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MASTER’S THESIS

**CONTEXT AND GENRE IN VIDEO GAME
LOCALIZATION**

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DECLARATION

I hereby declare that this master's thesis titled as “**Context and Genre in Video Game Localization**” has been written by myself in accordance with the academic rules and ethical conduct. I also declare that all materials benefited in this thesis consist of the mentioned resources in the reference list. I verify all these with my honor.

Date

8/05/2023

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ABSTRACT
Master's Thesis
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The video game industry has managed to reach billions of people, especially in the last ten years, and has started to surpass most entertainment industries in terms of income. This exponential popularity around the world increases the importance of video game localization. The aim of this study is to try to understand the effect of video game genres, contexts, budgets, and reviews on translation and to determine how people dealing with video game localization should improve themselves. In this context, eight different Turkish localized video games from different genres and contexts were selected and the examples taken from them were examined in terms of interaction, genre, context, and terminology. In the study, the source and target texts were compared to determine the features to be considered in translation and to minimize out of context translations. Most of the errors encountered are in terminology due to the lack of knowledge of the context. In addition, it has been observed that Turkish-specific characters still cause problems in many games. Analysis with the collected video game reviews revealed that translation is starting to be taken as a criterion. The analysis on the impact of video game budgets on localization showed that indie games may get high-quality localization when they become popular. It has been concluded that video game localizers who are familiar with video games, have high computer literacy and have a good command of the culture of the source-target language will increase the translation quality.

Keywords: Video Games, Translation Studies, Localization, Audiovisual Translation



ÖZET
Yüksek Lisans Tezi
Video Oyunu Yerelleştirmesinde Bağlam ve Tür
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Video oyun sektörü özellikle son on yılda milyarlarca kişiye ulaşmayı başarmış ve getiri olarak çoğu eğlence sektörünü geride bırakmaya başlamıştır. Dünya çapında katlanarak artan bu popülerlik, video oyun yerelleştirmesinin önemini de git gide arttırmaktadır. Bu çalışmanın amacı video oyun türlerinin, bağlamlarının, bütçelerinin ve incelemelerinin çeviriye etkisini anlamaya çalışmak ve video oyunu yerelleştirmesiyle ilgilenen kişilerin kendilerini ne yönde geliştirmeleri gerektiğini belirlemektir. Bu kapsamda, farklı türlerden ve bağlamlardan Türkçeye yerleştirilmiş sekiz farklı oyun seçilmiş ve içlerinden alınan örnekler etkileşim, tür, bağlam ve terminoloji bakımından incelenmiştir. İncelemede kaynak ve hedef metinler çeviride dikkat edilmesi gereken özelliklerin belirlenmesi ve bağlam dışı çevirilerin en aza indirgenmesi için karşılaştırılmıştır. Karşılaşılan hataların büyük bir çoğunluğu bağlam bilgisinin yetersizliği sebebiyle terminoloji konusunda yaşanmaktadır. Ayrıca, Türkçeye özgü karakterlerin hala birçok oyunda probleme yol açtığı gözlemlenmiştir. Toplanan video oyunu incelemeleri ile yapılan analiz, çevirinin bir kriter olarak alınmaya başlandığını ortaya koymuştur. Video oyunu bütçelerinin yerelleştirmeye olan etkisini araştırmak için yapılan analiz ise, bağımsız oyunların popülerleştiklerinde kaliteli yerelleştirmeler ortaya koyabildiğini göstermiştir. Video oyunu yerelleştiricilerin video oyunlara aşina, bilgisayar okuryazarlığı yüksek ve kaynak-hedef dilin kültürüne hâkim kişiler olmasının çeviri kalitesini arttıracak sonucuna ulaşılmıştır.

Anahtar Kelimeler: Video Oyunlar, Çeviri Çalışmaları, Yerelleştirme, Görsel-İşitsel Çeviri



CONTEXT AND GENRE IN VIDEO GAME LOCALIZATION

TABLE OF CONTENTS

DECLARATION	iii
ABSTRACT	iv
ÖZET	vi
TABLE OF CONTENTS	viii
LIST OF TABLES	x
LIST OF FIGURES	xi

INTRODUCTION	1
--------------	---

CHAPTER ONE VIDEO GAMES AND GAMEPLAY

1.1. GAME AND PLAY	4
1.2. NARRATIVE AND INTERACTIVITY	6
1.3. BEING A GAMER	8
1.4. HISTORY OF VIDEO GAMES	11
1.4.1 Current State of Video Games	13
1.4.2. Video Game Industry in Turkey	14
1.5. CLASSIFICATION OF VIDEO GAMES	15
1.5.1. Video Game Platforms	15
1.5.2. Video Game Genres	17
1.5.3. Video Game Remasters	19
1.6. VIDEO GAMES AND CULTURE	21
1.7. CONCLUSIONS	22

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.

CHAPTER TWO

VIDEO GAME LOCALISATION

2.1. AUDIOVISAL TRANSLATION	24
2.2. LOCALIZATION	27
2.3. VIDEO GAME LOCALIZATION	29
2.3.1. Challenges of Video Game Localization	31
2.3.2. Interaction and Variability	32
2.3.3. The Effect of Video Game Genres on Translation	34
2.3.4. Culturalization	35
2.3.5. Qualifications Required for Video Game Localization	36
2.4. VIDEO GAME REVIEWS	38
2.5. CONCLUSIONS	39

CHAPTER THREE

ANALYSIS OF THE SELECTED VIDEO GAMES

3.1. VIDEO GAME ANALYSIS	41
3.1.1. Interaction	41
3.1.2. Context and Genre	43
3.1.3. Terminology	48
3.1.4 Technical Constraints	58
3.2. COMPARISON OF THE SELECTED GAMES	62
3.3. LOCALIZATION AS A CRITERION IN VIDEO GAME REVIEWS	66
3.4. CONCLUSIONS	69
CONCLUSION	70
REFERENCES	74

LIST OF TABLES

Table 1: Classification and chronological ranking of video game consoles	p.12
Table 2: Video game genres and their best-known examples	p.17
Table 3: Interaction forms in Collaborative Virtual Environments	p.33
Table 4: Comparison of games in terms of genre, context, and terminology	p.62
Table 5: Comparison of games in terms of budget and localization	p.64
Table 6: Localization in reviews of <i>Forza Horizon 5</i>	p.67
Table 7: Localization in reviews of <i>Age of Empires III: Definitive Edition</i>	p.67



