

Cross-Cultural Research on Video Game Localisation

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Međukulturno istraživanje lokalizacije videoigara:

Usporedna analiza stavova hrvatskih i španjolskih gejmera

Diplomski rad

Mentor: dr. sc. Kristijan Nikolić, viši lektor

Zagreb, 13. prosinca 2023.

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Cross-Cultural Research on Video Game Localisation:

A Comparative Analysis of Croatian and Spanish Gamers' Perspectives

Master's thesis

Supervisor: Dr Kristijan Nikolić, Senior Lecturer

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Izjava o akademskoj čestitosti

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Handwritten signature in black ink, appearing to read "Andrej Novak".

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ABSTRACT

The video game industry emerged in the 20th century and has experienced remarkable growth and surpassed other entertainment sectors in terms of global influence. This expansion has subsequently driven the demand for video game localisation across diverse language markets, including Europe. This qualitative research conducted in the English language therefore aims to provide insight into the perspectives of gamers from Croatia and Spain on video game localisation. The objective of the research was to understand diverse player expectations and consumer behaviours in countries with different traditions of audio-visual translation. Croatian gamers were expected to exhibit a higher degree of aversion towards video game localisation into their native language compared to their Spanish counterparts. Conversely, Spanish gamers were expected to be more likely to embrace video games in their native language compared to their Croatian counterparts. The data were acquired through anonymous e-mail interviews with predominantly open-ended questions and the subsequent comparative data analysis. The research confirmed both hypotheses. However, effective localisation can be a powerful tool for enhancing gameplay immersion, according to both participant groups. This suggests Croatian gamers' attitudes might change if more successful video game localisations are presented to them. Lastly, these findings suggest localisation is an important aspect of product marketing, as consumers typically want the product to speak in their native language, so they can forge an emotional connection with it.

Key words: audio-visual translation, video game localisation, culturalisation, immersion, product marketing

SAŽETAK

Industrija videoigara nastala je u 20. stoljeću i doživjela značajan rast te nadmašila ostale sektore zabave u pogledu globalnog utjecaja. Taj rast potaknuo je povećanu potražnju za lokalizacijom videoigara za različita jezična tržišta, uključujući Europu. Ovim se kvalitativnim istraživačkim radom provedenom na engleskom jeziku stoga želi pružiti uvid u stavove gejmera iz Hrvatske i Španjolske na temu lokalizacije videoigara. Cilj je istraživanja bio razumjeti različita očekivanja gejmera i potrošačkih navika u državama s različitim tradicijama audiovizualnog prevođenja. Očekivalo se da će hrvatski gejmeri pokazati veći stupanj averzije prema lokalizaciji videoigara na svoj materinski jezik u usporedbi sa španjolskim gejmerima. Nasuprot tomu, očekivalo se da će španjolski gejmeri imati veću sklonost videoigramama na svom materinskom jeziku u usporedbi s hrvatskim gejmerima. Podacima su prikupljeni putem anonimnog intervjua preko e-maila s pitanjima uglavnom otvorenog tipa i naknadnom usporednom analizom podataka. Istraživanje je potvrdilo obje hipoteze. Međutim, uspješna lokalizacija može biti moćno sredstvo za poboljšanje osjećaja uživanja u videoigru prema objema skupinama ispitanika. To ukazuje na to da bi se stavovi hrvatskih gejmera mogli promijeniti ako im se predstave uspješnije lokalizacije videoigara. Zaključno, ovi nalazi ukazuju na to da je lokalizacija važan aspekt marketinga proizvoda, jer potrošači obično žele da im se proizvod obraća na njihovom materinskom jeziku kako bi uspostavili emocionalnu vezu s njim.

Ključne riječi: audiovizualno prevođenje, lokalizacija videoigara, kulturalizacija, uživanje u videoigru, marketing proizvoda

GLOSSARY

ABBREVIATION	DEFINITION
CEFR	Common European Framework for Reference
H1, H2	first hypothesis, second hypothesis
NES	Nintendo Entertainment System
P1 _{ES} , P2 _{ES} etc.	Participant 1 (Spain), Participant 2 (Spain), etc.
P1 _{HR} , P2 _{HR} etc.	Participant 1 (Croatia), Participant 2 (Croatia), etc.
Q1, Q2 etc.	first interview question, second interview question, etc.
VA	voice acting
VO	voice-over
VR	virtual reality

TERM	DEFINITION
audio-visual translation	translation of audio and visual content and media, including films, TV shows, and video games
culturalisation	the process of adapting a video game to one's cultural environment
gamer	a person who plays video games, often as a hobby
immersion	a sense of emotional connection with the virtual game environment
locale	pairing of a language and country code in localisation
localisation	the product of adapting a product to a specific locale
virtual reality	computer-generated simulation of a 3D environment

1 INTRODUCTION

1.1 Theoretical Background

The rise of the video game industry within the broader entertainment industry has been marked by periods of growth and decline. Initially, it was a smaller market with a niche target audience that gradually expanded, entering what is often described as a golden age. However, the industry later experienced a sudden downturn before recovering. Today, the gaming industry continues to expand, with some estimates suggesting the global video game market outperforms other entertainment sectors, such as literature, film, and music (Richter 2020).

By contrast, the evolution of video game localisation has taken its own course. The term refers to the process of adapting the video game for a different language and region – also known as the *locale*. Even though different regions might officially use the same language, such as Spain and Latin America, they do not follow the same cultural norms, conventions, and laws, all of which is important in the process of localisation. The meaning of the term *locale* therefore takes both language and geographical region into consideration to distinguish these differences (Rocket Uniface Library). Localisation is done in such a way that it creates the impression that the game was originally designed for that specific region, rather than an adaptation of an existing product from a different region.

