

Video Game Translation: A Descriptive Statistical Analysis

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Dedication

To my mother, Nancy Gómez, my biggest inspiration and my life's mover.

Sergio A. Rodríguez

To my family, especially my mother Jenny Ramírez, who helped and encouraged me in each step I took. To my friends and all the people who were a support for me during this academic process.

Simón A. Barajas Ramírez

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Sergio A. Rodríguez

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Simón A. Barajas Ramírez

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Abstract

Title: Video Game Translation: A Descriptive Statistical Analysis

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Keywords: Videogame, Translation, Localization, Transcreation.

Description:

The videogame industry is a global phenomenon that has been growing in the last years due to the localization processes that allow the massive distribution and production of games worldwide. Thus, game localization is a complex activity that involves the use of specific translation techniques, as well as the active participation of outsourcing and in-house localization agencies to provide a product accepted by the gaming audience. However, when the outcome is not welcomed by local users, video game fans come up with alternatives such as modding and ROM-hacking to alter the video games at will. The purpose of this study is to understand and describe the evolution and trends of video game translation practices/processes during the last 20 years. In order to identify the key approaches, techniques, and localization hubs, a descriptive and quantitative analytical approach was used to collect information from scientific and bibliometric software like Scopus and Web Of Science. Results show that adventure games are the most translated videogames, and PlayStation is the console brand that dominates the video game market.

Additionally, it was found that domestication, foreignization, and transcreation are the most used videogame translation techniques. In this same way, the mapping of localization hubs shows that the countries that localized the most video games are USA and Japan, alongside some European countries FIGS (France, Italy, Germany, and Spain). Lastly, it was found that in professional translation and fan-made translations, there are some discrepancies on the procedures or techniques to be used based on their particular practices.

* Bachelor Thesis

** Facultad de Ciencias Humanas. Escuela de Idiomas. Director: Heidy Gutiérrez

Resumen

Título: Traducción de VideoJuegos: Un Análisis Estadístico Descriptivo

Autor: Simón Alejandro Barajas, Sergio Andrés Rodríguez, y Andrés Fabián Gómez

Palabras Clave: VideoJuego, Traducción, Localización, Transcreación.

Descripción:

La industria de los videojuegos es un fenómeno global que ha ido creciendo en los últimos años debido a los procesos de localización que permiten la producción masiva de juegos. Por ende, la localización es una actividad compleja que implica el uso de técnicas de traducción específicas, así como la participación de agencias de localización internas y externas para brindar un producto óptimo a la audiencia. Sin embargo, cuando el resultado no es bien recibido por los usuarios, los fanáticos de los videojuegos llevan a cabo alternativas como el modeo y la alteración de ROM para cambiar los videojuegos a voluntad. El propósito de este estudio es comprender y describir la evolución de las prácticas/procesos de traducción de videojuegos durante los últimos 20 años. Para identificar los principales enfoques, técnicas y centros de localización, se utilizó un enfoque analítico descriptivo y cuantitativo para recopilar información de software científico y bibliométrico como Scopus y Web Of Science. Los resultados muestran que los juegos de aventuras son los más traducidos y PlayStation es la marca de consolas que domina el mercado de los videojuegos.

Además, se encontró que la domesticación, la extranjerización y la transcreación son las técnicas de traducción de videojuegos más utilizadas. Igualmente, el mapeo de centros de localización muestra que los países que más videojuegos localizaron son EE. UU. y Japón, junto con los FIGS (Francia, Italia, Alemania y España). Por último, se encontró que en la traducción profesional y en la traducción hecha por fans existen algunas discrepancias en los procedimientos o técnicas a utilizar en función de sus prácticas particulares.

* Trabajo de Grado

** Facultad de Ciencias Humanas. Escuela de Idiomas. Director: Heidy Gutiérrez

Introduction

1. Context of the problem

Video games have become a vital feature in the current globalized world as well as other types of media, such as movies, books, and music, additionally, this form of entertainment provides the audience with the ability to play a direct role and get completely involved in the digital universe. As stated by (Bushouse, 2015, p. 7), “[T]he fundamental factor that sets video games apart from other types of media is the fact that video games are interactive”. Furthermore, this huge field involves not only informatic and electronic characteristics but linguistic, literary, and creative. Finally, another relevant feature of video games is that translation and localization processes are mandatory for their production, upgrading, and distribution. According to (O’Hagan & Mangiron, 2013, p. 22). “[T]here is a general consensus today that video games have become a global phenomenon, and indeed, this is the fundamental reason for game localization”. Due to the indispensability that videogame translation holds in this immense industry and even more in the digital era, this study is carried out to deepen into a topic that is swiftly growing but unfortunately does not have yet the literacy and relevance that it deserves and that through this research project is intended to transmit and promulgate to the public that still may not know about the field.

This paper aims to conduct a descriptive statistical literature revision on the translation processes of localization and transcreation in the field of video games. To do so, processes of observation, processing and analysis of selected information were carried out.

2. Research Questions

1. Which video-game translation processes have taken place over the last 20 years?

2. Which video-game translation processes have taken place in the localization hubs around the world over the last 20 years?

3. Justification

The main motivation for this research work is the constant association of video games with translation and localization processes, establishing connections among different cultures into these digital environments. As future language professionals and part of video game audiences, we attempt to collect and describe the results that video games and translation have led during the last 20 years. This, being approached through the in-depth examination of the main translation processes in the videogame industry: localization and transcreation, the understanding of video game fandoms and their practices so as to get engaged in those digital environments; as well, as the adaptation of texts and complete narratives with different techniques and perspectives regarding the own translators.

4. Objectives

4.1 General Objective

To understand and describe the evolution and trends of video game translation practices/processes during the last 20 years.

4.1 Specific Objectives

To characterize and differentiate the objects of study: Video games and translation.

To identify the key approaches, techniques, and tools to video game translation/localization.

To conduct a global mapping of the most relevant location (hubs) in the game translation/ localization industry.

5. Theoretical Framework

5.1 Background

During the second half of the XX century, humanity witnessed an exponential growth of scientific, technological, and industrial development in every field of knowledge and practice. One of those fields was the video games industry and, consequently, the localization of video games, whose evolution has been traced back by scholars since the 1970s. For instance, Hasegawa (1990, as cited in O'Hagan & Mangiron, 2013, p. 46) has divided this evolution into 5 stages, as follows:

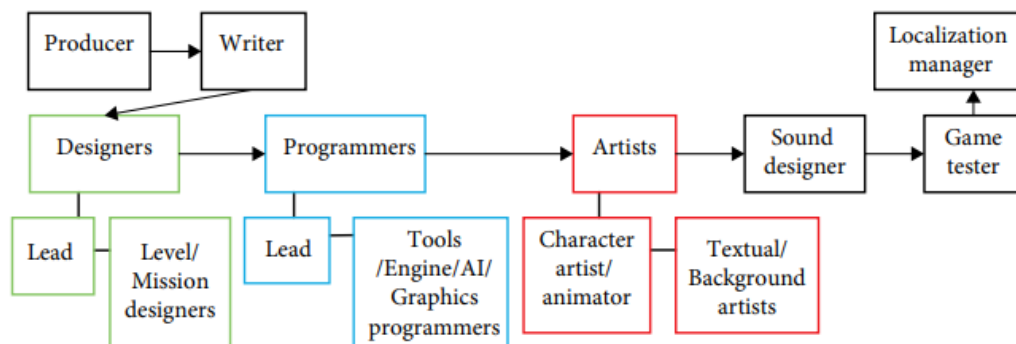
- Early phase (prior to the mid-80s)
- Growth phase (mid-80s to the mid-90s)
- Development phase (mid-90s to the late-90s)
- Maturing phase (2000 to 2005)

- Advancing phase (2005 to present)

The forefront of the video games market has swung between Japanese and American companies across the aforementioned stages, with Atari being the first of them. The milestones in the development of localization have been boosted by hardware upgrades in audio and video that allowed game developers to include more translatable assets in their products. This led to localization being defined as: “the many and varied processes involved in transforming game software developed in one country into a form suitable for sale in target territories, according to a new set of user environments with specific linguistic, cultural and technical implications” (O’Hagan & Mangiron, 2013, p. 19). Likewise, localization is regarded as a part of the development process of video games, as figure 1 displays:

Figure 1.

Game developing process.



Note. Retrieved from O’Hagan & Mangiron, 2013, p. 62.

As Figure 1 presents, localization is the last stage before publishing a video game because it entails the modification not only of the technical constraints, but of the cultural and linguistic features of the product. The latter is a cornerstone of localization since it is the verbal and most perceivable outcome of the process. Being said that, it is important to highlight translation as a crucial part of the localization process.

The following sections delve into some of the most relevant notions that have emerged along with the evolution of game localization: Rewriting and transcreation, as strategies that elicit and highlight the agency of the specialist; audience involvement, which is a particular feature of game localization in comparison with AVT, and other modalities of translation. As well as intersemiotic translation, a concept emerged from cultural semiotics and that is entailed in the game localization process.

5.2. Translation processes

5.2.1 Rewriting and transcreation

When it comes to localizing video games, rewriting is a relevant notion to comprehend the constraints under which game localization is performed. Rewriting, coined by Bassnett & Lefevere (1990), underscores the influence of power, manipulation, and culture on the texts, and by extension in texts used for the game localization process, seeking to ensure the survival of the works -video games- among the varied audience around the world (Lefevere, 1992, as cited in O'Hagan & Mangiron, 2013, p. 236).

With the scope of rewriting, which recognizes the manipulation exerted by different forces behind the translation and localization of every product, it is arguable to say that the developers and staff of the game industry are under control of game publishers. With powerful firms such as Electronic Arts and Square Enix and platform holders, i.e. Microsoft, Sony and Nintendo; as well as the tens of millions of gamers -whose opinion is particularly relevant in the industry. Moreover, the specialists in charge of localizing video games work under certain constraints related to the type of narrative or the game genre (O'Hagan & Mangiron, 2013).

By understanding the localization process as a form of rewriting, we can dimension the agency exercised by the translators as a form of transcreation in the game localization

process. Transcreation is a notion whose origin might be traced to India and Brazil, each one with a different perspective. In India, transcreation was defined by Tulsi Das as “a symbiotic intermingling of the original with the translation” (Bassnett & Trivedi, 1999, p. 10); whereas in Brazil it came up amidst a context of decolonization, de Campos defined transcreation as a radical translation practice that strives for the creation of difference in sameness rather than for the copy of a source text (Vieira, 1999, as cited in O’Hagan & Balgiron, 2013, p. 197).