LIST OF FIGURES

Figure 1: The Platforms that Developers are Most Interested in	p.16
Figure 2: Layers of Localization	p.28
Figure 3: Dialogue Options in <i>Witcher 3</i>	p.42
Figure 4: <i>Forza Horizon 5</i> Intro Mission	p.45
Figure 5: Pun in <i>Deep Rock Galactic</i>	p.47
Figure 6: Culturalization in <i>Dying Light</i>	p.48
Figure 7: Truck Terminology in <i>Euro Truck Simulator 2</i>	p.50
Figure 8: <i>Age of Empires III</i> Compendium	p.51
Figure 9: Translation Creativity in <i>Dying Light</i>	p.53
Figure 10: Untranslated Parts in <i>Northgard</i>	p.54
Figure 11: Untranslated Part in <i>Satisfactory</i>	p.55
Figure 12: Technical Term in <i>Satisfactory</i>	p.56
Figure 13: <i>Northgard</i> Word Choice and Sentence Structure	p.57
Figure 14: <i>Age of Empires III</i> Tools Menu	p.58
Figure 15: <i>Deep Rock Galactic</i> Bestiary Screen	p.59
Figure 16: Subtitles in <i>Witcher 3</i>	p.60
Figure 17: <i>Euro Truck Simulator 2</i> Truck Service	p.61
Figure 18: Availability of Localization as a Criterion in Reviews	p.68

INTRODUCTION

The worldwide popularity of video games and the consequent growth in the video game industry increases the need for video game localization. Localization is the process of preparing, manipulating, and translating the content of a software product in accordance with the culture and standards of a particular country or region (Esqueda, 2020: 704). It is becoming an indispensable part of the video game industry because companies want to reach wider audiences (Seljan and Katalinić, 2017: 43). Reaching a large audience increases the revenues of companies by creating customer bases in different markets. Video game localization, which was mainly done by amateur translators in the past, is now done by professionals within companies through various layers and processes (Chroust, 2007: 3). Consequently, localization quality is also improving, thanks to higher profit margins and increased video game budgets. However, it is now more difficult to meet the customer expectations that rise at the same rate as the rising budgets. For the new generation of translators to keep up with this rapidly changing sector, it is necessary to focus on audio-visual translation and computer literacy in educational institutions.

This study focuses on Turkish video game localization and defines the background information required for translators interested in this field. The aim of this thesis is to highlight the genres of video games, the context within a video game itself, and the context surrounding the video game industry in the scope of video game localization. The goal here is to introduce the video game industry to translators and to raise awareness for better quality video game localization. It is argued in this study that audio-visual translation and video game localization should be included more in translator training because the foundation of such awareness can be laid in educational processes.

The main research questions of this study are: How does the genre of a video game and its context affect translation? In which direction translators develop themselves to be better at video game localization? The third research question of this thesis is: What is the impact of video game reviews on the video game industry and video game localization? To find answers to these research questions, video games, video game industry and video game reviews are introduced. Then, the subject of translation, that is, the audio-visual translation used in video games, is

presented to lay a foundation for the video game localization. Finally, a data analysis is made with examples from video games and the implementation of the given information is examined. The first two chapters, consisting of literature review, are introductory and descriptive, and the third section, consisting of analysis, is exploratory and explanatory.

In the first chapter, technical, sociological, and cultural information about video games is presented. First, fundamental concepts such as *gameplay*, interaction and narrative which are some of the building blocks of video games, are introduced. After these concepts are clarified, video game players and their role in the video game industry is discussed. This is done because as in most sectors where human interaction is high, the biggest factor affecting this sector is consumers. Naturally, sociological issues are also addressed, as people are actively involved in video games and in the context surrounding video games, both human-to-human and human-to-software. For a better understanding of industry benchmarks, the historical development of video games in the world and in Turkey is examined. In order to provide a clearer picture of the technical dimension of the field, video game classification is emphasized. In the last part of the first chapter, video game culture is also mentioned to further familiarize translators with the context surrounding the video game industry.

In the second chapter, video game localization is introduced in the light of the information given in the first chapter. First, audio-visual translation, which is the foundation of video game translation, and its history are highlighted. Then, localization and video game localization, which are sub-branches of audio-visual translation, are discussed. Here, the similarities and differences between video game translation and other audiovisual translation types are clarified. The difficulties and intricacies of video game localization and the factors that affect video game localization are revealed. Intertextuality, which has an important place in video games as well as in other fields such as literature and film, is also mentioned. After describing the qualifications required for video game translation, video game reviews that have the power to shape the market and determine the buying decisions of people in the video game industry are introduced. The effect of video game reviews

on video game localization, which is one of the secondary issues examined in this study, is also discussed.

The data analysis of the thesis takes place in the third chapter. In the light of the information given in the second chapter, video game localization is examined in 8 different video games. These games have been selected in various genres or contexts for comparison. Examples taken from *Age of Empires III: Definitive Edition*, *Deep Rock Galactic*, *Dying Light*, *Euro Truck Simulator 2*, *Forza Horizon 5*, *Northgard*, *Satisfactory* and *The Witcher III: Wild Hunt* are divided in terms of interaction, context, genre, and terminology. After that, these games are brought together and compared. The comparison touches upon issues such as translation load, terminology, and subtleties to consider. The results obtained from this analysis highlights the points that translators should pay attention to in video game localization. Because a developer's budget affects whether a game is localized, or how many languages it will be localized to, the relationship between development budget and localization is also examined with 4 different games which are; *Cyberpunk 2077*, *Call of Duty: Modern Warfare 2*, *Rocket League*, and *Dinkum*. This secondary analysis is done to show that not only high budget games but also low budget games have potential for localization. The information about video game reviews in the previous chapters is evaluated in more detail with a data analysis that includes a total of 31 video game reviews of *Age of Empires III: Definitive Edition* and *Forza Horizon 5*.

CHAPTER ONE

VIDEO GAMES AND GAMEPLAY

To understand the details and intricacies of video game localization, one must first comprehend video games and the context surrounding them. The sections in this chapter will explain the concepts related to video games and give information about the video game industry. Video game is a general and inclusive term but fundamentally it means the interactive entertainment involving an electronic display. In accordance with its inclusive definition, it offers different types of entertainment and thus appeals to different audiences. In this chapter, starting with the concepts of game and play, studies in the video game industry are introduced in a historical and conceptual perspective. Interactivity, one of the distinguishing features of video games, is addressed within the scope of gameplay. The expectations of the target audience and their relationships with video games are examined in a sociological manner. The wide variety and intertwining features of video game genres are made clear by classification and exemplification. In addition, the relationship between video games and culture is discussed. Having theoretical and practical knowledge of game design, game development and gaming culture can help video game localizers make more informed decisions in translation.