On a global scale, video game localisation has faced both acceptance and rejection, depending on the target audience. One of the most challenging, yet important regions for localisation is Europe, due to its cultural and linguistic diversity. Therefore, this research anticipates that Croatian and Spanish gamers would have different attitudes towards video game localisation in their respective languages, driven by the acknowledgement that these two countries have historically exhibited different approaches to video game localisation.

1.2 Research Background

1.2.1 Research Motivation and Objectives

Localisation plays a pivotal role in making video games accessible to a wider audience and impacts the gaming experience. However, video game localisation remains a widely underrepresented topic in academic research, especially in Croatia. This therefore motivates this research to explore this subject and reveal any knowledge gaps pertaining to this topic.

The primary aim was to acquire a deeper understanding of Croatian and Spanish player expectations and consumer behaviours and lay the foundation for potential future research in the field of video game localisation. Furthermore, the findings of this research can be extrapolated to the broader context of the role of localisation in product marketing.

1.2.2 Research Questions and Hypotheses

The first research question addressed in this thesis is:

Are Croatian gamers more likely to exhibit aversion to playing video games in their native language than their Spanish counterparts?

The first hypothesis (H1) posits Croatian gamers are more likely to use negative language when expressing their views on Croatian video game localisation, potentially due to their historical lack of exposure to localised audio-visual content, in contrast to Spaniards.

Based on the first hypothesis, the second research question is:

Are Spanish gamers more inclined to play video games in their native language compared to Croatian gamers, because of their comparatively more positive attitudes towards localisation?

The second hypothesis (H2) suggests Spanish gamers will have a greater tendency to play video games in their native language, compared to Croatian gamers, because of their favourable stance towards video game localisation.

The next part of the thesis explores the history of video games and the development of localisation within the industry, followed by the cross-cultural research project on video game localisation in Croatia and Spain.

2 THEORETICAL OVERVIEW

2.1 History of Video Games

2.1.1 Invention of Video Games

Video games first emerged on the market as minor research projects, before evolving into a form of entertainment that caters to a wider audience. Furthermore, the term *video game* itself has undergone semantic transformation over time. As observed by Wolf (2008), the term's

initial usage relied on video technology (3). In the meantime, it has expanded to encompass a wider range of meanings in common usage compared to the original technical term. Wolf also notes the term has often been used interchangeably with *computer game* and *electronic game* (3), making it difficult to identify the first video game on the global market. Nevertheless, considering the broader definition, the history of video games can be traced back to around the late 1940s and early 1950s. Kowert and Quandt (2016) note an early prototype of video games could be assigned to the *Cathode Ray Tube Amusement Device* from 1947, which allowed players to manipulate a dot on the screen and aim at targets (3).

2.1.2 Golden Age of Arcades

In the following few decades, video games were available only to people who had access to computers. At that time, these were mostly programmers and other people who worked in the IT sector. It was not until the 1970s that video games became more mainstream after the invention of arcade games and the personal computer (*Kenbak-1*), both of which were invented in 1971. *Computer Space* is recognised as the first commercially available video game (Cradle of Aviation Museum), as well as the first arcade video game. Over the decade, arcade games experienced a rapid rise in popularity, especially in the United States, Canada, and Japan. *Space Invaders* (1978) introduced a point-based ranking system for players to the market, causing people to visit bars, restaurants, and other venues with coin-operated arcade game machines in droves. Moreover, the game was so popular that it caused a national coin shortage in the US (Kent 2002), setting off the golden age of arcade games. *Pac-Man* (1980), arguably the most popular game in the 1980s, is commonly listed as one of the greatest video games of all time. However, the golden age of the arcade collapsed within the same decade, especially in the US. The market was flooded with arcade games of poor quality, there was a lack of publishing control, and the personal computer became a serious competitor, disrupting the market. In 1983, the video game industry in North America generated \$3.2b in revenue. By contrast, it generated \$100m in revenue just two years later (Bugsplat 2021).

The industry slowly recovered after the introduction of the Nintendo Entertainment System (NES) to the North American market in mid-1980:

In 1981, when Nintendo was riding high on the popularity of the arcade game *Donkey Kong* in the U.S. market, the company's president at the time, Hiroshi Yamauchi, asked Mr. Uemura to create an affordable entertainment system that would bring the arcade experience home. (Dooley and Ueno 2021)

The console was also known as the *Famicom*, short for ‘family computer’, reflecting the company’s mission to create an entertainment device designed for every family. However, it was not an immediate success, and it took several years before the NES exploded in popularity in 1985 with the release of *Super Mario Brothers*. Masayuki Uemura, the engineer behind the development of the NES, stated that the game’s thrilling gameplay, catchy music and design were like gasoline on a fire (Dooley and Ueno 2021). Nintendo solidified their position as the industry leader, introducing video games to the everyday household. A survey conducted in 1990 found nearly 1 in 3 American households had a Nintendo console at home (Computer Gaming World Museum).

2.1.3 Shift towards Storytelling

Video games have therefore become widespread since the golden age of arcade games in the 1970s and 1980s. The following decade was a crucial period, characterised by innovative products and the consolidation of video games as a significant part of mainstream entertainment. In the 1990s, Sony’s *PlayStation* console entered the market, PC gaming became more popular, and the internet (World Wide Web) was launched, enabling online multiplayer gaming experiences. As technology improved and player expectations increased, companies started creating more complex video games. Modern video games have slowly introduced elements of role-playing and intricate narrative storytelling, akin to literature and film. This contrasts with the early arcade games that emphasised quick reflexes and competition instead.

The 1990s witnessed a significant shift towards storytelling in video games, as advances in CD-ROM technology enabled greater data storage. Complex narratives, character development, cinematic sequences, and voice acting (VA) became prominent in many video games, such as the *Final Fantasy* series. Discussing the franchise, Heaney (2022) mentioned that “every single member of the team gets their own stories that change them and deepen their characters in meaningful ways.” Over time, storytelling has risen to the forefront of the gaming experience. Since the 2010s, many video games have been set in expansive virtual worlds that provide players with a sense of agency in storytelling.