In the context of game localization, transcreation entails the visual as well as the acoustic and textual linguistic inputs provided to the end users. In other words, localizing a video game by transcreating it, beyond translating it, elicits more creativity from the specialists as it enables them to have more freedom and agency to render the text with the same affective appeal and functionality to end users.

In the case of end users, i.e. gamers, they are a distinct audience in comparison with the audiences of other modalities of translation. Gaming fandoms can also exert responsibility as designers and translators by perspectives and procedures such as romhacking, country-specific age rating systems censorship, and networking; which will be explained in the following section.

5.2.2. Audience Involvement

The relevance that gaming fandoms own nowadays is reflected in the text manipulation during the video games design process. According to (Bushouse, 2015 p. 32) fans are responsible for the games to be translated, memorable lines, characters’ names, and other game-related products. However, when the audience’s demands are rejected, the fandoms may perform the role of translators in independent game development processes. In an effort to look into the perspectives and procedures carried out by fan-translators, the three

following categories show audience involvement strategies as well as the limitations and processes observed by Translation Studies scholars in the field of video games.

5.2.3. Modding with Romhacking

Modding is defined as an informatic strategy that alters and redesign characteristics of a digital program, including some features that did not have before, as stated by (Fromme & Unger, 2012 p. 514) “It is the modification of the software code of a proprietary digital game made by nonemployed fans or gamers”. Because of this, plenty of specific modding programs have been developed with the aim of reworking and adapting video games in relation to the fans’ desires. A great example of this kind of modding software is **Romhacking**, the most popular alternative known by the audience in order to get involved in the translation of a video game, as it allows the fandom to approach it as a translator and designer. According to (Sánchez, 2009) romhacking is the process of ROM alteration in order to modify aspects such as the graphics, dialogues, levels, and other elements involved in the gameplay.

Nevertheless, romhacking owns technical restrictions as well, such as word limits in some dialogues, reason why romhackers need to come out with concise versions. Another important aspect is (Sánchez, 2009 p. 178) concept of familiarity with the games as a feature that will mark the difference between an expert and an amateur translator.

5.2.4. Country-specific Age Rating Systems and Censorship

When an official game translation is carried out, some limitations may be imposed by sociocultural standards, which label video games regarding the target market and classify them in age rating systems. As attested by (Sato-Rossberg, Wakabayashi & O’Hagan, 2012), rating schemes reflect the sociocultural, ideological, ethical, and religious convictions of the

given nation. These rating systems may lead to poor linguistic quality in relation to gaming communities' expectations, affecting the translation and localization process carried out ¹. However, fan-made translations are not imposed restrictions by country-specific age rating systems, specifically in reference to (Sánchez, 2009 p. 178) complying with foul language, sexual content or copyright. These features provide fan translations massive freedom in contrast with the industries' official versions as no censorship limitations or age labeling will affect the final product in relation to the language used.

5.2.5. Networking

When it comes to video game translation, translators' perspectives are guided by their relationships with the audience or users. Sometimes, such relations may reach the point of getting involved within processes of creation. This is described in (Vazquez-Calvo, 2020, p. 2) as the world communication beyond interlingual, intralingual and intersemiotic dimensions, becoming culturally active by intercultural mediation. In other words, it leads language users to become socially active in the instances already presented, as they interact and propose thanks to the language itself.

Therefore, acts of socio-cultural construction are present when there are "audience involvement" processes, as well as through actions such as choosing the proper translation approach and procedure or getting feedback in a dialogue. As stated by (Vazquez-Calvo, 2020) translation involves learning within community networks, implying linguistic creativity, intercultural learning, language learning, and metalinguistic discussion.

In conclusion, audience involvement is the process by which fandoms contribute and enrich the video games they admire, through specific strategies that may go from influencing

¹ Galhardi, R. (2014). Video Game and Fan Translation: A Case Study of Chrono Trigger. In *Fun For All Translation and Accessibility Practices in Video Games* (pp. 175–196). Peter Lang. <https://www.peterlang.com/document/1053065>

official development processes, to the task of playing author-like roles in the creation of new digital environments by themselves. All this, as translators also learn and get involved in sociocultural environments with other developers, establishing relations that nurture their technical capacities regarding programming and computing and also becoming culturally active in those linguistic settings.

5.3. Theoretical Foundations

5.3.1. Intersemiotic translation: A general view

Translation nowadays is a multidisciplinary field that has evolved into a more extended practice that involves different disciplines such as anthropology, sociology, cultural studies, and cultural semiotics (Kourdis, 2015, p. 2). The latter plays a vital role in describing, analyzing and identifying different components that help understand how words and signs can create meaning. The term of semiotics was chiefly coined by Ferdinand de Saussure and Charles Sanders Peirce as an attempt to study how signs (signifier and signified) “can transform their behavior and process meaning” (Nguyen, 2020, p. 25). In this sense, semiotics has gained recognition and utility within Translation Studies perspectives, since not only does focus on the intralingual or interlingual aspects of a text -understood as a “interpretation of verbal signs by means of some other language” (Jakobson as cited in Dusi, 2015, p. 182) but more so on the “transmutation of signs”[...] “an interpretation of verbal signs by means of signs of a nonverbal sign system” (Queiroz & Atã, 2019, p. 4). Therefore, intersemiotic translation can be understood as the transformation of a verbal sign or a written item into a nonverbal element or an extra-linguistic element, for instance, as a sound or image (Da Silva, 2018, p. 21). Such phenomena can be seen in different contexts, for instance in videos, literature, poetry, comics, cinema or any other multimodality text that incorporates

more than two semiotic systems. In this way, the translation of a language is not merely interlingual or verbal, it also includes a more complex process that attempts to transport and convey the sign system. Therefore, this process demands the acceptance of the new sign in the target culture and uniformity of language level. Consequently, the same desired effect of the message content of the sign is to be maintained and transmitted (Kurniasih et al., 2019).

In intersemiotic translation, another relevant aspect is the ability in which the message is transmitted from one language to another without affecting its degree of accuracy and adaptation if need be. This advantage of intersemiotic translation can be equated to a system of principles. The first one, known as *faithfulness*, deals with how accurately a text is translated, bearing in mind some cultural elements. As stated by Dusi (2015, p. 190), “faithfulness depends on the belief that translation is a form of interpretation considering the cultural habits of their presumed readers”. The second principle is known as *translatability*, the potential of a language or symbol to be translated, supported by some linguistic elements and context. As expressed by Ricoy (1999, p. 551), the quality of the translatability of a text depends “on the degree to which a given text can be contextualized in the target language, taking into consideration all linguistic and extralinguistic factors”.

In addition, the translator also plays a vital role in which a certain level of freedom and creativity is required, as this is pointed out by Nguyen: “[T]he translator has the freedom to choose and define the target ‘language’, i.e. by choosing the material, the genre, and technique that is best suited to the task” (2020, p. 28). Consequently, the translator can get access to a wide variety of different issues that sometimes are left behind or unnoticed and that deserve more detailed and deeper analysis. All this in order to reproduce, create and transform those verbal or available written items into multimedia and multimodal texts. Kaźmierczak (2018, p. 29) observes that some aspects worth analyzing are “verbal references

to other media as a translation problem, image as an obstacle and as a facilitation to text translation, and transfer of illustrations vs. creating new ones in the target culture”.

5.3.2. *Video games and intersemiotic translation*

Video games have an important role within the semiotic context as they are more than a tool for entertaining and they represent a variety of art related to literature and adaptation of novels (Da Silva, 2018, p. 2). Nevertheless, since video games are code execution in software, they are also considered a multimodal text with a combination of graphics and sounds. This property of multimodality allows players to have a deeper immersion in the narrative, thanks to the interactivity that they can have. Bernal (2016, p. 225) affirms that “game-world immersion is, of course, not as holistic as the real-world, but the layering of meaning-making signs utilized in modern video games can offer compelling ludo-artistic experiences that are genuinely engaging” (p. 240). Therefore, Thanks to the technological breakthrough of video games, gamers can achieve a higher realistic experience by employing certain elements, including higher-definition graphics, more appealing plots, and the immersion of the players' senses into the game. Thus, video game-player interaction helps the players to create a more explicit bidirectional connection, making the exchange of signs more feasible due to the different layers of semiosis present in the game. Some indexical, iconic, and symbolic signs are part of the intersemiotic structure of the videogame, embodying the visual, written, and musical components (Bernal, 2016, p. 241). For instance, the video game *Persona 5* is known as a novel adaptation that highlights some features running within the game, such as cultural, physical, and psychological elements depicted in the characters of the game, which influence the performance and interactivity of the players. In summary, intersemiotic translation is an indispensable part of the development, understanding, and execution of localization game processes since it transmits and interprets what is being

translated from one language to another, by using non-verbal means, images, and cultural elements, that transcend the linguistic codes. These theoretical foundations will allow us to discuss information and data collected for the development of the study.

6. Methodological Design

6.1. Type of Investigation

We carried out a bibliometric analysis with a quantitative scopus and a quanti-qualitative interpretation, since the main aim of this research paper is to track, identify and examine relevant volumes of data and the evolution of the most dominant translation techniques in the field of video games during the last two decades: transcreation and localization processes. To achieve so, the categorization of the bibliometric analysis was focused on the **performance analysis**. Since the center of the study was previous research contributions in the field of translation and video games, as stated by (Donthu, Kumar, Mukherjee, Pandey & Weng Marc, 2021, p. 287), “Performance analysis examines the contributions of research constituents to a given field and is descriptive in nature, is the hallmark of bibliometric studies”.

On the other hand, the selecting criteria for the bibliometric analysis are based on the related research exposed as part of the theoretical framework: rewriting, transcreation, and audience involvement; as well as studies and publications that date between a limited period of two decades (2000 - 2021).

6.2. Hypothesis, Variables, and Indicators

6.2.1. Hypothesis

To fully comprehend and describe this phenomenon of video game translation, the techniques used, and the localization process, this descriptive analysis research focuses on and bears in mind the concepts discussed above (transcreation, audience involvement, modding, romhacking, networking, localization, and intersemiotic translation). Thus, two hypotheses might arise from these concepts:

- Transcreation and modding are the most used and popular techniques in the video game translation process in the last 20 years.
- Localization processes have improved thanks to the implementation of new translation techniques within the videogame industry.

6.2.2. Variables and Indicators

Video game localization is an exhaustive and complex activity that involves the recognition of some components such as the translation technique to be employed, the consumption of the game, and the local/legal requirements that enable the launching and mass production of video games for a certain target population. Thereby different linguistic, cultural, and technological (software and hardware) implications are pretty much regarded as the ground and foundation for the expansion of this industry (Altice, 2020, p. 223).