1.1. GAME AND PLAY

This section presents a conceptual framework based on the concepts of game and play, which can be considered as the basis of video games. Although these concepts are quite comprehensive, in the context of video game sector, game can be defined as follows; It is a physical and/or mental challenge in which one or more people participate individually or in teams, within the framework of the determined rules, for the sake of recreational pleasure or winning a prize (Merriam-Webster, 2022a). Game and play are linked because play is the action of the game (2022b). The relationship between game and play is described by David Myers as:

Playing is to games as reading is to books. Sort of. Games are designed to be played, just as books are designed to be read. Both playing a game and reading a book involve transforming a pre-determined set of rules into a more immediate phenomenological experience. And, of course, reading includes a

larger set of behaviors than just reading books, just as playing includes a larger set of behaviors than just playing games (Myers, 2009: 45).

Based on this description, it can be said that games have boundaries and tactics used within its limits. Whereas playing is an open-ended field, the world and the rules in this field depend on the imagination. Although playing is a concept associated with children, it is an activity performed by people of all age groups and even intelligent animals. It has an important place in the physical and mental development of children. Playing allows them to interact and socialize with the world (Ginsburg, 2007: 183). This is also present in a lot of animal species, for example, it is the same evolutionary process in which kittens learn to socialize and survive through playing. Based on these definitions, playing video games is both a physical and a mental activity, as it includes eye-hand coordination and conscious decision-making processes. Gameplay processes in video games may seem complex. For this reason, new concepts have been proposed to explain these processes. While the game rules in video games determine what the player can and cannot do, the actual information that player learns to play a game can be defined with the concept of *gameplay gestalt* (Lindley, 2004: 186). What is required to progress and be successful in the game is not the player's awareness of the limits determined by the rules, but learning the possible tactics and gameplay styles, either with a guide or by trial and error. For example, the gameplay in *Age of Empires*, a strategy game (Table 2) series, can have similar characteristics with other strategy games, with actions such as collecting resources, building a city with these resources, managing the economy, and leading an army to defeat other players. Players who learn such cycles are more comfortable adapting to those types of games. In this case, the gameplay gestalt can also be defined as the patterns and techniques that the player uses to interact with the systems and rules in the video game (Silva, et al., 2019: 2).

At this point, it is necessary to mention the social context of video games. Games are developed to offer certain social environments. People can play solo single player, cooperatively with friends or competitively online with people they don't know. Although not limited to these, the change in the social context of the games greatly affects the game experiences of the people. While playing alone can

be a comfortable experience, playing competitive online games with strangers can create exciting and sometimes toxic experiences (Vella et al., 2016: 764-766).

1.2. NARRATIVE AND INTERACTIVITY

The relationship between narrative and gameplay is a central issue in video game studies and video game development (Lindley, 2002: 203). Video games don't just evolve technically, they evolve narratively as well. Video games don't have to have a narrative, but games that are story-driven do have it; For this reason, it has been stated that narrative elements can be successfully applied to video games with stories (Farca, 2011: 102). The narrative in video games is different from the narrative in theater and movies. In video games, diegetic¹ narrative is generally on a lesser level. This is because the interactivity in games makes it difficult for developers to predict what moves the player will make at any given point. However, sometimes mimetic² narrative makes things interesting by allowing players to take part in the narrative of the story, albeit to a limited extent (Majewski, 2003: 48-49). Of course, this will vary depending on the game type. Today, most video games have a story to tell, with the exception of simple rule-based games such as Chess or Backgammon in video game format. The stories in the narrative can progress in the form of introduction, development, and conclusion, as in the movie industry. But it does not necessarily have to follow such a sequence. Video games may offer a plot-driven on the rails experience and/or a free sandbox³ experience that can last as long as the player wishes. What distinguishes narrative in video games from narrative in the movie industry is interactivity. Apart from interactive media such as the internet and smartphones, the only interactive works that have achieved great success are video games (Frome, 2019: 858). Video games developed today are productions that contain various multimedia and multimodal content, and developers aim to put the

¹ A narrator tells the story.

² A direct presentation of speech and action.

³ Sandbox is a type of video game genre in which the player does not need to achieve a specific goal. It is characterized with freedom to explore.

player into the action as much as possible. This means that interactivity is prioritized. Although the concepts of gameplay and interactivity, which are often confused with each other or used in the same sense, are closely related but they are not the same thing. Gameplay includes interactive and non-interactive content, but interactive content does not have to include gameplay. For example, cutscenes that tell the story within the game are non-interactive content. Cutscenes are cinematics that are shown to the player when a certain part of a game is reached. For example, when a task is completed or the main character dies, a relevant cutscene is shown to the player to show the results of their actions. Cutscene and its relationship with the gameplay is expressed by Rune Klevjer as follows:

A cutscene does not cut off gameplay. It is an integral part of the configurative experience. Even if the player is denied any active input, this does not mean that the ergodic experience and effort is paused. A cutscene is never truly 'cinematic', no matter how poorly implemented it may be. In any case, it can not avoid affecting the rhythm of the gameplay (Klevjer, 2002: 195).

Cutscenes and dialogues often provide the narrative in video games. In the gameplay, player completes certain tasks to progress through the story. In the examples presented in this thesis in the following chapters where the interaction is at the highest level, it can be observed that the story in the game changes in line with the decisions made by the player. The player-controlled story, which was prominent with role-playing games in the past, is available in many game genres today. For example, in *Grand Theft Auto V*, which is an action-adventure game (Table 2), there are three different story endings that change according to the decisions made by the player. In addition, after the main story of the game is over, the player can continue to wander freely and explore the game world in a sandbox-like manner. In such games, there are often side stories that support the narrative, in addition to the main story. Side stories can be encountered in an open world game, for example, when an NPC⁴ gives the player a short mission that doesn't advance the main story. Sometimes developers release add-on packs to a game for an extra fee, which can include large-scale side stories. For example, the *Hearts of Stone* and *Blood and*

⁴ Non-playable character or non-player character.

Wine expansion packs for *The Witcher 3: Wild Hunt* are well-known in this regard. The side stories presented in these packs are as elaborated as the main story of the game and contain different endings depending on the player choices, as in the main story.