2.1.4 Immersion

Based on these trends, it can be inferred the future of video games revolves around *immersion*, a term used to describe a heightened sense of involvement and emotional connection with the

virtual environment. Moreover, immersion has advanced to a higher level with the most recent technological advancements in virtual reality (VR). VR enables players to physically inhabit the gaming world and engage with the virtual environment in a more lifelike way, as shown in Figure 1, which illustrates how the term *immersive* has become prominent in literature in recent decades. The use of the word increased from 0.0000004868% in 1990 to 0.0001448996% in 2019, an increase of 29,665.74%.

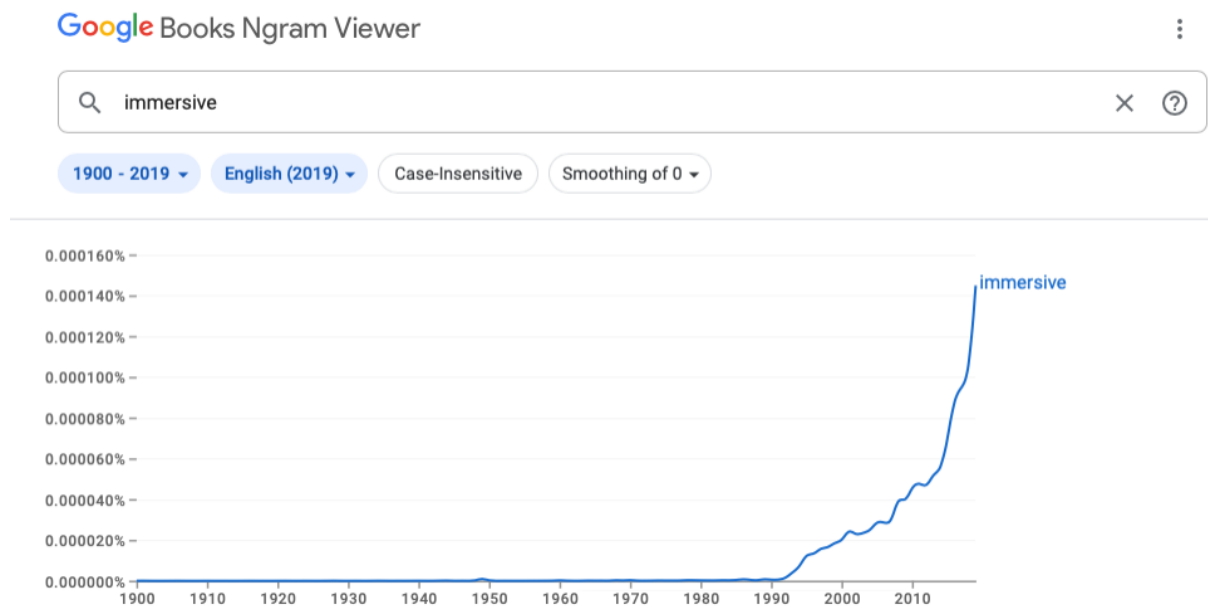


Figure 1: The use of the term *immersive* in Google Books over time (Google Books Ngram Viewer).

This correlates with the rapid development of realistic video games since the 1990s. With the advent of VR technology, this trend is likely to continue.

Immersion can be affected by various factors, such as realistic and high-quality graphics, captivating sound design and music, as well as a compelling narrative featuring well-developed characters and engaging storytelling.

As previously mentioned, complex storylines have taken centre stage in 21st-century video game development. This has also made language and culture integral components of gameplay, as it is important to convey the story in a meaningful way that players can emotionally connect with. Playing video games in one's native language can amplify immersion by aligning with the player's cultural background, which could be the reason for the rise of localisation in video game production in recent decades. This interplay between language and immersion will therefore be further explored in the following chapter of the thesis.

2.2 History of Video Game Localisation

2.2.1 Early Stages of Video Game Localisation

Video game localisation goes beyond text translation. The process also includes creating manuals, modifying artwork, recording new VA audio, adjusting the game to comply with legal and/or cultural requirements, among others. In the early days of the industry, most video games were relatively simple, making localisation nearly redundant. For example, arcade video games quickly spread across the globe at its peak, including developing countries. According to Bernal-Merino (2017), many people quickly learned to play arcade games due to the simplistic nature of the gameplay mechanism, despite having no knowledge of English, the source language of many popular arcade games (1). However, as the video game industry grew, the demand for localisation rose. One of the earliest examples of video game localisation can be seen in *Pac-Man*. Originally developed in Japan by Namco, the popular arcade action game was later introduced to the US market. In Japan, it was titled *Pakkuman*, a playful term referring to the onomatopoeic Japanese word *pakupaku* used to describe gobbling down food (LocaliReview). When the game was released in the US, it was initially transliterated as *Puck-Man*. However, it was later changed to *Pac-Man*:

The answer lies with Midway, the company who obtained the rights to manufacture the game in the United States. They were concerned by the potential for people to vandalise the machine by changing the 'P' into an 'F.' And so, Pac-Man was born! Following the North American release, Namco adopted Pac-Man as the official name for all future iterations of the game in Japan and abroad. (LocaliReview)

Furthermore, the names of Pac-Man's enemy ghosts in the game were also localised:

In the Japanese version of the game, the red, pink, cyan, and orange ghosts are called Akabei, Pinky, Aosuke, Guzuta. If translated literally, these names would read as Reddy, Pinky, Bluey, and Tardy. [...] When the game came to the West, these ghosts were introduced as Blinky, Pinky, Inky, and Clyde. (LocaliReview)

Pinky and Inky were unambiguously named after their respective colours. Blinky was likely created for two reasons: one, the ghost blinks when its vulnerability to Pac-Man is running out; two, the ending -inky matches with the other two ghosts. However, Clyde is the only one to stand out from this rhyme scheme. Nevertheless, the name makes sense because of its programming, which is different than its counterparts. Whereas the other three ghosts

collaborate to track down Pac-Man, Clyde appears to act on a whim. Therefore, having a name that stands out from the others appears appropriate as well.