By that very fact, then localization is not just a linguistic translation procedure. As pointed out by Altice, within the video game there are some “cultural allusions, graphical elements, iconography, music, and other referents” (2020, p. 220). Despite this, not all games are localized or do not meet the expectations of gamers, which has prompted the expansion and more common use of ROM hacking/Modding in the gamer community. These two

practices allow hackers to access the data and software of the video game to modify, replace and change different elements such as graphics, dialogues, and even translate the video game, which in some way implies an informal or non-official localization process (Altice, 2020, p. 220). Taking into account these processes within the translation in the video-game context, some variables come in handy for the analysis and mapping of a number of video games translation activities.

Thus, the following variables guided the course of this study putting the hypothesis to the test. They also helped in the selection and application of the most convenient tools/techniques for data gathering and analysis:

Variables of the study

- The key countries that lead the video game market
- The most ROM-hacked games
- The most translated languages in video games (from L1 to L2 or vice versa)
- The translation techniques utilized in this process (transcreation, ROM hacking, or any other available)
- The most *popular* type of translation (Either official translation or video game fan translation)

6.3. Data Collection Instruments

Since this study has as a major and general concern on describing and grasping the evolution and trends of video processes, strenuous and detailed information retrieval was carried out from a large collection of reliable online sources. This was intended to get the maximum amount of data needed so as to identify the variables and indicators required in this study. Therefore, to do such a task, a specific search technique was chosen to maximize this

process, called *Boolean operators*. According to Aliyu (2017, p.216), it allows the user to find more accurate information “by using a precise choice of words with operators (AND, OR) for building up query expressions instead of letting the system do it automatically”. These boolean operators, for instance, enable the user to search terms combined with AND (whose function is to concatenate the words and produce results that include all the keywords linked) and OR (whose function is to produce the result that includes either or all the keywords). This allows us to delimit and systematize any needful information. Consequently, the search strings utilized within this study were the following:

- (Audience involvement OR fandom influence OR fans influence) AND (Rom alteration OR Modding)
- (Localization) AND (Source language) AND (Target language)
- (Localization) AND (Transcreation OR Modding)
- (Localization) AND (Globalization).

In addition, these combined commands were inserted into a selected and limited source of bibliometric software such as VOSviewer, Gephi, and Leximancer, alongside some scientific databases widely used like Scopus and Web of Science (Donthu et al., 2021).

Thus, this data collection instrument facilitated the compilation, analysis and tabulation gathered from selective bibliographic databases for the making and execution of the arithmetic analysis and global mapping aimed in this research study.

6.4. Resources and Techniques of Analysis

In order to achieve the objectives of this research, a performance analysis was conducted. This type of analysis allowed us “to present the performance of different research constituents in the field” (Donthu, et. al., 2021, p. 287). One of those constituents are the

countries that have contributed to the field and the industry, both of them quite significant for this enquiry.

The aforementioned analysis technique was carried out by retrieving data from academic databases such as Scopus and Web of Science, through pre-established search strings with boolean operators. Subsequently, the collected data was visualized and analyzed by means of *VOS Viewer* software.

6.5. Activities and Schedule

For this research project, the schedule of activities was based and designed on a Gantt chart divided into 3 main stages and 7 specific activities that were carried out through the academic period of (2022-2) during a span of 14 weeks.

Table 1.

Timetable of activities

Stage	Activity	Weeks													
		October				November				December				Jan	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Data collection	Design of the search strings														
	Selection of the databases where search strings will be used														
	Compilation of the bibliometric data														
	Rectification of data collected														

Data analysis	Synthesis of the performance of localization practices in different countries																		
	Reporting results	Findings																	
	Discussion																		

7. Results

In order to carry out the data collection process for the database of this research study, 50 different papers linked to the videogame translation field were tracked and collected from diverse digital scientific journals, websites, libraries etc. Afterwards, these documents were included in the bibliometric analysis through the implementation of a digital matrix built in a Google Sheets format, aiming to analyze and classify the information into 6 specific criteria designed for this article: *Most translated videogames by genre, Consoles with the most translated videogames, Most employed translation techniques, Countries where most videogames are localized, Official translation vs Fan-made translation, and Leading videogame translation companies and developers*. Through the following section, you will be able to know more in depth about the results that this scientific analysis drew at the end of this research.

7.1. Most translated videogames by genre

The development and distribution of videogames has strikingly evolved during the last two decades. Not only in terms of technological features such as improvements of image quality, gameplay experience and new platforms, but also in terms of the new stakeholders

beyond the well-known American and Japanese game producers, their marketing strategies and the intended distribution of their products around the world.

In order to provide a clear perspective of videogame genres that were considered within this research, Table 2 presents videogame genres based and adapted from Apperley (2006). However, it is important to bear in mind that as long as videogames have evolved in terms of multimodality, they have undergone a certain *hybridization*² that makes more complex the classification of modern videogames (Fernández, 2012, as cited by Fernández, 2014).

Table 2.

Videogame genres division for this study

Genre	Type of games
Simulation	Sports Flying Driving
Strategy	Real time strategy (RTS) Turn-based strategy (TBS)
Action-adventure	First-person shooters (FPS) Third-person shooters (TPS) Adventure Hack and slash
Role-playing	Role-playing games (RPG) Massive Multi-player Online RPGs (MMORPGs)
Retro	70s, 80s and 90s games

Given that 93 out of 100 top games by 2002 were Japanese (Electronic Gaming Monthly, 2002 as cited by Huang, 2009), retro games -such as Super Mario Bros., and 8 bit games- have been one of the most translated, especially by the early 2000s (Sánchez, 2009).

² *Hybridization* is the phenomena “whereby genres are more difficult to categorize and classify, which has certain implications for translation” (Fernández, 2014, p. 231).

Along the last two decades, major producers have published games known as AAA which are intended to be distributed all over the world, hence being the most localized ones (Vázquez, 2016; Afzali & Zahiri, 2021)

There is another important factor to consider, as stated by Costales (2012, p. 393), RPGs “include more translatable assets” than other genres given their narrative approach with ‘open world’ environment that allows designers to include complex storylines and different interactions among characters (Mangiron & O’Hagan, 2006). Table 3 shows the video games found in the analysis with their respective genre.

Table 3.

Videogame titles and genres found through the analysis

Title	Genre
Super Mario Bros.	Retro
The Legend of Zelda	Action-adventure
Final Fantasy series	RPG
Metal Gear	Action-adventure
Sonic the hedgehog	Retro
Zero wing	Retro
Counter Strike	Action-adventure
Mother 3	RPG
Space Invaders	Retro
Pac-man	Retro
Pokémon series	Retro
Donkey Kong	Retro
Kingdom Hearts	RPG
Crysis	Action-adventure
The Witcher series	RPG

The order	Action-adventure
Killzone	Action-adventure
World of Warcraft	MMORPG
Baldur's Gate	RPG
Chrono Trigger	Retro
Seiken Densetsu 3	Retro
Tales of Hearts	RPG
Gone Home	Action-adventure
Max Payne 2: The fall of Max Payne	Action-adventure
Persona 4	Simulation
Silent Hill: Homecoming	Action-adventure
Condemned: Criminal origins	Action-adventure
Alan Wake's American Nightmare	Action-adventure
The Elder Scrolls	RPG
Phoenix Wright: Ace Attorney	Simulation
Yakuza	Action-adventure
Assassins Creed	RPG
Dante's Inferno	Action-adventure
Total War: Three Kingdoms	Strategy
Grand Theft Auto (GTA)	Action-adventure
Gears of War	Action-adventure
Clash of Clans	Strategy
Clash Royale	Strategy
Diablo III	RPG
Pro Evolution Soccer (PES)	Simulation
Tomb Raider series	Action-adventure
Resident Evil 7	Action-adventure

Ghost Recon: Breakpoint	Action-adventure
Goat simulator	Simulation
Watch Dogs 2	Action-adventure
Just Cause	Action-adventure
Batman Arkham Asylum	Action-adventure

From the information presented in Table 3 it was possible to measure the genre most frequently found in the analysis performed. It is displayed in Table 4, according to which, action-adventure games are the most frequently found in localization projects; followed by role-playing games, retro games, simulation games and strategy games respectively.

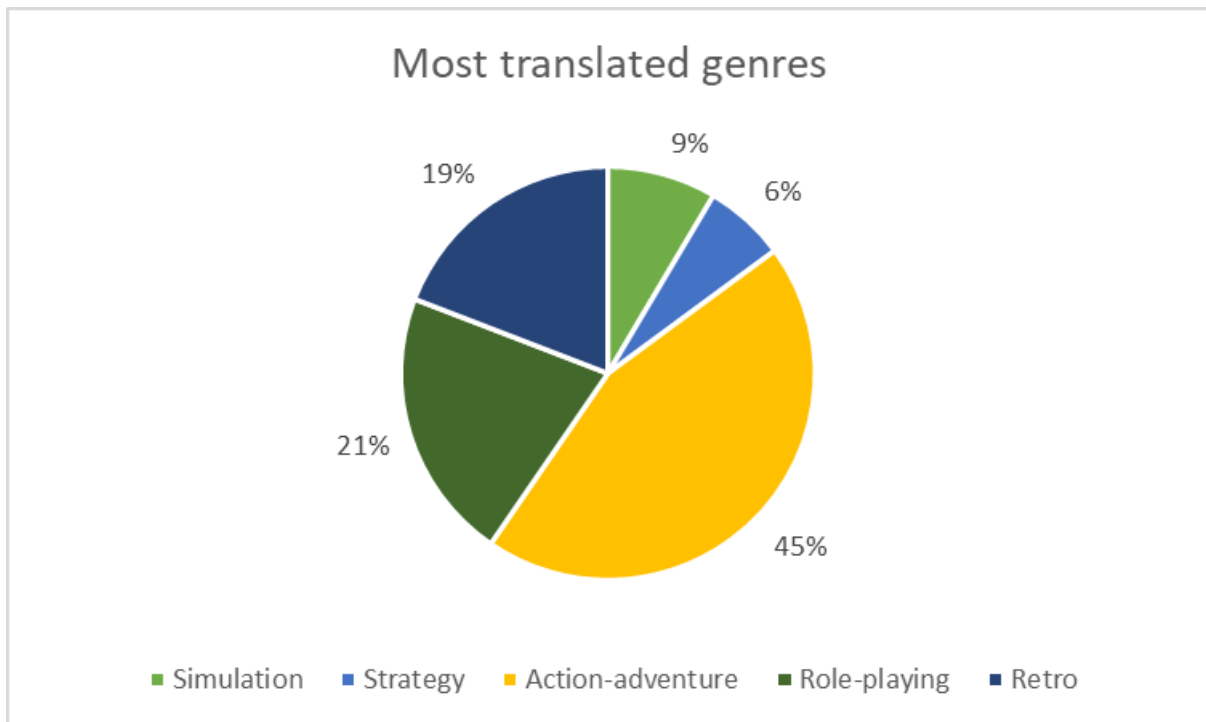
Table 4.