1.3. BEING A GAMER

In this section, people who play video games (gamers) are discussed. Knowing who the gamers are provides a better understanding of their expectations, and their expectations are partly shaped by the identities they adopt. In an interview conducted by Jonathan Rutherford, Homi Bhabha summarizes the multiple identities of people as follows: “‘The people’ always exist as a multiple form of identification, waiting to be created and constructed” (1990: 220). In other words, people do not exist just with the identity of a gamer. They want to highlight the ones they like among their different identities, or they may display different identities to fit in different environments. People who play video games are often identified as gamers, but being a gamer is a self-definition. That is, not every video game player has to be defined as a gamer. In fact, even though they play video games actively, some people don't want to be identified as gamers because of the bad connotations of the word “gamer”. According to the answers given by people who participated in an interview on this subject, it has been revealed that there are prejudices such as the idea that playing video games is not “cool” and that playing video games makes people look antisocial and nerdy (Shaw, 2011: 38). However, considering that this study was done 10 years ago, such prejudices are decreasing with the increasing popularity of video games and the further establishment of freedom of identity. A later study points out that people feel connected when playing multiplayer games, which goes against the prejudice that video games inhibit sociality (Rogers, 2017: 10). Another stereotype about gamers is that only men play video games, but studies show that women play almost as much as men (Paaßen et al., 2017: 431). However, it is rare for women who play video games to be described as hardcore gamers. Although the image drawn in the media and the female identity seem incompatible with the gaming identity, this situation has started to change in recent years and women have

started to take part in the video game industry more frequently both as gamers, reviewers, and developers.

It is common for those who identify as gamers to use different definitions such as casual gamer or hardcore gamer. The difference here is usually due to the genre of game and the time spent. Here, hardcore gamer doesn't necessarily mean video game addict. Psychologist Professor Elizabeth Hartney's comment on the relationship between video games and addiction:

Playing video games a lot is not necessarily a sign of a video game addiction, however. Some people are simply very enthusiastic about them and that is how they enjoy spending their free time. If gaming creates distress and interferes with a person's ability to function in their life, then it might be a sign that there is a problem (Hartney, 2023).

For example, hardcore gamer definition can be made for those who play competitive and demanding games. Demanding, both in terms of time spent and skill required. However, such definitions do not have definite limits, as it is a case of determining one's own identity. People who spend a lot of time with games but play peaceful and single-player games instead of online competitive games may not define themselves as hardcore gamers. As the presence of video games increases both in the public and in the academia, the issue of how people define themselves remains inconclusive. For this reason, besides what people do with games, the issue of how games affect people comes to the fore. The idea that video games are culturally independent, consequence-free, and trivial activities, is no longer valid (Toft-Nielsen and Krogager, 2015: 72). Games affect the players' bodies physically, mentally, and emotionally, and it would be more logical to conduct multidisciplinary studies to examine these effects and to make the results contribute to the field. Thanks to the developing technology, the fact that people's brain activities can now be examined in more detail paves the way for such studies. For example, children who play video games for three hours or more a day show higher brain activity in areas of the brain associated with attention and memory than those who don't play at all, according to MRI brain imaging analyzes of nearly 2,000 children aged 9-10, conducted by researchers from the University of Vermont (National Institute on Drug Abuse, 2022). With such studies, it would be useful to scientifically examine the benefits and harms of video games on people, because the time spent on this type of media, which can be considered relatively new in human history, is quite high.

By examining the video game industry in a sociological manner, the relationship between gamers and games can be better understood. Also, seeing the game industry from the point of view of video game developers will provide more logical solutions to the problems that arise during the studies in this field. First, it is necessary to mention the concepts that led to the emergence of gaming capital. First, it would be useful to know some of the key Bourdieusian concepts. Here, concept of capital comes to the fore. It is divided into four as economic capital, cultural capital, symbolic capital, and social capital. With these concepts, power relations in social life are explained from a sociological and economic point of view (Bourdieu, 1986: 16). Cultural capital is also divided into three in itself;

Cultural capital can be described as embodied capital, the knowledges, skills, and dispositions of the bodily habitus; objectified capital, the cultural goods, material objects and media physically transmissible to others; and institutional capital, the academic qualifications, professional certificates and credentials an individual holds (Walsh and Apperley, 2008: 6).

Literacy can be given as an example of cultural capital because it is the key to the door of knowledge. Economic capital, as the name suggests, represents a power that can be directly converted into money. Social capital represents the power of networks of relationships between people and the ability to access social and cultural institutions.

The concept of *gaming capital* is based on Bourdieu's concept of cultural capital, and it was introduced by Mia Consalvo to describe the development and diversity in the gameplay activity and the power relations in the video game industry (Consalvo, 2007: 4). Gaming capital accumulates in people and institutions that have accomplished tangible work in the video game industry. It can also be linked to social capital. Although playing games is seen as an antisocial activity by non-gamers, it is actually one of the environments that enable people, especially young people, to socialize. In today's world where societies are rapidly becoming individualized, face-to-face socialization is an activity that most people cannot perform adequately. Games are preferred by young people as they offer a more interactive experience than socializing on social media. It is known that online games already provide very social environments, but single-player games also provide socialization indirectly. Game forums, groups, and pages on different platforms on the Internet such as Reddit serve as a meeting and socializing environment for

players who share the same tastes. Social capital adds even more value to gaming capital in such environments.

Although gaming capital is valid among people who define themselves as gamers, it is a capital that game developers may also take into account, consciously or unconsciously. It is possible for people who have accumulated high gaming capital to convert it into economic capital. For example, game developers and technology companies may sponsor video game streamers. Moreover, when a person or a company with high gaming capital conducts a video game review, it can be seen that more people show interest and take their remarks into account when deciding on buying that video game. For example, reviews posted on Metacritic, a very popular website that reviews movies, TV shows, music albums, and video games since 1999, will get more attention and recognition from gamers.

1.4. HISTORY OF VIDEO GAMES

In this section, the state of today's video game industry is examined by looking at the history of video games both in the world and in Turkey. Although the history of video games started with experimental studies in the 1950s, it was in the 1980s that it became widespread among the public. Arcade video games and console video games started to be developed in the United States. Atari is one of the pioneering companies. Video games quickly spread to Japan and caused the establishment of a much larger game industry there, laying the foundations for major game developers that are still active today such as Nintendo, Sega, and Konami. So much so that Japanese companies began to dominate the American market. In addition, Korea and China are in a substantial position both in game production and in gaming.