Video games have grown more complex since the release of *Pac-Man*, making localisation more challenging. As Mangiron and O'Hagan (2006) describe it:

These early games required the least amount of translation, as the games consisted mainly of dots and lines with very few command lines. By comparison, today's major game titles present many elements to be translated, reflecting intricate gameplay features with breathtaking 3D graphics, surround-sound and incorporation of human voices as well as in-game cinematics, known as 'cut-scenes'. (11)

With the ongoing expansion of the video game industry, there has been an increased focus on the importance of cultural adaptation in the process of localisation.

2.2.2 Culturalisation

Culturalisation involves the “process of adapting [a video game] to one's cultural environment” (Močilac 2018). This includes history, religion, and other components that define a culture. For example, the most recent sequel in the widely popular *Assassin's Creed* series has been fully localised into Arabic for the first time. Ubisoft's *Assassin's Creed Mirage* is set in 9th-century Baghdad, so the company wanted to create an authentic vision of the environment. The cultural adaptation features accurate pronunciation of Arabic words, traditional artwork, and lessons on the history of Baghdad, among others. Consequently, the game leaves the impression that it was originally designed in Arabic, rather than translated from English. Various experts were called in for collaboration to create a successful presentation of Baghdad, including native speakers of the Arabic language, artists, and historians. The successful outcome of this collaborative project demonstrates that localisation can generate a substantial return on investment (ROI). However, culturalisation is a challenging process due to cultural differences between locales. As a result, video games may sometimes be censored in certain regions of the world. In 2020, China censored artworks for some characters from *League of Legends* due to their “seductive visual graphics” (de Leon 2020), igniting a debate over its justifiability. For instance, the official artwork for Evelynn, a seductive portrayal of a succubus, was altered to conceal her midriff. A more extreme example of censorship can be seen in *Kakuto Chojin*. Published in 2005, the game caused controversy due to perceived insulting references to Islam, because it contained Arabic chanting from the

Qur'an. Nevertheless, it was initially released in the US in the hope that the issue would fly under the radar. However, three months later, following a protest by the Saudi Arabian government, Microsoft withdrew the game worldwide (P. Brown 2004).

As Mangiron (2021) notes, “Cultural adaptation is also essential to guarantee playability of the localized versions, as players need to interact with the game in order to advance and enjoy the gameplay experience” (4). Video game localisation is therefore a complex task because it can contribute to the global success of a video game, but also have detrimental consequences. Before embarking on a video game localisation project, it is important to devise a clear strategy based on comprehensive market research, all while keeping in mind various constraints, such as tight deadlines, budget limitations, and legal restrictions. Furthermore, video game localisation may often reflect trends in the translation of audio-visual content, for example dubbing. Countries with a long tradition of dubbing audio-visual content may also be more inclined to localise video games in their native language, as a reflection of player expectations and market demand. With all this in mind, the following section gives a brief overview of video game localisation across various markets around the globe.

2.3 Video Game Localisation across the Globe

2.3.1 China

As laid out in earlier sections of the thesis, video game localisation is a complex process that has been either welcomed or downright rejected. The US is often regarded as the first country to introduce video games to the world, followed by Japan. In the meantime, other regions joined the productions, such as Western Europe, China, and South Korea.

China is one of the leaders in the gaming industry, accounting for 25% of the international game market, according to Dai (2022). Therefore, localising video games for the Chinese audience is a top priority for any serious business within the industry. However, China is geographically vast and thereby linguistically diverse. There are two writing systems in China. Simplified Chinese is used in mainland China, whereas Traditional Chinese is used in Taiwan and Hong Kong. Furthermore, Mandarin is the most spoken variety of Chinese in mainland China and Taiwan, while Cantonese is spoken in Hong Kong. Differentiating between these variations is crucial to avoid controversy. For example, younger Hong Kong gamers may be frustrated if the translator is not a Traditional Chinese user or mistakenly adopts terms used only in the other two variations of Chinese: “Anything that appears ‘too Chinese’ could easily

trigger them and lead to a boycott” (Dai 2022). Furthermore, from a Western perspective, localising into any type of Chinese is a difficult task, as the language is substantially different than English in terms of language structure, so it is difficult to find a translator aware of these nuances. The cultural gap between China and Western society can often complicate the localisation process, which is why Western media often report on censorship in mainland China. Despite these difficulties in bridging the cultural gap, China remains an industry leader, with many video game companies eager to localise their products for the Chinese market.

2.3.2 United States

However, video game localisation in the US follows different market dynamics. Whereas China has strict rules on content moderation, censorship is much more lenient in the US compared to China. This can be viewed as a reflection of American attitudes towards freedom of expression, as observed in the following ruling by the US Supreme Court:

Like the protected books, plays, and movies that preceded them, video games communicate ideas – and even social messages – through many familiar literary devices (such as characters, dialogue, plot, and music) and through features distinctive to the medium (such as the player’s interaction with the virtual world). That suffices to confer First Amendment protection. (E. Brown 2011)

The ruling that video games are entitled to First Amendment protection demonstrates different regulatory and cultural norms between China and the US, which influences the general tendencies in video game localisation. Furthermore, despite having a culturally diverse population, most games are localised into English, and the process involves less cultural adaptation.