Frequency of genres found in the analysis

Genre	Frequency	
Simulation	4	9%
Strategy	3	6%
Action-adventure	21	45%
Role-playing	10	21%
Retro	9	19%
TOTAL	47	100%

Figure 2.

Most translated genres according to the analysis



According to Figure 2, the most translated genre is action-adventure games. However, it is worth considering that many games belong to different genres simultaneously, especially between action-adventure and role-playing games. Subsequently, it can be inferred that these two genres share some features in common, such as the open world setting and the interactions with non-playable characters (NPCs), which particularly enriches the amount of translatable units in those sorts of video games.

7.2. Consoles with most translated videogames

Since the creation of the first videogame, when William Higinbotham created Tennis For Two that people could play on an oscilloscope in 1958 (Chodos, 2008), they have been software to be played in hardware known as platforms. Along the decades, there have been different manufacturers that positioned their platforms on the market. The first outstanding manufacturer was Atari, which held a monopoly over the console market from late 1970 until

1983 (Maroney, 2019) when Nintendo came up to revitalize and dominate the American market with its Nintendo Entertainment System [NES] (Huang, 2009). The upcoming decades witnessed the rise and fall of SEGA consoles as well as the emergence and positioning of Sony and Xbox as a mainstream console manufacturer since the mid-1990s, partially due to their revolutionary CD-ROM storage system (Huang, 2009; Mangiron, 2012; Suvannasankha, 2019; Maroney, 2019; Mangiron, 2021). The current platforms market offers ninth-generation consoles such as Nintendo Switch, PlayStation 5, Xbox Series, as well as computers, mobile phones, portable platforms like PS Vita and Nintendo DS; and, more recently developed, virtual reality headsets including HTC Vive, Samsung Gear VR, Oculus Rift, and PlayStation VR (Zan, 2018).

A relevant aspect to bear in mind about gaming platforms is the audience they are aimed at. For instance, Sony's PlayStation and Microsoft's Xbox are designed for a teenage and adult demography, whilst Nintendo's Wii is rather intended for a family-friendly audience (Uribe-Jongbloed, Espinosa-Medina, & Biddle, 2016; Önen, 2018).



















Over the last two decades, the mainstream consoles have been produced by Nintendo, Sony and Microsoft. These companies have committed their effort and budget to produce high-performance computers that allow their users to experience the best and most realistic gameplay feel through innovative game controllers and peripherals devices, along with ever higher resolution graphics (O'Hagan, 2009). One of the most significant advances corresponds to motion control enabled controllers and haptic feedback (Uribe-Jongbloed, Espinosa-Medina, & Biddle, 2016; Zan, 2018).





Given that the literature does not provide a clear account of the most localized videogames by console, the following table displays the top-selling consoles of all time in order to provide the reader with a broader perspective of which consoles have widespread the most around the world and, consequently, infer the one that have most translated videogames.

It is important to consider that among the mainstream consoles manufacturers, Sony and Nintendo are Japanese and Microsoft is American.

Figure 3.

Top-selling consoles in history

Pos	Platform	North America	Europe	Japan	Rest of World	Global	Global Chart
1.00	PlayStation 2 (PS2)	53.65	55.28	23.18	25.57	157.68	
2.00	Nintendo DS (DS)	57.92	52.07	33.01	12.43	155.43	
3.00	Game Boy (GB)	43.18	40.05	32.47	2.99	118.69	
4.00	PlayStation 4 (PS4)	38.69	48.74	9.40	20.19	117.02	
5.00	Nintendo Switch (NS)	39.49	28.30	24.84	16.16	108.79	
6.00	PlayStation (PS)	40.78	31.09	21.59	9.04	102.50	
7.00	Nintendo Wii (Wii)	45.51	33.88	12.77	10.23	102.39	
8.00	PlayStation 3 (PS3)	29.92	34.99	10.47	16.14	91.52	
9.00	Xbox 360 (X360)	49.11	25.87	1.66	11.90	88.54	
10.00	Game Boy Advance (GBA)	40.39	21.31	16.96	2.85	81.51	
11.00	PlayStation Portable (PSP)	21.41	24.41	20.01	15.26	81.09	
12.00	Nintendo 3DS (3DS)	25.77	21.07	24.67	5.35	76.86	
13.00	Nintendo Entertainment System (NES)	33.49	8.30	19.35	0.77	61.91	
14.00	Xbox One (XOne)	32.47	12.47	0.12	5.51	50.57	
15.00	Super Nintendo Entertainment System (SNES)	22.88	8.15	17.17	0.90	49.10	
16.00	Nintendo 64 (N64)	20.11	6.35	5.54	0.93	32.93	
17.00	Sega Genesis (GEN)	16.98	8.39	3.58	0.59	29.54	
18.00	Atari 2600 (2600)	23.54	3.35	0.00	0.75	27.64	
19.00	Xbox (XB)	15.77	7.17	0.53	1.18	24.65	
20.00	GameCube (GC)	12.55	4.44	4.04	0.71	21.74	

Pos	Platform	North America	Europe	Japan	Rest of World	Global	Global Chart
21.00	PlayStation 5 (PS5)	7.99	7.24	1.63	2.97	19.83	
22.00	PlayStation Vita (PSV)	2.70	5.24	5.92	3.44	17.30	
23.00	Xbox Series X/S (XS)	7.92	4.32	0.21	2.34	14.79	
24.00	Nintendo Wii U (WiiU)	6.23	3.54	3.33	0.87	13.97	
25.00	GameGear (GG)	5.40	3.23	1.78	0.21	10.62	

Note. Retrieved from *Best Selling Console of All Time*, by Statistics and Data, 2022.

As it can be observed in Figure 3, the videogame console market has been dominated by Sony PlayStation and Nintendo, with a predominance of the former in the western world and the latter in Japan. Besides consoles, there are some exceptional cases especially in Asia; for instance, in China computers are the most employed platform and, therefore, holds the majority of translated titles (Dong & Mangiron, 2018; Zhang & O'Hagan, 2019; Peng, 2021). Similarly, the Iranian videogame market is dominated by mobile phones, followed by computers. Meanwhile, it is also worth mentioning the case of Baltic states, where videogames developing studios have produced many popular titles for Android mobile phones (Koscelnikova, 2020).

7.3. Most employed translation technique(s)

The translation of video games is an arduous task that generally goes in hand with an accurate localization process. The latter goes beyond the language barrier and includes cultural and symbolic elements that help localizers, game translators, and publishers to obtain a broader insight about what is the proper method or focus on how they should translate complex audiovisual pieces. This is backed up by Petru who claims that “there is no general agreement as to what exactly is expected from a professional translator, or what should the minimal standard of their work be” (2011, p. 87). On the other hand, the main concern among video game translators and skilled localizers is to preserve the game experience, allowing

players to enjoy any video game in their respective language without facing ambiguities or “weird language” Costales (2012). This is an attempt to satisfy and reach the needs and standards of the players, regardless of their nationality, language, or culture.

To carry out such a complex process, translators need to meet some requirements in order to avoid complications like poor translation and lack of cultural references incorporated in video games. Thus, the necessary conditions for video game translation may include the following: familiarity with the domain of games; previous translation experience; experience as a gamer; and last but not least, a good knowledge or expertise of the gaming world. Other aspects that must be taken into account are related to the translatability of some video games. For instance, some genres of video games are more flexible and richer, linguistically and syntactically speaking, as more translatable items increase the chance to use more than one translation technique. Therefore, and based on all the information collected through the analysis of data, three major points can be discussed:

1. Unfortunately, throughout all the documents analyzed, no highly significant findings were found that refer to translation techniques that are commonly used. Likewise, there is no explicit consensus among the most influential authors in this field or any kind of corroborating statistics on the specific use of translation techniques in video games. However, a correlation was found between the kind of game genre and the type of translation implemented. Therefore, there is a pattern that confirms how the format and the style of the game influence the approach of a translation technique. The following table

called *Video Game Translation Techniques* shows the techniques that are used in this field along with a brief description of their function, the type of video ³

2. Game genre that is commonly associated with the technique, as well as examples of popular video games. The translation techniques in bold (foreignization, domestication and transcreation) represent the ones that this section will focus on since they are the most relevant for this study.

Table 5.

Videogame translation techniques found through the analysis.

Translation Techniques	function	Game Genre	Examples
Foreignization	It is intended to keep the look and feel of the original game and transfer the atmosphere and the taste of the source culture into the target locale	Any game genre with a great amount of content and cultural elements	Grand Theft Auto IV Assassins' Creed
Domestication	It aims to bring the game closer to the target culture	Any game genre with strong cultural items (Japanese video games, football sport games)	Final fantasy FF titles Super Smash Bros Brawl FIFA
No translation	Generally subject to the no translation of certain names, terms, places or expressions	Fighting games	Street fighter Tekken
Transcreation	Adaption of games using the freedom of the translator in order to achieve a suitable game experience and preserve the look and feel of the title	Role play game(RPG) Action games Adventure games	Final Fantasy X Darksiders Diablo II Uncharted 2

³ According to Hurtado, a translation technique is a procedure, generally verbal and visible in the translation result, which is used to achieve translation equivalence, with five basic characteristics: 1) they affect the translation output; they are cataloged in comparison with the original; 3) they refer to textual microunits; 4) they have a discursive and contextual character; 5) they are functional. (Hurtado, as cited in Melo, 2012, p. 27).