The history of video games is also the history of game consoles that allow video games to be played, and these consoles are still developing in direct proportion to computer technologies. The table below summarizes the history of game consoles from pre-1975 to post-2006.

Table 1: Classification and chronological ranking of video game consoles

Classification	Company	Console	Year
Proto-Class		Pre-Platform Consoles	Pre-1975
Early 8-Bit Class	Fairchild Camera and Instrument	Fairchild Channel F	1976
	Atari, Inc.	Atari 2600	1977
	Magnavox, Phillips	Magnavox Odyssey 2	1978
	Mattel Electronics	Intellivision	1979
Middle 8-Bit Class	Coleco	ColecoVision	1982
	Atari, Inc.	Atari 5200	
Late 8-Bit Class	Nintendo	Nintendo Entertainment System (NES)	1985
	Sega	Master System	1986
	Atari, Inc.	Atari 7800	
Early 16-Bit Class	Hudson Soft, NEC Home Electronics	TurboGrafx-16	1989
	Sega	Sega Genesis	
Late 16-Bit Class	Nintendo	Super Nintendo Entertainment System (SNES)	1991
32-Bit Class	The 3DO Company, Panasonic	3DO	1993
	Atari Corporation, IBM	Atari Jaguar	
	Sega	Sega Saturn	1995
	Sony	PlayStation	
64-Bit Class	Nintendo	Nintendo 64	1996
128-Bit Class	Sega	Dreamcast	1999
	Sony	PlayStation 2	2000
	Nintendo	Gamecube	2001
	Microsoft	Xbox	
Internet Class	Sony	PlayStation Portable (PSP)	2004
	Nintendo	Nintendo DS	
	Microsoft	Xbox 360	2005
	Sony	Playstation 3	2006
	Nintendo	Wii	
		Next-gen Consoles	Post-2006

Source: Kemerer et al., 2017: 12.

The bit classes in this table indicate the hardware levels, graphics capabilities and technical limitations of the consoles of that period. Developing technology has provided the advancement of all these features and has paved the way for the creation of more complex and sometimes realistic games.

1.4.1 Current State of Video Games

Since the 1990s, video games have become popular not only on consoles but also on personal computer operating systems such as Commodore 64, Macintosh, and Windows. As video game platforms have evolved, so has the amount of content and features that developers can offer in games. For example, realistic graphics make games more believable and immersive. When making a game, developers take into account the technical features of the platform on which they will present the game, because realistic graphics require demanding technical components. While a game is being developed, making it compatible with the past generation Playstation 4 allows more users to access it, but it may cause the potential of the current Playstation 5 to not be fully utilized.

One of the most important components in many video games is artificial intelligence. The possibility that artificial intelligence could become equivalent to, or even superior to, human intelligence in the context of video games has long been debated. Chess has long been used by computer scientists as a way to test artificial intelligence. IBM Deep Blue, an artificial intelligence supercomputer developed for playing Chess, succeeded in beating the world Chess champion Garry Kasparov in 1997 after many trials and showed the world the potential of artificial intelligence in solving complex problems (Greenemeier, 2017; IBM100, 2011).

Even though video game industry has a history of only 50-odd years, the high pace of development of the computer technologies has made it a constantly developing industry. More than 1 billion people play video games today (Smith, 2020: xix), and these games range from simple puzzle-style mobile games to high-end computer games with budgets even higher than Hollywood movies. In an environment where the differences between video games can be so great, the issue of classification becomes important. This is where different types of video games come

into play. This topic will be explained in more detail in the classification of video games chapter.

1.4.2. Video Game Industry in Turkey

Video games started to become widespread in Turkey in the early 2000s. One of the important factors in its popularity among children and adolescents is internet cafes. The most popular game in internet cafes of that period was *Counter Strike* (2000), a first person⁵ shooter game (Table 2). One of the reasons for its popularity is that it can be played in both local and online multiplayer and due to its simple content, no foreign language is required to play. Therefore, there was no real need for localization to play it. People of all age groups have become involved with video games with the popularization of mobile games in the 2010s. According to a study that collected data to evaluate the feasibility of studies on the game industry and localization show that the video game market in Turkey is the 18th largest in the world (Allcorrect Games, 2022). Especially during the pandemic, as in the whole world, the video game market in Turkey has grown, and a large part of this growth is due to the widespread popularity of mobile games. The most important feature of mobile games is that they are very easy to access and can be played anywhere. With the developing technology, mobile phones now function like portable game consoles such as PSP or Nintendo DS (Table 1).

Until recent years, domestic video game production was limited in Turkey, and now most companies are interested in mobile games due to profitability. Video game budgets are generally not very high. However, TaleWorlds Entertainment, which can be considered one of the pioneers, is a company that has succeeded in producing worldwide popular games such as *Mount & Blade* franchise. Most of the games popular in Turkey are games developed by foreign countries. For example, *Counter-Strike: Global Offensive* (CS:GO) was developed by the American Valve Corporation, *Grand Theft Auto Online* (GTA Online) was developed by the British

⁵ Games that play from the point of view of the character in the game.

Rockstar North, and *PlayerUnknown's Battlegrounds* (*PUBG: Battlegrounds*) was developed by the South Korean PUBG Studios. It is true that these games are very popular not only in Turkey but also all over the world, according to the number of active players. Some of the main reasons why competitive games like *CS:GO*, *PUBG* and *Valorant* are so popular is that they are free to play. In conclusion, considering that 80% of the Turkish population does not speak English (Allcorrect Games, 2022), the importance of localization studies becomes evident. Just as with literature, localization can encourage local video game production by bringing foreign games to wider audiences in the country.