2.3.3 Europe

Video game localisation in Europe is particularly difficult for several reasons. Despite cultural differences, Europe and the US share similar values regarding freedom of expression, which is reflected in the relatively lenient censorship standards for video games in both regions. However, European video game localisation requires a nuanced approach due to its culturally and linguistically diverse population. Furthermore, there is a greater need for more extensive cultural adaptation to accommodate a wide range of locales. The UK is Western Europe’s

leading gaming hub, ranking as the fifth-largest gaming market in the world. Other major European countries follow it, such as Germany, France, Italy, and Spain:

It is so popular that translations made for the region have even received its acronym within several different industries – EFIGS or FIGS – which refers to the individual languages that are commonly used in the region; English, French, Italian, German and Spanish. (dela Cerna 2021)

In addition to English, it is crucial for gaming companies to prioritise localisation for the FIGS languages. This is particularly true for Spanish, as it is the second most spoken language in the EFIGS acronym after English.

2.3.3.1 Spain

According to Stephanou (2021), Spain alone has 27 million gamers, most of whom prefer mobile gaming, even though console video games have also recently gained popularity. Therefore, Spanish video game localisation is important to succeed in the market. This is especially true for VA, because the exclusion of Spanish voice-overs can lead to poor sales and heavy criticism (dela Cerna 2021). This could potentially be seen as a reflection of the long-standing tradition of dubbing films and TV shows into Spanish.

2.3.3.2 Croatia

Unlike Spain, Croatia follows the tradition of subtitling audio-visual content rather than dubbing. This may also be among the reasons why Croatia ranks among the top countries in the global English language proficiency ranking as per the EF English Proficiency Index. According to the test results from 2023, Croatia is on the 11th spot in 113 participating countries, while Spain ranks as 35th. Croatia is also a smaller market compared to the FIGS-region and video game localisation has not been widespread in the country. Moreover, the term *immersion* does not have an established translation with widespread usage in the context of video games. Language users might sometimes employ the anglicism *imerzija* or descriptive paraphrases such as *uživljavanje u videoigru* instead.

However, things may be slowly changing. Sony published a Croatian version of the fourth sequel of its video game *God of War* in 2018, which proved to be a commercial success worldwide: “According to data analysts The NPD, Sony Santa Monica’s mega-selling PS4 title, *God of War*, is the fastest selling PlayStation exclusive title of all time, having shifted 3.1 million copies in its first few days, then five million within its first month“ (Moyses 2018). This

would make it “one of few large triple-A¹ titles to be officially translated and localised for the Croatian games market” (Kidwell 2018). In-game localisation includes menus, controls, etc. However, there is no Croatian VO; the game offers subtitles instead. Nevertheless, Sony’s investment in the Croatian market may become an incentive for other influential companies to follow suit.

This chapter has provided an insight into the historical background of video games. Initially marked by simplicity and mechanical nature, video games have progressively undergone a significant transformation, evolving into a modern form of entertainment that prioritises intricate narratives and storytelling to create immersive gaming experiences. Furthermore, video game localisation has gained significant prominence as gaming companies strive to reach a broader global audience. Localisation has proved to be a challenging task, because the process extends beyond just translation in its most narrow sense. Instead, it involves tasks such as legal compliance and culturalisation. One of the most challenging regions for successful localisation is Europe, due to its linguistic variety and different traditions in the translation of audio-visual content.

Therefore, the next part of the thesis reports on a comparative study of perspectives towards video game localisation among gamers in Croatia and Spain, European regions with traditionally opposite practices in video game localisation.

¹ AAA, pronounced and sometimes written triple-A is an informal way of saying a video game was produced and distributed by a mid-sized or major publisher, which implies higher development and marketing budgets.

3 METHODOLOGY

3.1 Research Method

The research was conducted between October and November 2023 via e-mail interviews as the primary data collection method. Participants were provided with structured instructions, followed by the interview with a series of open-ended questions. The interviews were carried out in the English language. Subsequently, as participants returned their responses, any ambiguities or gaps in responses were addressed through follow-up e-mails. Even though Künzli (2022) mentions it is under-represented in translation studies (4), this asynchronous online communication was an effective tool for ensuring clarification where necessary. Moreover, e-mails can accommodate a geographically dispersed sample, making them a practical approach for collecting data from participants in different regions, e. g. Croatia and Spain. This method also enabled participants to provide reflective responses at their own pace, fostering a more comprehensive understanding of their attitudes and perspectives on video game localisation.

After concluding all e-mail correspondence, the interviews were analysed separately. The responses of Croatian participants were grouped together and analysed. Subsequently, Spanish participants' responses were analysed in the same fashion. After the separate analyses, a cross-analysis was conducted to compare the findings between the two participant groups.

3.2 Participant Sample

3.2.1 Demographic Analysis

The interview was carried out on five participants from Croatia and an additional five from Spain. The criteria for selecting the sample were as follows:

- Participants had to be born and raised in Croatia and Spain, with Croatian and Spanish as their native languages, respectively. Participants had to stem from a monolingual household to avoid their opinions being shaped by a foreign culture. Therefore, people with parents from different countries were not taken into account. Exceptions were made for participants who spoke both Spanish and Catalan as native languages, due to the complex socio-cultural history of Spain. Furthermore, people from other Spanish-

speaking countries were excluded because the research focusses strictly on Spain as a locale distinct from other Spanish-speaking locales.

- Participants had to be born between 1994 and 2003, i. e. they had to be in their 20s, indicating they grew up during the transition between the late 1990s and early 2000s, when video game localisation experienced sharp growth. Gender was irrelevant, as gender-based differences were not considered for the purposes of this research. The average age of Croatian participants was 25, while the average of Spanish participants was 24.4.
- Participants had to have played video games on a regular basis for at least 10 years. This was to ensure the participant sample consisted of gamers who had grown up with video games as one of the primary sources of entertainment, because they would be the target audience for the process of localisation.

All participants were required to provide written consent before the interview, in which they agreed the participation in the research project was voluntary. Furthermore, participants were assured that their responses would remain confidential and that their identities would remain undisclosed throughout the research process, in accordance with international ethical research standards.