Loyalty	Preservation of the atmosphere of the story will be a key element in order to meet the expectations of the target audience.	Games based on comic book, films literal works	Indiana Jones Harry Potter Star Wars
Literal translation	It is used where there is a good amount of technical words and specific terminology	Sports Racing games	Forza Motorsport 3 Grand Turismo Fórmula 1 Test Drive
Compensation and loss of meaning	Translators may engage in partial rewriting in order to “negotiate functional equivalents” that will allow to compensate for the loss of meaning	Any game genre where humor, riddles or puns can be found	Batman Arkham Asylum Torrente

3. Secondly, *foreignization*, *domestication*, and *transcreation* were the most translation techniques addressed in the research articles collected and analyzed. For example, the video game *Assassins' Creed* is a remarkable case in which *foreignization* is present. The game is based on a variety of Italian cities and regions, as well as a large number of local names. Therefore, most of these cultural elements (such as Italian expressions and names of characters, places, etc.) were preserved unchanged in the localized Spanish and English versions to maintain the Italian atmosphere. In addition, the voiceover actors in charge of cut-scene spoken dialogues added a very discreet Italian accent that contributed to the audiovisual scenography of the game. A different example of a translation technique is *domestication* found in sports games. FIFA is a well-known case, as localization processes meet the preferences and expectations of gamers, taking into account the tendencies and current football marketing of the countries where it is being sold. For instance, in Spain, the

video game cover is distributed under the illustration of Spain soccer teams and players such as Barcelona and Real Madrid. In England, it happens with local and popular soccer teams, like Juventus and Manchester United. However, this is more than a marketing strategy as soccer teams and leagues are adapted to the interface of the game to keep the gaming experience to the target culture. Lastly, successful implementation of transcreation is found in the game Final Fantasy X, where American localizers decided to completely change the names of weapons, armor, and characters, leaving behind the literal translation because of space restriction. On the other hand, it was also found that there can be cases where foreignization and domestication can be implemented at the same time in video games, mostly in RPG games (Japanese games). According to O'Hagan, "While games are translated within the broad framework of the domestication approach, they also require a complex mixture of foreignization strategies to retain some of the unique Japanese flavors of the original game" (2009, p. 152). In this same way, transcreation gives localizers and translators the freedom to change any type of Japanese content, changing different elements but keeping the "odor" and "original essence", guaranteeing the game immersion. As pointed out by Suvannasankha "many games opt for free translation, replacing Japan-specific content with cultural references from the West and limiting the use of speech, items, and settings that may feel out of place to a Western player" (2019, p. 7); This includes cultural elements such as puns, jokes, historical elements among others.

4. Thirdly, it should be noted that there is no standardized procedure or parameters that the professional in video game translation must follow. Therefore, there is no criterion that can be rejected or accepted since unbiased translations are generally subject to approaches and personal practices that vary even in the same translation team hired by developers. As stated by Fernández, “As long as video games are concerned, the concept of ‘right’ or ‘wrong’ translation does not apply and translators focus on achieving the objective of meeting a functionalist objective: preserving the game experience” (2012, p. 6).

Table 6.*Videogame Examples*

<i>Technique</i>	Source text (Game)	Target Text. Using bold letters to emphasize the technique				
<p>Domestication: In the game, <i>Chrono Trigger</i>, some enemy names were domesticated so they could have more sense in the English localized version.</p>	<table border="1"> <tr> <td><i>Japanese source text (1995)</i></td> </tr> <tr> <td>ピネガー (binegaa)</td> </tr> <tr> <td>マヨネー (mayonee)</td> </tr> <tr> <td>ソイソー (soisoo)</td> </tr> </table>	<i>Japanese source text (1995)</i>	ピネガー (binegaa)	マヨネー (mayonee)	ソイソー (soisoo)	<p>Vinegar Mayonnay Soysaw</p>
<i>Japanese source text (1995)</i>						
ピネガー (binegaa)						
マヨネー (mayonee)						
ソイソー (soisoo)						
<p>Foreignization:</p> <p>The video game <i>Assassins' Creed</i> is a remarkable case in which foreignization is present. The game is based on a variety of Italian cities and regions, as well as a large number of local names. Therefore,</p>	<p>Luridi codardi</p> <p>Ladro</p> <p>Creapa, traditore!</p>	<p>Luridi codardi(fifty cowards)</p> <p>Ladro (thief)</p> <p>Treapa, traditore! (die, traitor!)</p>				

most of these cultural elements (such as Italian expressions and names of characters, places, etc.) were **preserved unchanged** in the localized Spanish and English versions to maintain the Italian atmosphere

Torna qui, maledetto cavallo!

Torna qui, maledetto cavallo!

(come here, damned horse!)

Transcreation:

The following example shows how an American translator substituted a Japanese play on words with a fresh invention in an attempt to achieve a comparable comedic impact in English. The game is *Final fantasy X*

アニキ: ダイジョウブか〜?

Brother: What's your status?

[Brother: Are you OK?]

リック: ダイジョバナイ!

Rikku: **Disasterrific!**

[Rikku: Were "NO-K"]

The Japanese joke is based on one of the characters, Rikku, purposefully breaking a grammatical rule by conjugating a noun, (daij?bu, 'OK'), as if it were a verb. Her brother chides her, telling her to use the correct form.

アニキ:「ダイジョバナイ」は間違

い!

Brother: '**Disasterrific**' is not a

[Brother: "NO-K" is not correct!] word!

「ダイジョウブではナイ」と言え!

[Say "Were not OK"!]

Say '**disastrous**' like the rest of

Spira!

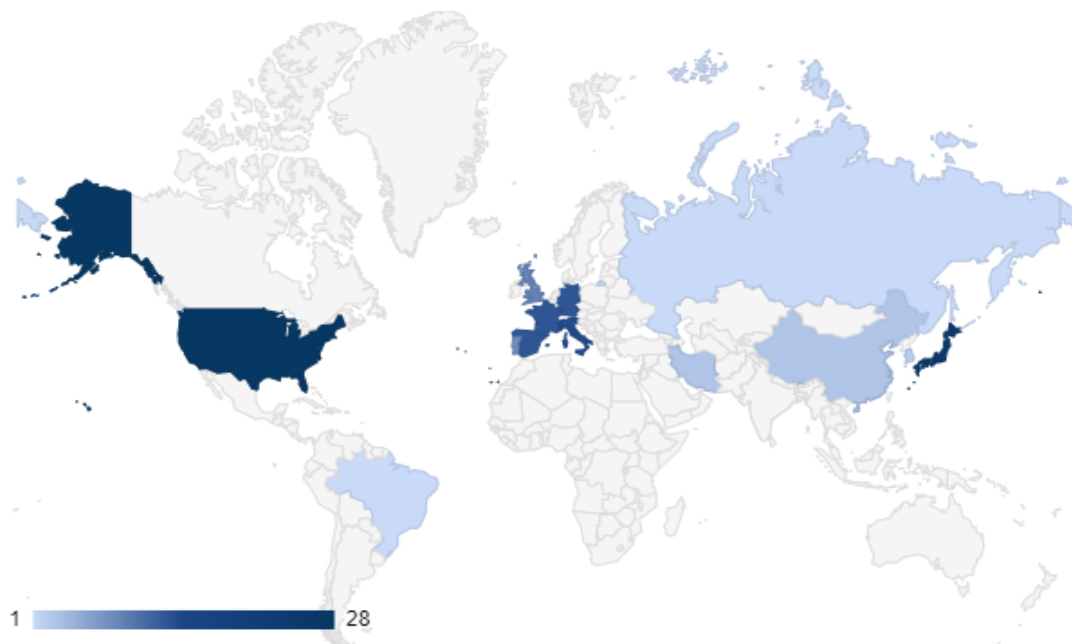
7.4. Countries where most videogames are localized

Videogames are massive entertainment products that have been spread and commercialized all over the world, even more during the last decade thanks to the Internet and Globalization processes that, according to (Reich, 1998), allow to produce and interchange social and technological conventions without national border restrictions. Therefore, videogames can be found in many different places, sometimes with more frequency than others, but in general they are pop-culture productions that stay as relevant in society as movies, music or other types of media.

In this paper, we found and analyzed different game hubs around the world, where videogames tend to be localized the most due to diverse factors such as the historical influence of the place, the business relevance of the country or the huge population consuming videogames.

Figure 4.

Countries where most videogames are localized: geographic chart



The information was gathered from diverse academic publications related to the field and analyzed using a geographic chart from the office tool “Google Sheets”. The graphic shown in Figure 4 highlights the countries from a lighter to a darker color, according to their relevance and number of references found in the database (see Figure 1). Results showed variation regarding the countries and continents where developers localize their videogames, as it is possible to observe in the graphic, with a total of 13 countries that were included in the database: Japan, United States, France, Italy, Germany, Spain, Korea, United Kingdom, China, Brazil, Russia, Iran, and Portugal.

That being said, the graphic reveals that all over the world, the main videogame hubs are located in the 2 original developer and leader countries of the gaming industry from its very origins: the United States and Japan. These countries still own an undeniable influence regarding the massive production and translation of videogames while at the same time, they represent a hemisphere and a culture. Extensive companies such as Sony, Nintendo, Microsoft or Sega make of the U.S.A and Japan, the digital power of the field, strengthening their economies and counting with great populations to boost their own industries.

Subsequently, it was found that Europe, specifically the FIGS countries (France, Italy, Germany, and Spain) represent the second-largest gaming centers on the planet. Firstly, the economic relevance that these hubs constitute for the global gaming production (usually coming from the U.S.A or Japan) makes of the European market a really profitable place in which localization processes need to be carried out. According to (Clement, 2022), Europe represented 21.13 billion dollars during 2022, with the UK, Germany, and France, leading these figures. Secondly, the massive investment in the gaming field in Europe is also constituted by a strong amount of videogame developers such as King, Supercell or CD projekt RED that make possible a global interchange with industries such as the Japanese or the American. Finally, FIGS are vital due to the accessibility that these countries represent to

the rest of the world, as it is the case of Spanish, a language in which if a videogame is successfully localized and released, it will represent profits not only in the European context but in a great part of all the Spanish-speaking countries in the globe.

Lastly, it is possible to notice in the geographical chart, countries that own significant figures of localized videogames and worldwide relevance in the field, however, not at the same level as the other countries already mentioned in the text. In this position, we can find nations such as Brazil, Russia, Korea, Iran, and China, places that although there is not a really extensive trajectory and legacy in the gaming industry, have been increasingly earning and getting involved in this context during the last years, mainly through their massive demographic density that represents high profits to the dominant companies in the area. According to (Mangiron, 2018) countries such as China are growing exponentially in the gaming market, with revenues in the sector of about 27 billion dollars per year since 2016, and that is likely to grow even more in the future. At the same time, the academic context in these hubs regarding videogames and translation studies (TS) is also earning relevance, with more researchers interested in the technological and financial potential that these countries may acquire and develop in a few years.

To conclude, the results presented in this section display and categorize the worldwide relevance of the founder hubs in the gaming industry up until today (Dec. 2022), the quiet but vital importance of Europe in the development and spread of videogames around the world with the FIGS countries, and finally, the growing markets in the field that may end up leading it in the near future.

7.5. Official translation vs Fan-made translation

Video games are a massively profitable business that has been growing astronomically every year, which is mainly due to the large scope of globalization and localization work. The latter is in charge of making major adjustments and/or changes in cultural, linguistic, and technical aspects. As a result, the video game product is adapted to the target locale where its final destination is to be distributed (Pettini, 2022). This complex process involves and is carried out by either of the following counterparts: professional translators and/or fan translators alongside Rom-hackers. However, these two sides share a common goal: to translate effectively and in the best possible way video games based on their criteria and translation understanding and dynamics.