1.5. THE CLASSIFICATION OF VIDEO GAMES

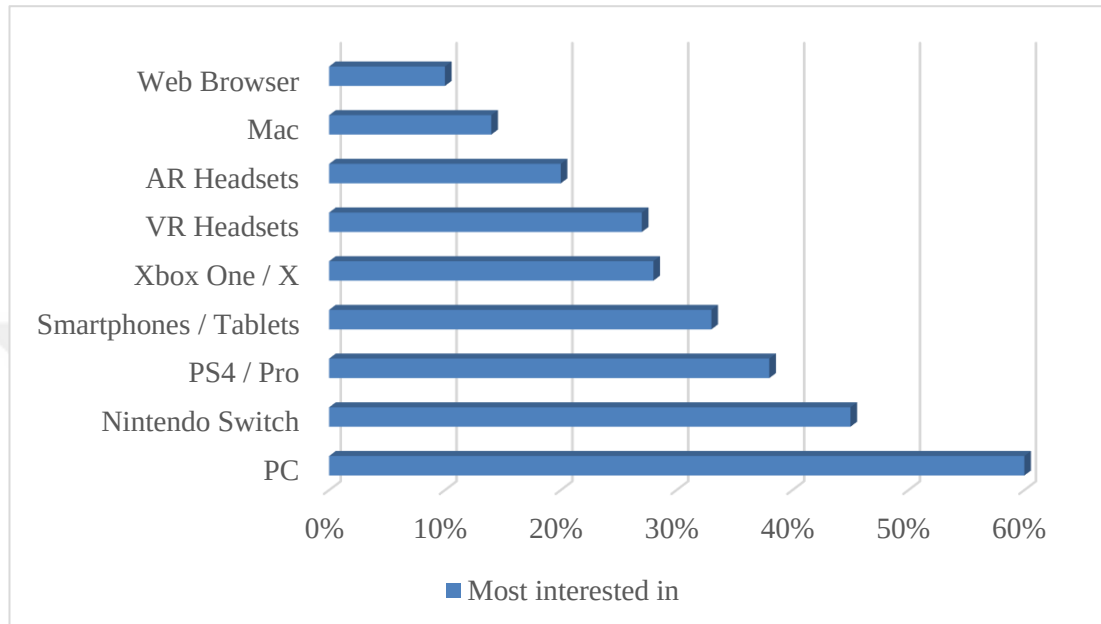
This section describes the different standards used to classify video games. Video games are diverse productions in terms of content, platform, context, purpose, and technology. Therefore, to make studies in this field more tangible, there is a need for classification of video games. In most of the studies, the terms game type or game genre are generally used to describe games that have one or a group of common features; and games that have different features in addition to these common features are distinguished under sub-genres (Heintz and Law, 2015: 176). These classifications are usually made based on the way the player interacts with the game and the content the game offers. Due to its ever-changing and intertwined nature, a formal and definitively accepted classification does not yet exist. Still, genre classifications are very useful, as they allow those interested in video games to easily find the content they want. Here, video game genres, and platforms that enable video games to be played will be examined. Then, the increasing number of remaster video games will be discussed.

1.5.1. Video Game Platforms

Video game platforms are devices that make it possible to play video games, and these platforms evolve simultaneously with computer technologies (Table 1). Since video game developers want their games to reach large audiences, they prefer to develop games for whichever platform is more popular. For example, PCs are

more preferred than any other gaming platform, according to a 2019 survey of nearly 4,000 game developers (GDC, 2019: 13). The results of the survey are as follows:

Figure 1. The Platforms that Developers are Most Interested in



Source: GDC, 2019: 13.

The results of this survey show that game developers act according to player preferences and PC stands out as the most preferred game platform. This may be because installing games on PCs that are already used for work or school activities is more affordable than paying for an extra device just to play video games. In other words, it can be said that PCs are more accessible in general. Due to this popularity, games that were previously exclusive to consoles are now being offered to PCs as well. However, building a high-end gaming PC is often more expensive than buying a console. For this reason, the final choice is left to the person's budget, taste, and expectations from video games. In addition, considering that the general population's interest in smartphones and mobile gaming is increasing especially after the Covid pandemic, it can be understood why developers turning to mobile platforms. Handheld consoles like Nintendo Switch and smartphone games are preferred because they give the person the opportunity to play games anytime, anywhere.

1.5.2. Video Game Genres

Video game genres often determine the type of interaction the player has with the interactive entertainment software. For example, in a shooter game the player controls a single character through that character's eyes and tries to shoot enemies with some kind of weapon, while in a real-time strategy game, the player can control an entire army from an overhead perspective. Such differences can also change the storytelling and the way the dialogues are presented. Classification and categorization facilitate access to desired content in video games as well as in the fields of literature, cinema, and music. It would be more logical to adopt a flexible approach in the classification of such artistic activities for continuity (Li and Zhang, 2020: 65). A video game genre is formed by an innovative video game and continues with new games inspired by that game. In this process, games that manage to add new features on top of the main genre or blend them with other genres create subgenres. The table below presents video game genres, subgenres, and the best-known examples of these genres.

Table 2: Video game genres and their best-known examples

Genre	Subgenre	Example
Action	Platform Games	<i>Super Mario Bros.</i>
	Shooter Games	<i>Counter-Strike</i>
	Fighting Games	<i>Mortal Kombat</i>
	Beat 'Em Up Games	<i>Final Fight</i>
	Stealth Games	<i>Metal Gear Solid</i>
	Survival Games	<i>DayZ</i>
	Rhythm Games	<i>Guitar Hero</i>
	Battle Royale Games	<i>PlayerUnknown's Battlegrounds (PUBG)</i>
Action-adventure		<i>Grand Theft Auto V</i>
	Survival Horror Games	<i>Resident Evil</i>
	Metroidvania Games	<i>Hollow Knight</i>
Adventure	Text Adventure Games	<i>AI Dungeon</i>
	Graphic Adventure Games	<i>Life is Strange</i>
	Visual Novels	<i>Ace Attorney</i>
	Interactive Movies	<i>The Wolf Among Us</i>
	Real-time 3D Adventure Games	<i>The Forgotten City</i>
Puzzle	Breakout Clone Games	<i>DX-Ball</i>
	Logical Games (Physics, Coding)	<i>Portal</i>
	Trial-and-error / Exploration Games	<i>Limbo</i>