3.2.2 Participant Language Proficiency Self-Assessment

Before proceeding to the main questions of the interview, participants were asked to self-assess their language proficiency in foreign languages. The self-assessment was conducted with reference to the Common European Framework of Reference (CEFR)². While this method provides a useful context for understanding participants' language skills, it is important to acknowledge that self-assessment is subjective by nature. As a result, there may be variations in the accuracy of these self-assessments. Nevertheless, they serve as a valuable reference point for measuring participants' language proficiency.

All Croatian participants listed English as their first foreign language, with their proficiency estimated at C2 (4 participants) or C1 (1 participant). Furthermore, all participants mentioned

² Developed by the Council of Europe, the Common European Framework of Reference is a standardised framework used to assess a person's language proficiency in various European languages. The reference levels range from beginner (A1) to proficient (C2).

speaking other foreign languages, ranking their proficiency from A2 to C2, with a tendency towards the upper proficiency levels for most participants.

All Spanish participants also listed English as their first foreign language. However, their self-assessment was lower: B1 (1 participant), B2 (2 participants) or C1 (2 participants). Furthermore, not all participants mentioned speaking other languages. Two participants mentioned speaking only English as a foreign language, while the other three participants indicated they spoke other foreign languages only at a beginner level (A1 or A2).

In summary, both groups have English as a common foreign language, but Croatian participants generally have a higher self-assessed level of proficiency and are more multilingual compared to their Spanish counterparts, who exhibit a lower self-assessed level of language proficiency and a lower degree of multilingualism. This can likely be attributed to several factors. For example, English-language media, including films, television shows, and video games, are widely consumed in Croatia. This exposure to the English language in popular culture may enhance language skills. Additionally, Spanish is spoken as a first language in more countries, potentially reducing the urgency for Spanish speakers to become proficient in other languages. These self-assessments already support the assumption in H1 that Croatian participants have been exposed to English-language media more than their Spanish counterparts.

After the language proficiency assessments, participants were asked to respond to the open-ended interview questions that assessed their attitudes towards video game localisation. There were nine primary questions and an additional one that allowed participants to freely express their opinions about the topic if they could not fit them into any of the preceding questions. These ten questions can be found in the next section.

3.3 Interview Questions

1. How long have you been playing video games? *This includes video games on all platforms – PC, consoles, mobile phones.*
2. What language do you usually play video games in?
3. If you are fluent in multiple foreign languages, have you ever tried playing video games in more than at least one of these languages? Do you prefer one language over the other, and if so, why? Please elaborate your answer. *If you speak only one foreign language or have never*

played video games in which you can choose the foreign languages you speak, you may skip this question.

4. Have you ever played a video game localised into your native language?

5. If a video game gave you the option to choose between a foreign language you are fluent in and your native language, which one would you prefer? Please elaborate your answer.

6. Just like other media forms like films and literature, video games are known for providing immersive experiences. Immersion implies that the game design and narrative are crafted in such a way to immerse the player into the fictional world. Would you say that localisation enhances the gaming experience or does it diminish the element of fantasy? Please elaborate your answer. Provide examples if necessary.

7. Storytelling plays a significant role in nearly any video game. A unique background helps create well-rounded characters by supplying them with a set of personality traits, a historical context, and more. How do you think this can be adapted to your native language and culture? Please elaborate your answer. Provide examples if necessary.

8. *The spell deals 100 magic damage.* This is an example of a sentence that has become so ingrained in the English language that it flows naturally. How do you think this should be translated into your native language? Does it sound natural? Why or why not? Please elaborate your answer. Provide additional examples if necessary.

9. How do you think certain well-established gaming terms in English could be translated into your native language, such as *AFKing*, *noob*, *buff/nerf* etc. Please elaborate your answer. Provide additional examples if necessary.

10. Is there anything else you would like to add to the topic that you could not fit into any of your previous answers? If so, you are welcome to share your thoughts here.

4 RESULTS AND DISCUSSION

4.1 Cross-Analysis of Participants' Responses

4.1.1 Question 1 (Q1): Gaming Experience

Q1 inquired about the length of the participants' gaming experience.

Croatian participants stated they had been playing video games for 15-21 years (17.6 years on average). In a similar vein, Spanish participants stated they had been gamers for 12-20 years, with an average of 17. With the average Croatian participant age being 25 and Spanish 24.4, this indicates all participants have been playing video games most of their life. It can be inferred video games have been a significant form of entertainment during their formative years, making both participant groups valuable as a source of information for the topic of video game localisation.

4.1.2 Question 2 (Q2): General Language Preference

In Q2, the participants were asked to state which language they usually play video games in.

Four Croatian participants stated they played video games in the English language. One participant mentioned playing video games in the original language with English subtitles, before switching to another localisation of a language they are fluent in, if the localisation in that language is available (P2_{HR}). This indicates a strong preference for the English language in video games among most participants.

However, all Spanish participants stated they usually played video games in the Spanish language. P3_{ES} mentioned they might play in English if there is no Spanish localisation available, which is rarely the case. This suggests Spanish gamers have a strong preference for their native language, which stands in sharp contrast to their Croatian counterparts.

4.1.3 Question 3 (Q3): Multilingualism and Language Preference

Q3 asked the participants if they had ever tried playing video games in more than at least one foreign language if they were multilingual and which one they would prefer.

The responses indicate Croatian participants fluent in multiple foreign languages have experimented with playing video games in different languages. The reasons for this

experimentation vary, with some participants using it to test their language skills (P2_{HR}, P4_{HR}). However, a common trend is that many participants prefer English despite trying various languages. This preference is often based on familiarity, as English is commonly used in video game phrases and interfaces, making it feel more natural (P1_{HR}) and default (P3_{HR}) to the participants. Overall, the data suggest English remains a dominant language for video gaming among Croatian participants, even when they are multilingual. For example, P3_{HR} described playing video games in German as “a somewhat weird experience”, while P5_{HR} always switches back to English after playing in Italian “because I got used to video game phrases spoken in English rather than other languages.”