An important aspect to note about professional translation and localization is that not all games released to the market are primarily translated, therefore, a gap is created between those gamers who want to experience and enjoy the video game in their particular language. In this case, fan translation steps in as a way of both protest and expression. Thanks to the rapid evolution of the digital era and globalization, fan communities found a way to group and spread through the massive use of the internet. This would take place in special websites such as forums and chat rooms, so they could work on their versions to localize not only those non-localized games but also games that did not have a good translation and needed to be fixed (Maroney, 2019). Nonetheless, fan translation sometimes struggles with finding a proper localization process, and paradoxically, it ends up creating a video game translation with poor standards. Some examples found are related to spelling mistakes, grammatical and syntax inaccuracies regarding the target language, and incoherent phrases within a given context, among other situations where the problem lies not only in language expertise but also in the culturalization and adaptation process (Sanchez & Sanchez, 2008). For example, it has been claimed that the Final fantasy VII role play game in the Spanish localized version

has several mistakes. One of the most notorious is found in the following extract: “Sir ..Cloud?, su **fiesta** le espera en el piso 2”. The mistake lies in the literal translation of “party” as *fiesta* in Spanish, when the word **party** in video games normally refers to "group" or “team”, especially in RPGs. Another mistake made by the fan translators is the omission of the question mark at the beginning of the question “Sr.....Cloud?. Therefore, the lack of context and poor knowledge of the language can have a bad impact on the game experience.

Figure 5.

Spanish translation error.



On the bright side, over the past few years, fan translations have improved considerably in terms of translation quality for the following reasons: the emergence of new programs that facilitate the work of romhacking, the documentation of new reverse engineering techniques, and the collaboration of several rom hackers in the same project thanks to email, chats and forums (Sanchez & Sanchez, 2008). During the analysis and data collection, it was worth observing that there is some discussion between the official translation and the translation made by fans, where very important points were touched on, such as the purpose for which each part translates, the style they use the most, as well as some advantages and disadvantages that exist on both sides.

As for which translation is more used, whether the official translation or the translation made by fans, it will always depend on some variables such as the popularity of the game, since the more popular and profitable the game is, the more localization companies will focus on those according to the supply and demand of the market.

Another important variable is the acceptance and client satisfaction of translations, when these are carried out by professionals in the field. If the fandom is not satisfied with the outcomes, fan translators may sometimes deliberately break the norms established by professional translators, because they have differing preferences. On the one hand, professional localizers and translators are generally subject to the rules and policies of video game publishers and companies, so revenue is the top priority, in addition to being able to maximize player enjoyment. Along these lines, most professional translators use some strategies such as domestication, foreignization, and transcreation to culturally and linguistically adapt the content of the video game, while fan translators try at all costs to maintain a more concise and accurate style, having in mind the faithfulness to the original work (Suvannasankha, 2019). Therefore, it has been found that fan translators reject the use of any translation technique that may alter or modify in some way or another the essentials of the game. Moreover, as a general rule, they still dismiss domestication, as keeping textual translation close to the original game can preserve cultural references, puns, name characters or some idiosyncrasies (Petrù, 2011). In this same way, fan translators do not have restrictions regarding strong or harsh language, which allow them to avoid video game censorship. Some Japanese games such as RPG games are a common example of it. The RPG video game *Tales of phantasia* has two versions: the professional and the hacked one. In the professional translated video game, one of the character names is replaced by a western name (Claus), while in the fan-made version the character keeps his original name (Klarth). Besides, the hacked version has an uncensored dialogue, which makes it more attractive to the audience,

while the professional one has a more subtle dialogue. Additionally, some graphic changes are observed as well.

Figure 6. *Romhacked vs professional translation of Tales of phantasia.*

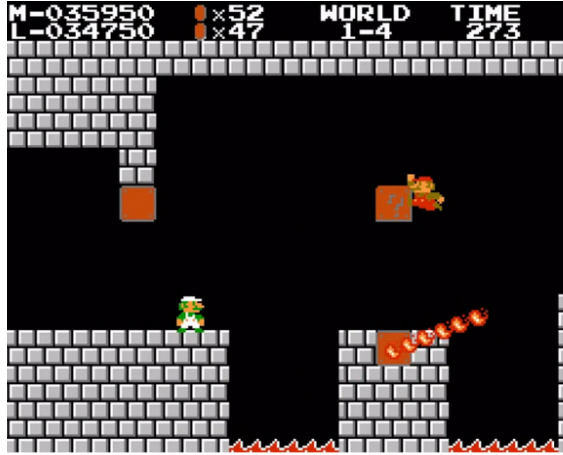


Note. Retrieved from Muñoz, 2009, p. 178.

On the other hand, even though fan translators take matters into their own hands, by using romhacking to modify dialogues and different settings of video games, some legal issues come into play, such as copyrights and the illegal aspects and not granted a modification of video games. The most notable fan-made ROM hack of a game is the 1986 Famicom Disk System game Super Mario Bros 2, known as Super Mario Bros, in which it was originally designed as a single-player video game, however the two-player hack sought to give SMB a true multiplayer mode, once it is applied, two gamers can play at the same time with no restrictions. Some other minor adjustments are related to the brightness and graphics of this popular piece of gaming history.

Figure 7.

Graphic Example of Romhacking in SMB.



On the contrary, these actions jeopardize localization companies as revenues and reputation can be seriously affected. However, some video game companies agree to buy translations made by fans, thanks to the great reception by players, which opens the possibility of a mixed official and non-official translation that some companies may implement to up their sales. To conclude, the translation done either by professional translators or fans is a complex process that involves the use of certain techniques and approaches that are most of the time different between them, but at the same time, both sides take compelling accountability in order to provide the most complete gaming experience to gamers.

7.6. Leading videogame translation companies and developers

In order to understand how videogames translation is carried out nowadays, it is important to take into account that these processes can be divided into 2 different categories which are **outsourcing** and **in-house localization**.

Firstly, we can define outsourcing as a translation that is not implemented by the same videogame developer, nevertheless, the developer hires an independent translation agency in order to get all the content about the videogame localized and prepared to sell in the target market previously established. To do so, as stated by (Mangiron, 2007), the developer prepares and sends a localization kit to the hiring agency, that includes all the relevant features to be considered in the translation, as well as specific instructions and guidelines materials if they are required. Many fans and academics criticize this translation strategy as it pulls apart the original work from the final results that are released in other countries, provoking in many cases chaotic and confusing productions with no sequence among them.

On the other hand, we have in-house localization, the most commonly employed strategy by huge video game companies, such as Nintendo or Sega. Here, the same developer is also in charge of the localization processes, usually through a translation branch or department. Contrary to outsourcing, in-house localization is more accepted and better rated by the audience and reviewers as it keeps the original game perspective and feels by the same work team.

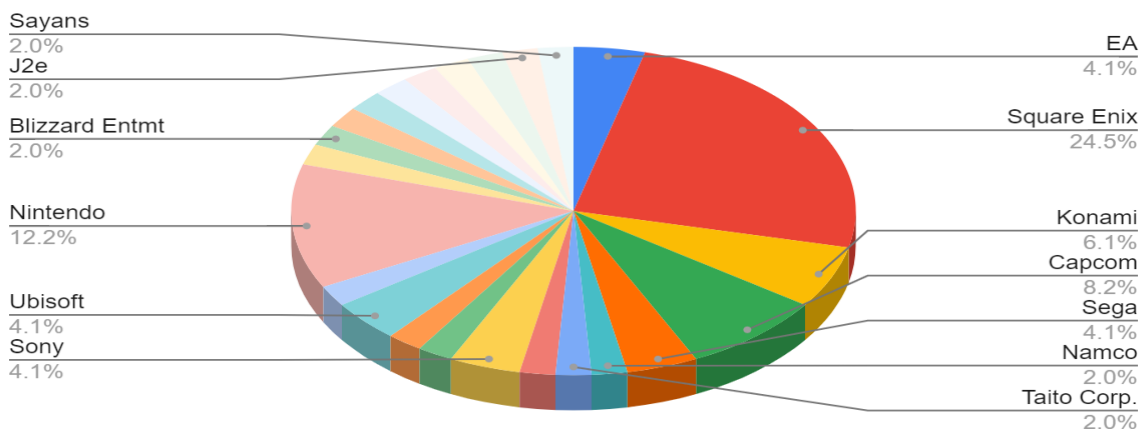
For this study, we decided to analyze diverse videogame translation companies mentioned in the literature, aiming to establish which are the most relevant nowadays, as well as compare the type of strategy employed in their projects and its relationship with their success and prestige in the gaming field. To do so, we included 24 companies referenced in the publications, that go from massive and historical brands such as Konami or Nintendo to independent translation agencies such as Shiny Entertainment or Tecmo Koei. All the information was analyzed and presented by the implementation of a pie chart that shows the most prominent agencies found in the database as well as their percentage regarding references and quotes in the literature (see Figure 2). Data highlights 13 companies as the most outstanding in the field, with 10 of them belonging to the in-house localization

category: EA, Square Enix, Konami, Capcom, Sega, Namco, Sony, Ubisoft, Nintendo, and Blizzard Entertainment, and the other 3 fitting in the outsourcing group: Sayans, J2e, and Taito Corporation. It is worth mentioning that other companies such as Wuhu Ingame Technology or Darinoos were not pointed out in the graphic due to their small relevance in the area, however, they will be included later on in this paper section.

Figure 8.

Leading videogame translation companies and developers

**Projects in Charge
(found in the database)**



By observing Figure 5, it is possible to mention that the videogame translation field is led by 3 Japanese companies that have been historically enriching the gaming market and that still stand as prestigious as they have ever been: Capcom, Nintendo and Square Enix. The key to their success relies on the huge catalog of localized videogames that these enterprises offer to gamers from all over the world. With franchises such as Final Fantasy, Super Mario, Resident Evil, The Legend of Zelda or Chrono Trigger, people can get engaged with amazing stories and gameplays adapted to their own cultures and languages that go from English and the FIGS languages in the Western Hemisphere to Chinese, Japanese or Persian in Asia and the Eastern part of the planet. It is vital to mention, that a great part of the translation

processes carried out by these 3 companies is in-house localization, which might be a really important feature if we detail aspects such as storyline cohesion or key conceptual art in the games, that do not get lost from localization to localization, as the same developers and publishers carry out this essential stage before the videogame is finally released.

