the study, it is the first study addressing the reception of game subtitles and it provides interesting qualitative data about participants' preferences, as well as some quantitative data about the potential effectiveness of certain parameters, that should be further confirmed or rejected in future studies.

## **7. Conclusion and future research avenues**

Research on game localisation within the wider Translation Studies framework has been ongoing for more than a decade, contributing to establishing the foundation of the discipline from an ontological and descriptive perspective. However, despite the fact one of the main tenets of game localisation is reproducing the gameplay experience of the original in the localised versions, academics have been slow to take up the challenge of carrying out reception studies, with the exception of a handful of examples as presented in this chapter. The first reception study about player experience was carried out by O'Hagan in 2009 with one single subject, by recording his player trajectory, by asking him to keep a game log and via interviews of the subject. The next reception study, which took place in 2014, concerned itself with the concept of *quality* in game localisation (Mangiron 2014).

Since then reception studies have continued to grow steadily, with contributions by Geurts (2015), Fernández Costales (2016) and Ellefsen (2016) regarding users' language preferences and their views towards localisation, a research line that is currently being followed by Ameri, who is looking into the reception of localised games in Iran. O'Hagan also expanded her experimental research on player experience of localised games (O'Hagan and Mangiron 2013, O'Hagan 2016 and O'Hagan and Flanagan forthcoming) using a wider sample and comparing users' experience of the original US version against the users' experience with the German

and Japanese localised versions. Her methodology was innovative, as it tried to study and measure PX combining questionnaires with biometrics for triangulation purposes. Finally, Mangiron (2016) analysed the reception of game subtitles, combining questionnaires with eye tracking technology in order to combine subjective with more objective data.

Despite the progress made in the area of reception studies in game localisation, more studies are necessary in order to gain a deeper insight into what users think about localisation and how they experience localised games. Future research about players' preferred localisation strategies, with large sample groups and differentiating between different game genres, would provide information relevant both for the industry and academia, that can in turn be applied to training. Participants in Fernández Costales's (2016) and Ellefsen's (2016) studies favoured a foreignising approach, which kept cultural references and humour untranslated, which is at variance with the mainly domesticating approach applied by the industry and described in academic literature. Therefore, this issue should be further explored in order to find out what players really expect and experience when playing games. In addition, studies trying to relate the reception of localised games with sales in a given territory, not available to date, would provide insightful information to the industry about what localisation strategies to apply in different markets.

Studies like Ellefsen's (2016), focusing on the reception of video games by users of different territories where the same language is spoken, such as English, French and Spanish, would also be useful to provide information about reception from players speaking the same language but from different cultural backgrounds. At the moment, developers and publishers tend to provide a single language version for all territories where that language is spoken, which is usually the US English version in

the case of English. In the case of Spanish, localisation vendors are often asked to provide a neutral Spanish version that can be used in all Spanish speaking territories. However, given the idiomatic nature of the language used in games, such neutral versions tend to be lackluster and devoid of local flavour, which is likely to impact negatively on PX and immersion. Data about the reception of a game by users speaking the same language but from different territories would help the industry make informed decisions not only in terms of what languages, but also what regional varieties games should be localised to.

More reception research into game localisation quality, with measurable quality metrics, would also be necessary in order to improve current quality standards. Furthermore, the issue of the quality of professional versus fan translations could be explored. This could be done by comparing, for example, the reception of two versions of the same game, one translated by professionals and the other one by fan translators.

Another area that would benefit from further reception studies is game accessibility, as accessibility is one of the pending issues for the industry. Tests with users with functional diversity would provide invaluable data that could contribute to the development of more accessible games. While universal accessibility is still a distant reality due to the visual and interactive nature of the medium, accessibility for deaf and hard of hearing players should be more easily achieved by asking players about their needs and ensuring that all audio assets in a game are also available in textual format. Further research in the reception of games subtitles would contribute to the development of best practices while improving accessibility for all players. Collaboration agreements with industry developers whereby researchers would be granted access to the code of mainstream games and permission to manipulate them

would also be very beneficial for future reception tests regarding subtitling practices in games.

Finally, more experimental research like that carried out by O'Hagan (2016) about concepts such as *player experience* and *immersion*, comparing the PX of users of the original and different localised versions is necessary to bring the discipline forward and to really understand how users experience localised versions of games. Such studies can provide the game industry with data that can help assess the level of localisation required for different territories, as well as the most suitable AVT modes and localisation strategies. According to the literature, full localisation with dubbing facilitates immersion (O'Hagan and Mangiron 2013, Bernal 2016), but respondents taking part in the three quantitative studies about players's preferences carried out to date stated that they preferred games to be subtitled. Therefore, it would be interesting to analyse how the different AVT modes impact on immersion.

Due to the complexity and interdisciplinarity of such large scale reception studies, research teams composed by members with different expertise, such as translation scholars, psychologists, game designers, and statistical experts, would be necessary to complete them successfully. Undoubtedly, reception studies in game localisation present challenging opportunities for any scholar willing to bring research in this field to the next level.

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## Games

*Ico* (Team Ico 2001)

*Haunted House* (Borrás, Mallol, Plana and Ruíz 2011)

*Plants vs Zombies* (PopCap 2009)

*The Republica Times* (Lucas Pope 2013)

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<sup>ii</sup> For a critical overview of eye tracking research in AVT, see Szarkowska et al. 2013 and Kruger, Szarkowska and Krejtz 2015.

<sup>iii</sup> LocJam is a global non-profit game localisation contest organised by the International Game Developers Association (IGDA) Localisation Special interest group (Loc SIG) and a game localisation provider named Team GLOC with the idea of promoting game localisation and giving an opportunity to anyone wishing in working in this area to become familiarised with it. The competition started in 2014 and has run successfully every year since. For more information, see <http://www.locjam.org/>.

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<sup>iv</sup> The Alpha Cronbach test is considered the most common measure of internal consistency ("reliability") in a survey. It is most commonly used when there are multiple Likert questions in a questionnaire that form a scale, in order to determine if the scale is reliable. For more information, see <https://statistics.laerd.com/spss-tutorials/cronbachs-alpha-using-spss-statistics.php>.