Spanish participants, however, expressed a lower degree of multilingualism, and therefore mostly skipped this question. P4_{ES} mentioned trying video games in different languages, such as French, Japanese, and English. However, they quickly resort back to Spanish because it is “easier to me to understand all the concepts”.

The responses to Q2 and Q3 have shown Croatian participants perceive gaming terminology as intrinsic to the English language, while their Spanish counterparts do not share these views, and ultimately always choose their native language over any other language.

4.1.4 Question 4 (Q4): Gaming and Mother Tongue

Q4 asked the participants if they had ever played video games in their native language.

The responses indicate most Croatian participants have not played video games localised into Croatian (P3_{HR}, P4_{HR}, P5_{HR}). Alternatively, some participants tried localised mobile games or educational games, but these are exceptions rather than the norm. This suggests Croatian gamers might prefer to play video games in languages other than their native language, particularly in English. The lack of enthusiasm for playing fully localised video games in Croatian might be caused by a perceived poor quality of the localisation process, as stated by P2_{HR}.

Conversely, all Spanish participants regularly play video games in Spanish, as already indicated in Q2 and Q3.

4.1.5 Question 5 (Q5): Language Preference – Foreign vs. Native Language

In Q5, the participants were asked to state whether they would prefer a foreign language they were fluent in or their native language, if a video game gave them the option to choose.

Among Croatian participants, only P5_{HR} stated they would prefer Croatian, because they would “like to have the option that represents [sic] my country and language in the field of video games”. Otherwise, participants expressed preference for English and other foreign languages. Moreover, P3_{HR} even said they “consider [English] to be the mother tongue of gaming”.

Spanish participants stated they would prefer their native language in most scenarios. The reasons might be convenience (P2_{ES}), comfort (P3_{ES}), and necessity to understand all concepts (P3_{ES}, P4_{ES}). However, P2_{ES} mentioned they might prefer a foreign language if it helps with immersion: “If the setting of the scenarios is located in a place where the foreign language I speak is spoken, I might prefer it to be in that language”. This suggests that, even though Spanish gamers prefer their native language, they are still open to playing in other languages if it helps increase the level of immersion.

4.1.6 Question 6 (Q6): Immersion

Q6 asked the participants whether they thought localisation could positively or negatively influence gameplay immersion.

Based on the responses of Croatian participants, there are various opinions regarding the impact of localisation on the gaming experience and immersion into the fantasy world. Some participants said low-quality localisation could break the immersion (P4_{HR}, P5_{HR}), and most participants reiterated English was the default language in the gaming world. P1_{HR} mentioned that even “movies are also in English”. This suggests English seems to be the dominant language in media in general.

Localisation especially becomes difficult in video games based on an existing culture. P2_{HR} gives two examples that illustrate the importance of culturalisation:

I have recently been playing games from the Japanese video game franchise *Yakuza*. Despite its global popularity, the series' localization for the non-Asian market encompasses only its title [...] and the screen language [...] being in English. [...] none of the games from the franchise have English audio [...]. All other aspects of game design are also in Japanese: for example,

the buildings in the fictional town modeled after Tokyo all have signs written in one of the three Japanese writing systems. [...]

For comparison's sake, another game from the same studio that made *Yakuza*, called *Judgement*, is set in the same world as the former, but has a completely different storyline - the focus is not on Japanese tradition and turf wars between mafia gangs, but rather about daily crime-solving and the judicial system in general [...], so this game, unlike *Yakuza*, actually has an English dub available.

The impact of localisation on a player's immersion can be influenced by the nature of the video game and its cultural context. The fact that *Yakuza* lacks English audio and that many aspects of the video game remain in Japanese highlights the developers' commitment to maintaining the authenticity of the video game's setting. Conversely, *Judgement*, set in the same world as *Yakuza*, offers an entirely different narrative focus, making it possible to localise the game into foreign languages and make it accessible and relatable to a broader, non-Asian audience. It can be inferred the cultural context is an important aspect of a video game that needs to be acknowledged before engaging in a localisation process. While retaining the original language and cultural elements can enhance immersion, video games with different themes may benefit from more extensive localisation to cater to a wider international audience. The approach to localisation should therefore align with the narrative and target player base of the video game. For example, P1_{ES} mentioned that in fantasy settings, "references about Spain [sic] or Spanish culture is unnecessary in my opinion, it would ruin the experience".

4.1.7 Question 7 (Q7): Storytelling and Culturalisation

In Q7, the participants were asked to state their opinions regarding the role of language and culture in storytelling.

The conclusion drawn from the responses of both Croatian and Spanish participants is that successful cultural adaptation requires a delicate balance between maintaining cultural authenticity and making the video game accessible and engaging for the target audience. For example, P1_{HR} recognised Croatia's potential for creating video games inspired by the country's history: "If I see Croatians as units, or characters in games I play I would definitely give it a shot because of personal sentimental meaning". Similarly, when talking about expansive narrative-driven video games, such as the *Assassin's Creed* franchise, P5_{ES}

mentioned that “the environment is way better when the personalities are set in a historical context”.

These findings highlight the importance of setting the characters in the correct historical and cultural context, as well as utilising correct language, as it plays an important role in localisation, because it drives the emotional connection between the video game and the player, enhancing the gaming experience and immersion. However, P3_{ES} cautioned against “over-adapting” certain cultural elements due to globalisation: “Most people are aware of other cultural aspects and their peoples’ way of acting. Therefore, there might be no need to adapt some things that in the past had to be.”

4.1.8 Question 8 (Q8): Gaming Expressions

In Q8, the participants were given an example of a typical sentence found in video games – *The spell deals 100 magic damage*. The participants were then asked to provide a translation into their own native language and to explain whether such translation sounded natural or not.