Furthermore, we have the companies with a medium range and relevance in the context of videogame translation. In this group, we find: Electronic Arts (EA), Konami, Sega, Namco, Blizzard Entertainment, Ubisoft, and Sony. In contrast with the first group, these enterprises are multinational and not merely Japanese, with Blizzard or Sony from the United States. Here again, it is clear the group is still dominated by these two historical countries leading videogames in a worldwide range. Once again, it is possible to find a large inventory of localized videogames from these companies, with games such as World of Warcraft, FIFA, Metal Gear Solid or Assassin's Creed, titles that are available in the same extent of languages and cultures as the ones from the first place, and that in the same way, make use of in-house localization in order to carry out the majority of their projects.

Lastly, the pie graphic sets the independent companies at the bottom of the study due to the lack of relevance in the field of videogame translation, with only 3 of them appearing in the figure: Sayans, J2e, and Taito Corp, and others such as CD Projekt, Bohemia

Interactive or Shiny Entertainment that are not highlighted in there. The list of localized videogames products of these enterprises is acceptable, with titles such as Cyberpunk 2077, The Witcher, Day Z, and Space Invaders, however, the lack of renown in the industry as well as their work as outsourcing agencies, hinder the possibility to grow and get to a larger audience. On the other hand, companies such as Darinoos from Iran or Wuhu Ingame Technology and iDreamsky Games from China, focus merely on translation processes in their local context, culture, and language, a feature that highly limits their capacity to reach different countries and people with their works.

In conclusion, this section presents the most relevant and important videogame translation companies nowadays, as well as their impact on the gaming industry. It was possible to notice how Japanese companies are the strongest and remain outstanding over the years due to their quality regarding translation, art design, and gameplay, but also thanks to their closeness to the global audience and fandoms. Findings reveal that American companies have also a vital place in localization processes, making use of in-house localization as well. Finally, independent companies were found to be the least relevant, due to the limitations regarding the focus on a single culture but also the outsourcing localization that in a great part of the time does not get the credit and recognition that in-house localization does.

7.7. Analysis and discussion

The results presented in this paper allow us to understand videogames as a dynamic industry and source of entertainment and information. Video games involve different fields of knowledge and features that usually go unnoticed by the public in general, however, these features are vital in order to achieve the final digital result that is released in diverse geographical hubs of the world. Therefore, a game must accomplish some quality standards imposed not only in the local context where it is intended to be published, but in each environment where the game will be commercialized, becoming a really difficult task for each of the departments or branches in charge of the project development.

The processes of videogames development are carried out thanks to the involvement of linguistic and translation studies, marketing, artistic design, programming, screenwriting, among other fields of knowledge that make possible the creation, development, and sustainability of the massive gaming culture that we can experience in the modern age, and at

the same time, grant a multi-perspective analysis of videogames according to author and setting.

The multifunctionality of videogames can be exemplified by their analysis from the diverse perspectives included in this paper, which go from *Most translated videogames by genre*; *Consoles with the most translated videogames*; *Most employed translation techniques*; *Countries where most videogames are localized*; *Official translation vs Fan-made translation*; and *Leading videogame translation companies and developers*. For the purpose of this section, we will deepen into each of these categories as we compare the findings already presented, with the shared beliefs, theories and information gathered before carrying out this research project, establishing a critical point of view regarding videogames and translation studies that are involved in this activity.

To begin, we have the “*Most translated videogames by genre*” category. This criterion was proposed in order to recognize the diverse gaming genres that exist, as well as to provide the reader with a general contextualization regarding these ramifications in the gaming culture. This classification also included the most popular and successful videogames in each of the genres included and the scenarios in which they may facilitate or hinder the translation and localization of a title due to its length and complexity. Therefore, the study gathered and grouped 5 general videogame genres: Simulation, Strategy, Action-Adventure, Role-Playing and Retro. It is worth mentioning that the “*hybridisation*” of videogames may mix the categories several times, allowing gamers to find titles that include 2 or more different videogame genres in the same project. At the same time, the great majority of the titles found are videogames that currently stay relevant in pop culture and that most of the time can be located in diverse genres, for example, *The Legend of Zelda*, *Final Fantasy*, *Super Mario Bros*, or *Resident Evil*.

Findings reveal that the legacy or trajectory of a gaming brand can be considered then, an essential feature in its production, localization and modernization nowadays, as the videogames mentioned before, demonstrate how a retro title can evolve through the years to keep selling and influencing audience's appeals. Additionally, transforming that outdated concept of one-genre-videogame to a more versatile perception, where the title does not need to fit in a single standard, but developers have the freedom to innovate. As videogames start becoming wider, translators get a more challenging task as well, localizing games from the viewpoint of diverse genres and including specific material from RPG games to Strategy titles, for example. All this along with the fact that the evolution of the industry is real, and it is happening, the titles that await us in the future will change the current perspective that we have about videogames or even the conception itself.

On the other hand, the study focused on a more industrial and productive feature surrounding the videogame field with the creation of the second criterion: "*Consoles with the most translated videogames*". Here, it was possible to track and collect information regarding the supply and demand of gaming consoles around the world, as well as to analyze the causes of success or failure of these machines in the global market. It is important to bear in mind that for the purpose of this study, the concept of console included specifically the classical electronic devices such as Xbox, Nintendo or Play Station. Also, due to the lack of literature regarding translated videogames figures, this section of the study focused on the top-selling consoles and their gaming catalog, instead of merely translated videogames figures. Results reveal that the Play Station series PS2, PS4, and PS3 are the most-sold consoles in the world, followed by the Nintendo series DS, GM and Wii, and finally Xbox with its series of XBOX 360.

After analyzing these results we can highlight from them how the 3 main consoles in the top are electronic devices with more than 19 years in the market (Nintendo DS the

youngest), indicating, that the main reason for their success was not the technical aspects -that nowadays tend to be enhanced to the extreme with the graphic section or the detailed system of physics- but, the massive videogame catalog that these consoles offer. For example, the PS2 system allowed players to experience more than 3,870 titles back in the day (2000) according to the SIE Business Development (2021), a diverse gaming inventory of localized videogames available in different countries, that not only included a localization process carried out in the interfaces or pause menus, but in the whole gaming experience with cases such as the Biohazard (Japan) or the Resident Evil (U.S - E.U) series, which were even assigned different names due to their market appeals and audiences.

Nowadays, consoles such as the PS5 not only accomplish the requirements in quantity of videogames available (only 360 since its released in 2020) but also has lost that touch getting involved in the community through more extensive and qualified translations but simplifying content in order to save money and time. Therefore, the audience tends to maintain that essence lost with the time in some titles, getting involved in their own projects and prioritizing what they may consider most relevant, making use of emulators to keep in touch with those legendary consoles that brought success to the industry in general.

Subsequently, the criterion of “*Most employed translation techniques*” was centered on the translation studies (TS) and the strategies employed by the videogame translators in order to adapt titles to a foreign market. Here, we intended to find the standard model employed in this field when carrying out localization processes. However, it was not possible to establish a very accurate account as the documents used in this bibliometric study do not provide specific information on the nitty-gritty of localizers’ translation labor, but a multiple set of techniques that can be employed: Foreignization, Domestication, Transcreation, No Translation, Loyalty, Literal Translation, Compensation and Lost of Meaning, with first three being the most commonly employed in the gaming field.

The importance of this diversity regarding strategies makes of videogames a varied environment where just like music, cinema or other types of arts, the audience develops preferences regarding what they want to see, listen and feel. This heterogeneity may be reached by the use of all those strategies in the scenario that they fit the most, for example, the use of **Foreignization** in the Assassin's Creed sagas allows the player to experience cultural emblematic products from the old European society as they were named and employed in that period of time, something that would not be possible by making use of **Domestication** in the same scenario proposed. Therefore, these different alternatives enrich and strengthen the localization processes, as the only matter that translators should be aware of is the identification and correct use of them in the specific culture and moment that is needed. As it was mentioned before, this section of the study allowed us to know more about this immense field in which the idea of standardization and faithfulness at first sight may be the way, but at the end of the day, restrains the human touch from videogame: diverse ways of perceiving the world.

Likewise, results on the different approaches and translation techniques used for video games shed light on potential training scenarios for those young learners who may share the experience of video gaming and academic purposes. Together with the information on the most translated video game genres, students may project themselves on the discursive features of the most relevant genres and become specialized in these.

Regarding the next category, "*countries where most video games are localized*", it was established as a variable and indicator that could help us understand and analyze the importance of the localization phenomenon during the last 20 years. Therefore, and thanks to the theoretical framework displayed in this research, it had already been identified that Japan and The United States of America were the only two countries that lead the video game market, being pioneers in this field since the 70s, and going through different stages (Early

growth, development phase, etc.) to achieve maturation and adaptation in the localization process. According to the findings found on the geographical chart, it was expected from the beginning to see such countries in the first spot, however, some others were out of sight as most literature focuses on the massive characterization and in-depth overview of Japanese localization.

The other countries with the most localized games are France, Italy, Germany, Spain, Korea, United Kingdom, China, Brazil, Russia, Iran, and Portugal, having more relevance and greater scope European countries such as (Germany, France, Italy, and Spain). Some factors related to the massive production of video game localization in these countries lie in the economic and technological investment for the development and translation of video games, the potential and need of the video game market as well as the dynamic and influence of the growth of this market.

On the other hand, the following criterion we explored on the database labeled as “*Most commonly used video game translation between official and fan-made*” was proposed to compare, analyze and gather further information that could prove which is the most accepted and used. Findings show that official translation is the process mostly used for developers, publishers, and localizers that work for video game companies or third parties interested in offering their translation services (translation of audiovisual content). Another key finding about official translation is the fact that there seems to be a pattern regarding the common translation techniques used among them. Some of them are domestication, foreignization, and transcreation. This is supposed to add some cultural changes and settings to the games so they can make much more sense and be accepted in the localized versions.

On the contrary, fan-made translation seems a very recent activity that emerged due to the extended use of forums and chats related to the conversation. It is also a process mainly

carried out by not only the fan community but also Rom-hackers and people that have some expertise in the field, always acting in favor of their interests.

It was also found that fan-made translation has as a goal to keep the flavor and originality of the video games, avoiding the translation techniques used by professional translators. Additionally, an important finding that differentiates these two translations is that each one performs different translation styles and strategies, as well as the technical processes carried out to get things done. This is mostly limited by Country specific age rating systems and censorship which, in the case of professional translation, can delimit and affect the quality of the game translation, which in turn, totally changes the reception of the video game in the audience's involvement. On the contrary, fan-made translations have become a worldwide success as ROM hacking and modding break this barrier, opening possibilities to change video games freely.