	Hidden Object Games	<i>Mystery Case Files: Huntsville</i>
	Reveal the Picture Games	<i>Reveal!</i>
	Tile-matching Games	<i>Tetris</i>
	Traditional Puzzle Games	<i>Microsoft Solitaire</i>
	Puzzle-platform Games	<i>Unravel</i>
Role-playing (RPG)	Action Role-playing Games	<i>The Witcher 3: Wild Hunt</i>
	Massively multiplayer online role-playing games (MMORPG)	<i>Knight Online</i>
	Roguelike Games	<i>Hades</i>
	Tactical Role-playing Games (TRPG)	<i>Jagged Alliance</i>
	Sandbox Role-playing Games	<i>The Elder Scrolls V: Skyrim</i>
	First-person Party-based Role-playing Games (DRPG)	<i>Etrian Odyssey</i>
	Japanese Role-playing Games (JRPG)	<i>Final Fantasy VII</i>
	Monster Tamer Games	<i>Pokémon Sword and Shield</i>
Simulation	Construction and Management Simulation Games	<i>SimCity</i>
	Life Simulation Games	<i>The Sims</i>
	Vehicle Simulation Games	<i>Euro Truck Simulator 2</i>
Strategy	4X Games	<i>Sid Meier's Civilization V</i>
	Artillery Games	<i>Worms</i>
	Auto Battler Games (Auto Chess)	<i>Dota Underlords</i>
	Multiplayer Online Battle Arena Games (MOBA)	<i>League of Legends</i>
	Real-time Strategy Games (RTS)	<i>Age of Empires</i>
	Real-time Tactics Games (RTT)	<i>World In Conflict</i>
	Tower Defense Games	<i>Plants vs. Zombies</i>
	Turn-based Strategy Games (TBS)	<i>Total War: Rome II</i>
	Turn-based Tactics Games (TBT)	<i>X-COM</i>
	Wargames	<i>Wargame: Red Dragon</i>
	Grand Strategy Wargames	<i>Hearts of Iron</i>
Sports	Racing Games	<i>Need for Speed</i>
	Sports Games	<i>FIFA</i>
	Competitive Games	<i>Rocket League</i>
	Sports-based Fighting Games	<i>Fight Night Round 3</i>
Massively Multiplayer Online Games (MMO)		<i>World of Warcraft</i>
Miscellaneous	Board Games or Card Games	<i>RISK: Global Domination</i>
	Casino Games	<i>Four Kings Casino & Slots</i>
	Casual Games	<i>Stardew Valley</i>
	Digital Collectible Card Games	<i>Hearthstone</i>
	Gacha Games	<i>Genshin Impact</i>

	Horror Games	<i>Outlast</i>
	Idle Games	<i>Cookie Clicker</i>
	Party Games	<i>Pummel Party</i>
	Photography Games	<i>Pokémon Snap</i>
	Programming Games	<i>Pony Island</i>
	Social Deduction Games	<i>Among Us</i>
	Trivia / Quiz Games	<i>GeoGuessr</i>
	Typing Games	<i>The Typing of the Dead</i>
Video Game Genres by Purpose	Advergames	<i>Citroën C4 Robot</i>
	Art Games	<i>Papers, Please</i>
	Casual Games	<i>Minesweeper</i>
	Educational Games	<i>Big Brain Academy</i>
	Esports Games	<i>Valorant</i>
	Exergames	<i>Ring Fit Adventure</i>
	Serious Games	<i>America's Army</i>
Sandbox		<i>Minecraft</i>

Source: Adams, 2010: 70.

The classification of video game genres has not been finalized yet, as games generally blend the features of different genres instead of having the features of only one genre, and new genres are constantly emerging. That is, the items in this table are open to change and evolution. This confirms the need for a flexible approach. Since a video game can contain features of more than one genre, usually the most dominant features are considered. An example for such an approach is done by the popular gaming platform Steam. In Steam, it is the players themselves who assign the genres to the games, and it stands out as a user-oriented approach. For the game genres specified on the promotional pages of the games, Steam states “Popular user-defined tags for this product:”. In this case, *Age of Empires IV* is taken as an example, there are “Strategy, RTS, Medieval, Multiplayer, War” tags and users can define new genre tags with the “+” button.

1.5.3. Video Game Remasters

People play video games starting from childhood to adolescence and even adulthood, and this can make them experience nostalgia when they play the games that they played in the past. Although nostalgia is normally associated with older memories, even 10-year-old games can feel nostalgic due to the rapid development in the video game industry. Also, 10 years is a long time for a 7-year-old. Scholars

working on this subject have been examining the relationship between old video games and nostalgia since the mid-2000s and have concluded that a 15-year-old game can be considered old (Neill Hoch, 2020: 1). Video game developers have taken advantage of this feeling of nostalgia, especially in recent years, and have popularized video game remasters⁶, remakes⁷ and reboots⁸. These three concepts can sometimes be confused with each other but being aware of the differences between them can make expectations for such games more reasonable. While the awareness of the players can shape the expectation in their minds when purchasing a game, the awareness of the translators can enable them to translate by taking into account the conscious changes made in the old and new game versions, or in other words, between the original and the remaster. The community's perceptions at the time the original game was released may have changed when the remaster came out, and game developers can make changes to keep up with this situation. This can be given as an example of the impact of changing culture on video games.

It may be worth paying attention to the changes made in all kinds of reproduction games. Because when a game made in the standards of a previous period is re-released, it may be updated in line with the standards of this period. An example that has caused controversy on this topic is *Age of Empires III: Definitive Edition* (Tantalus Media, 2020). It is a real-time strategy game (RTS)⁹ (Table 2) and takes place during the period when European powers colonized the Americas, and the African continent was exploited and enslaved. The controversial issue in the original *Age of Empires III* (2005) was that slavery activities were never mentioned in the game, almost as if on purpose. Fast forward to 2020, among the improvements made in the Definitive Edition, it was claimed that the offensive content in the game was changed and made appropriate. Changing the names of Native American societies in the game to their original names instead of the names given by the colonists is among

⁶ The modernization of a game while retaining its essential features.

⁷ Complete reproduction of a video game while retaining its essential features.

⁸ Reproduction of a video game keeping only the theme.

⁹ Real-time strategy (RTS) games are a subgenre of strategy video games in which all players control their units simultaneously.

the prominent changes. Names of French origin and derogatory meaning, Sioux were changed to Lakota and Iroquois to Haudenosaunee. These changes were made so that those societies would not be offended by the game.

1.6. VIDEO GAMES AND CULTURE

In this section, video game culture is explained by examining the relationship between video games and culture. Simple games such as *Solitaire* and *Minesweeper* aside, the variety of content offered by modern video games is high. Much of these games do not consist of actions performed within the framework of simple game rules. Apart from navigating the game world and manipulating objects, games involve learning by reading the information presented and speaking to the characters. In fact, this exchange of information is also done between other players in online games. Naturally, cultural interaction can often be found in this environment where human or human-like elements are plentiful. For this reason, most video games can be described as “hybrid cultural texts” (Kubiński, 2016: 22).