The translation of gaming expressions from English into Croatian poses challenges related to naturalness, as some of the English terms have already acquired a secondary meaning associated with gaming, for example *damage*. By contrast, the Croatian equivalent *šteta* does not have this connotation yet, making translation attempts difficult. Furthermore, all participants translated *magic damage* as *magična šteta* instead of, for instance, *čarobna šteta*. This suggests Croatian words with foreign roots might be the best option, as it would make it closer to the English original, which has already been dubbed the “default” language several times by the participants. Furthermore, P3_{HR} even emphasised that, to create a successful Croatian localisation, “pure” Croatian words should be ignored in favour of internationalisms.

Spanish participants independently translated this sentence in a similar way, such as *El hechizo inflinge 100 de daño mágico*. For example, both P5_{ES} and P2_{ES} noted it sounded natural because they were used to playing video games in Spanish. P1_{ES} furthermore said that “people have adapted to understand this game expressions [sic], therefore it wouldn’t sound strange at all if you would see that text in a game.” This suggests that, with time, people are willing to adapt to various localisation solutions.

4.1.9 Question 9 (Q9): Gaming Terminology

Q9 asked the participants to provide translations of well-established English gaming terms, such as *AFKing*, *noob*, *buff/nerf*.

The general sentiment among both Croatian and Spanish participants is that well-established gaming terms (such as *AFKing* and *noob*) that have widespread usage should remain in English, as they have become part of the global gaming culture. For less known terms like *buff* and *nerf*, there is willingness to provide translations, while acknowledging that the translation could lead to loss of nuances in meaning. Both Croatian and Spanish participants gave examples of using a foreign root and native suffixes to create a new word in their respective languages, e. g. *nerfati* in Croatian and *nerfear* in Spanish. This allows for a smoother transition between the original term and the localisation, without sounding too strange.

4.2 Summary of Findings

Croatian participants have been playing video games for an average of 17.6 years, indicating an almost life-long engagement with gaming. Even though all participants are multilingual, English remains the predominant language for video games, often being considered the “default” or “natural” language of gaming. Furthermore, most participants have not even played video games in Croatian, with minor exceptions. There is also a perceived lack of enthusiasm for fully localised video games due to concerns about the quality of the translation. Therefore, most participants would opt for a foreign language, especially English, if given a choice when playing video games. Poorly localised video games could break the immersion and ruin the gameplay experience, especially when the influence of the English language permeates not only the gaming world, but also other media forms.

Spanish participants have also been playing video games for most of their life, averaging at 17 years. Contrary to the Croatian participants, they usually play games in their native language out of familiarity and comfort, especially because they are not as multilingual as their Croatian counterparts. Most participants would choose Spanish over any other language when playing video games, but they remain open to playing in a foreign language if it helps create more immersive gameplay experiences.

According to both Croatian and Spanish participants, successful video game localisation requires a perfect balance between cultural authenticity and accessibility, to connect the video

game's narrative with the target language and culture, which can be challenging. Furthermore, both participant groups believe translating gaming terminology could be difficult, especially for well-established international terms. However, the participants are more open to the translation of less-known gaming terminology. Moreover, the participants suggest using internationalisms, i. e. words with foreign roots adapted with native grammar rules, might be the best approach for successful localisation, as it would help break the language gap without fully breaking the immersion during the process.

The results of this research confirm both hypotheses. H1 presumed Croatian gamers would be more likely to use negative language when expressing their views on Croatian video game localisation, potentially due to their historical lack of exposure to localised audio-visual content, in contrast to Spaniards. Overall, the research found Croatian participants displayed higher frequency of negative attitudes towards Croatian video game localisation compared to their Spanish counterparts, thereby confirming H1. The aversion was expressed either directly by using words with negative associations, such as *unnatural*, or indirectly by referring to the English language as the mother tongue of gaming. Conversely, Spanish participants frequently expressed their preference for playing video games in their native language, highlighting their favourable stance towards Spanish video game localisation.

H2 suggested gamers would have a greater tendency to play video games in their native language, compared to Croatian gamers, because of their favourable stance towards video game localisation. Spanish participants reported a significantly higher frequency of playing video games in Spanish compared to their Croatian counterparts, reflecting their positive attitudes towards Spanish video game localisation, and thereby confirming H2.

5 CONCLUSIONS

In addition to confirming both hypotheses, the research has also produced some unexpected results. When it comes to the broader context of video game localisation, both participant groups shared similar views regarding the potentially positive impact of effective localisation on immersion and the gaming experience. This implies an approach that considers both the source and target languages and cultures. These findings suggest that, even though Croatian participants expressed relatively negative opinions regarding localisation into their native language, this perception may change over time if more successful localisations become available in the gaming market. This suggests a common tendency that gamers in principle would like to have video games localised in their native language, regardless of different traditions in the translation of audio-visual content and video game localisation. Additionally, a similar conclusion can be extrapolated on a broader scale by considering video games as products and gamers as consumers. Generally, consumers prefer products localised into their native language, as it enables them to connect emotionally with the product and align its purpose with their wishes and needs.

While this research provided valuable insights, it is important to acknowledge certain limitations. It was conducted within approximately four weeks, limiting the opportunity for comprehensive data collection and subsequent analysis. Furthermore, recruiting participants for the interview was a challenging task. Of the 22 individuals that initially agreed to participate in the research, only 10 followed through after multiple reminders, resulting in a participation rate of just 45.5%. Moreover, some participants failed to respond to certain questions, such as Q9, due to unfamiliarity with the terminology from the examples. Consequently, they did not believe they could provide valuable insight.

To address these limitations, future research should consider refining the interview questions to elicit more detailed responses and recruit a participant sample that is more closely aligned with the specific research objectives. Furthermore, the research should involve a larger participant pool, if possible, so that the findings do not point to tendencies, but instead represent solid conclusions supported by consistent and robust data. Implementing these adjustments will contribute to the reliability and accuracy of results.

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