However, not every fan-made translation video game is widely accepted, since mistakes in programming and linguistic inaccuracies might show up. Therefore, through all the literature collected and analyzed, including in the database, fan-made translation and official translation were mentioned in different contexts without being offered an explicit answer about which one is the most popular by far. Nonetheless, this information helps this study partially validate part of the hypothesis outlined at the beginning of this research: Transcreation and modding are the most used, and popular techniques in the video game translation process in the last 20 years.

Findings suggest that even though these two translation techniques are used in different contexts (transcreation in professional translation and modding being a type of room hacking in fan-made translation) it is not mentioned to which degree, nor for how long they have been employed in such contexts. But it can be stated that transcreation is a translation technique very popular to a large extent, utilized for game adaptation employing the

translator's independence to provide an appropriate game experience while preserving the feel and touch of the game. In this same way, ROM hacking seems to be a popular translation technique among translation fans.

Lastly, the category named the "*Main translation company*" provided this research with a better understanding of the way companies perform their localization process, distinguishing the two most common procedures. In the first case, we have outsourcing agencies in which a third party specialized in video game translation (or any kind of audiovisual translation) is hired to carry out video game translation tasks. On the contrary, there are in-house-localization companies that center on the execution and creation of video games, with inside departments that take care of the localization process too. The findings show that most of the translated video games named in the literature tend to be in-house localization companies, ten of them with the following names: EA, Square Enix, Konami, Capcom, Sega, Namco, Sony, Ubisoft, Nintendo, and Blizzard Entertainment. In contrast, outsourcing agencies were a minority since it was hard to find only three: Sayans, J2e, and Taito Corporation. Some implications about these findings suggest that even though fan translation can be done, with some good rating and acceptance by gamers, in-house translation is the market leader and it may offer opportunities for future language professionals a broader insight about the complex mechanisms of translation in this field.

8. Conclusions

This research led to insights regarding the most relevant genres, consoles, techniques, countries, and video game translation companies, as well as the role and relevance of fandom in the localization of video games.

The videogame industry can be divided into five genres: Simulation, strategy, action-adventure, role-playing and retro; and we can find several AAA titles in each of them. Concerning translation and localization, the most significant genres are action-adventure and role-playing games as they are open-world with many interactions between characters, and tend to be inspired from literary and cinematographic works. Along these lines, the hybridization phenomenon is the strategy whereby many videogames, especially the most popular by top companies, might belong to more than one genre due to its advanced technological assets, rich gameplay experience and cultural relevance.

Results also expose that albeit PlayStation devices are the most sold consoles in the world, followed by Nintendo and finally Xbox; their preference might vary over different regions of the world. The most noticeable variation is the outstanding success of consoles in the western countries, whereas powerful Asian markets like China and Iran prefer computer and mobile games. It is striking the preference and relevance of classic consoles nowadays, demonstrating that the gamer community not only regards technological advances; but also, and even more, the experience offered by legendary consoles and titles via emulators and ROM-hacking techniques to keep up to date with modern devices.

In relation to the most relevant techniques, the analysis brought out a set of techniques used by official in-house and third-party localizers, such as: Foreignization, Domestication, Transcreation, No Translation, Loyalty, Literal Translation, Compensation and Lost of Meaning; among which the first three are the most commonly employed in the industry.

The most relevant countries for the videogame localization field have historically been Japan and USA; in the last two decades other countries with high relevance in the market have accounted for vast amounts of localized versions of video games, i.e., France, Italy, Germany, Spain, Korea, United Kingdom, China, Brazil, Russia, Iran, and Portugal.

Another significant factor that explains this beyond the market nuances is the amount of speakers of certain languages like Spanish and Russian.

Another relevant insight concerns the differences between official translation and fan-made translation. The former is the one realized by developers, publishers, and localizers that work for video game companies or third parties that offer their translation services; they tend to implement foreignization, domestication and transcreation techniques. On the other hand, fan-made translation is an ever-evolving practice that emerged from fandom forums as a response to censorship limitations and technological constraints of legendary titles; this process is carried out by the fan community as well as Rom-hackers and people that have some expertise in the field, always acting in favor of their interests.

One of the hypotheses proposed in this study claimed that transcreation and modding are the most used and popular techniques in the video game translation process in the last 20 years. This has been validated by the findings that suggest that these two translation techniques are the most commonly used in official and fan-made translation respectively. Transcreation has been quite popular in professional translation projects, especially of action-adventure and role-playing games; and modding, as a type of ROM hacking, showed to be a popular translation technique among fandom localization projects.

This research also hypothesized that localization processes have improved thanks to the implementation of new translation techniques within the videogame industry. This hypothesis was also validated, as the huge evolution of consoles and videogames during the last twenty years has pushed the boundaries of translation techniques to be ahead with the intertextuality and multimodality of the upcoming genres and realistic gameplays experiences.

8.1. Further research

Besides the aforementioned conclusions of this study, numerous studies were found about different localization aspects and related issues. Although they were not as relevant for the objectives of this study, it is worth mentioning them to incite readers and the academic community to continue researching on those topics in order to strengthen the academic as well as the professional fields of translation studies and linguistics.

Localization is not the only way of developers to position a videogame in a transnational worldwide market. Therefore, Chandler establishes (2005, as cited in Mangiron, 2021, p. 3) the notion of internationalizing a videogame, and how it entails developing the product so that it has a flexible architecture and assets that can be easily replaced for each target market, aspects that at the end, help to promote and facilitate the commercialization of a videogame. Likewise, the concept of culturalization claimed by Edwards (2012, as cited in O'Hagan, 2015, p. 7) is interesting, as it is “a step further beyond localization” and it considers a deeper perspective of the content choices and fundamental assumptions of a game. In other words, culturalization leads to a more meaningful connection between gamers and titles than localization. Notwithstanding, there are some studies that reflect a preference of gamers for foreignized versions of videogames that allow them to experience the original version and cultural context of the game (Khoshsaligheh & Ameri, 2020, p. 5).

It is important to delve into these concepts because they provide a broader scope of approaches towards the widespread and positioning of video games over the world; which might be very helpful not only for professional translators in the videogame industry but also for the newcomers and in-training translators.

In addition to that, there are some issues and errors that affect the quality of the translation and localization processes. These must be addressed with a problem-solving perspective in order to enhance the translators' performance. One of the most documented are

the ones related to register, puns, terminology, cultural references, dialect, humor, and the use of compensation when it is needed to substitute particular items (Mangiron & O'Hagan, 2006, p. 7). One of the most common limitations faced by translators in the videogame industry are the "blind localizations" that makes them miss the context or the interaction in which the dialogues occur as they are given scripts with only the lines of each speaking character (O'Hagan, 2015, p. 5). Another relevant constraint on the localization process is the censorship; especially concerning sexual content, foul language, copyright issues as well as political and religious beliefs. Notwithstanding, as unofficial fan-made localization projects do not have to abide by those regulations; they usually release interesting proposals that consolidate among the gamer's community (Sánchez, 2009, p. 178).

Furthermore, the quantity and quality of the videogames based on books and movies has been a controversial topic. On the one hand, Peng (2021, p. 5) stands out that some people claim that videogames are "typically subjected to contraction or simplification of plots". On the other hand, he establishes that videogames allow to enrich plots more than other types of media given its user-interactive and multimodal features. The videogames based on books and movies are usually role-playing and action-adventure games which offer narrative texts and well-developed plots that bring out transcreation as one of the most suitable localization techniques (Zhang & O'Hagan, 2019, p. 189). This correlation between transcreation and role-playing/action-adventure games is striking as it might be linked and compared to the translation of the book or movie on which some of those games are based.

One of the most relevant aspects of a videogame, especially AAA, is the profitability, which has been proved to highly depend on the quality of its localized versions (Dong & Mangiron, 2018, p. 14). Narrowing down the scope, the role of translators in the localization team of the videogame production companies is rather of a specialized technician; under the lead and supervision of the project manager, the localization coordinator, the localization

engineers, and game testers (Vázquez, 2016, p. 18). Thus, more research is needed to shift the role of localization and translators as the last part of a videogame developing process to a prominent department of the videogame industry; this will encourage developer companies to perform a deep localization that improves the standards and gains of localization/translation professionals.

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Appendix

Appendix A. Bibliographic matrix of 50 analyzed documents

Criterion #1: Most translated videos game by genre	Criterion #2: Console with most translated videogames	Criterion #3: Most employed translation techniques	Criterion #4: Cultural context
By the examples provided in the text, the most common translated videogames are: Retro, RPG, Adventure and 8 bit And with videogames such as: Chrono Trigger, FF5 or Seiken Densetsu 3	"Romhacking" usually relates to modifications and translations of old games such as those for the Super Nintendo Entertainment System, PlayStation One or Sega Mega Drive, but it is possible to find some translations of current top generation videogames on the Web, such as yet another Brazilian fan translation of Chrono Trigger for the Nintendo DS. (p. 178)	Fan T: It is still unclear whether fan translations utilize similar or very different procedures and translation strategies to their official counterparts, due to a lack of descriptive studies (p. 177) Official T: some companies started to employ a method of 'shared authorship' (Bernal, 2006: 1), allowing the creative and localization departments to work together - Transcreation and Blending videogames (p. 177)	Japan as "Animal or cultur, Memoria into a bl (p. 180)
By the examples provided in the text, the most common translated videogames are: Retro, RPG, Adventure and 8 bit And with videogames such as: FF4, Kirby or Tales of Hearts	Diverse consoles are mentioned however the more common are Nintendo and PlayStation with big catalogues, that are even approached with emulators and PC softwares	The translation foreignizes the work by keeping in references and terminology from the source culture, or domesticates it by replacing such references and terminology with something more familiar to the target culture (p. 8) Both strategies have an impact in the game immersion	Since the source o people o have be Japanes same lev
No specific genres are mentioned in this article, however, some games have been used as examples for the purpose of the author, among them we have: WOW, Gone Home, Paper Mario, Persona 4	In the console game sector mainstream localisedgames might sell in millions of units worldwide, and a single game often offers gamers in excess of 100 hours of gameplay during which they experience intercultural communication via interactive gameplay (p. 13) By mainstream consoles, the author refers to Nintendo, PS and	Game localisation has until recently resisted CAT (Computer-Aided Translation) tools... Game localisation encapsulates many characteristics of translation in the digital age and, in particular, the software-mediated cultural experience that games embody is useful for shedding light on the role of translation in facilitating intercultural communication (p. 2)	Editions success! are expl as a new deploye For Japs directly f

<https://docs.google.com/spreadsheets/d/1VHQZGoXtFRfQCXJNOtC0Vj76ckOWizeToosIVj>

[LRlbg/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1VHQZGoXtFRfQCXJNOtC0Vj76ckOWizeToosIVj/edit?usp=sharing)