While the changes in society are reflected in the culture over time, the effects of these changes can also be seen in video games. Different societies in the world produce different cultures and the video game industry, which offers a wide range of genres, has created, and still creates different subcultures in itself. Anyone who is familiar with video game culture may rightly argue that there is no single and unified game culture, because there are huge differences between a Sports game and an MMORPG (Table 2) game or a Mobile game, both in terms of player experience and content (Muriel and Crawford, 2018: 2). Even among games of the same genre, each game can have its own subculture. For example, *Valorant*, released by Riot Games in 2020, managed to create its own audience and subculture in these 3 years, surpassing the deep-rooted competitive FPS games that came before it. Gaming subcultures

often have forums and pages where players share screenshots, artwork, and memes¹⁰ with each other. There are also plenty of people who meet and start playing games together in these environments. When there is a certain community, there may be people who support each other, as well as those who create opposition. In advanced cases of this, toxic environments can be created. It is possible to see this situation in the comments made to the games. For example, most reviews for *Counter-Strike: Global Offensive* on the Steam platform refer to how toxic the game's community is. Conversely, *Deep Rock Galactic* reviews praise the game community for being friendly. Although video game culture is a field that evolves with internet culture, both can offer elements that affect and change each other. As a hybrid field that is a combination of different fields such as computing, technology, entertainment and socialization, video games have become a popular subculture in most of the countries in the world. The economic successes achieved by the games have supported the validity and acceptability of this new media subculture formed by gamers.

1.7. CONCLUSIONS

Video games are versatile entertainment media products. They contain features from different fields such as card games, board games, role-playing games, arcade games, TV series and movies. Their stories, conveyed through the cutscenes and dialogues, are similar to movies but the audience takes an active role in video games. The active role of gamers also makes them part of the experience. Therefore, gamer behavior can shape this industry and is a subject worth examining. Moreover, video games are productions that are directly dependent on technology. The technological development of gaming platforms has revolutionized video games in terms of both interaction and graphics. Now, productions that are rich in both story and gameplay can be produced with large budgets. With video game development becoming more accessible, indie developers can also achieve great success. Due to

¹⁰ An image, video, or piece of text, often humorous in nature, that is copied and disseminated rapidly by internet users. A meme often goes through minor changes throughout its lifespan. Eventually, it fades into oblivion with the emergence of new memes.

the increasing demand for video games during the Covid pandemic, mobile games have allowed video games to spread to an even wider audience.

Before going into the topic of video game localization, the classification of video games was discussed, and it was revealed how wide range of products video games can be. Even in a basic video game genre study, 12 genres and close to 70 subgenres were found, and these numbers could be expanded over time. For translators, at least basic knowledge of video game genres will provide information on what kind of content will be encountered in the translation of these genres. Another aspect that translators should consider is culture. Video games are cultural products because they reflect the perspective and worldview of the culture in which they are produced. This naturally affects the content and language use in a game. In this sector, especially in multiplayer games and game forums, human relations are at the forefront and cultural transfer is high, both human-to-human and game-to-human. Finally, as remasters of old video games are translated, changes to content must be studied and adapted to current norms because they reflect cultural change in the world.

CHAPTER TWO

VIDEO GAME LOCALIZATION

2.1. AUDIOVISUAL TRANSLATION

In this section, audiovisual translation and its relevant sub-branches are examined together with their historical development. Audiovisual translation is a field of translation studies that deals with multimedia translation and multimodal translation. This means that this field deals with all kinds of visual and auditory content. It includes the translation of languages used in all electronic devices. Unlike literature such as books and magazines, movies and games contain many different sensory and communicative modes, and each mode is used to convey a certain message or emotion. As the translation of these extra content requires different approaches than the traditional literary translation, the field of audiovisual translation is needed. Today, popular media such as movies, TV series and video games are among the areas where audiovisual translation is used the most. In the field of audiovisual translation, one of the most used techniques in the mentioned popular media types is subtitle translation or subtitling. Jorge Díaz-Cintas describes subtitling as follows:

Subtitling may be described as a translation practice that consists of rendering in writing, usually at the bottom of the screen, the translation into a target language of the original dialogue exchanges uttered by different speakers, as well as all other verbal information that appears written on-screen (letters, banners, inserts) or is transmitted aurally in the soundtrack (song lyrics, voices off) (2020: 150).

There are some key features that distinguish subtitle translation from traditional translation. The translators must convey meaning, but they also need to comply with spatial and temporal constraints in various platforms. Therefore, computer literacy is also very important in order to effectively use the software that enables subtitle translation. For this reason, various training models have been proposed to focus on subtitle translation in translator training. For example, in subtitle translation courses using a situated learning-oriented education model, students are encouraged to both take responsibility and use their creativity through project-based education that emphasizes first-hand learning (Okyayuz and Kaya,

2016: 265). If translation students gain experience in the training, they stand out in business life and meet the expectations of companies more easily.

The second most popular type of audiovisual translation is dubbing. Frederic Chaume defines dubbing as follows: “Dubbing is a linguistic, cultural, technical and creative team effort that consists of translating, adapting and lip-syncing the script of an audiovisual text” (2020: 104). Dubbing requires a larger budget and greater teamwork than subtitle translation. The advantage of dubbing over subtitles is that the viewer can see and hear the content in their native language. In this technique, not only translators, but also people from many different fields such as voice actors, dubbing directors, sound engineers can take part. The worldwide demand for content on platforms such as Netflix, Amazon Prime Video, Disney+, Apple TV Plus, HBO Max and even YouTube, especially since the Covid pandemic period, has led to an increase in the demand for audio-visual translation, both in subtitling and dubbing form; Therefore, audio-visual translation has become one of the most dynamic fields of translation studies today (Cintas and Massidda, 2020: 256). It is important for translators to familiarize themselves in the different techniques of audio-visual translation for their professional development.

Another function of audiovisual translation is to provide access to media content for people with certain disabilities. The two main techniques used to provide media accessibility in this field are audio description and subtitling for the deaf and the hard of hearing (SDH), also called closed captioning (CC). Audio description technique is used for blind and visually impaired people. In this technique, visual contents and sounds in environments such as movies, TV shows, museums and theaters are described to these people with an audio commentary (Mazur, 2020: 228). In addition to the dialogue transfer in standard subtitles, SDH or CC is a subtitle technique that depicts who is speaking, sounds, music, and other paralinguistic features to the audience (Szarkowska, 2020: 253). These techniques have started to be integrated into video games more frequently in recent years. For example, *Forza Horizon 5*'s screen reader feature is available for those who have difficulty reading the texts in the menus.

Audio-visual translation (AVT), which dates back to the silent period in cinema in the early 1900s, has started to occupy an important place in the film

industry since the 1930s. Although the development of AVT varies according to the region, countries with large film industries such as France, Germany and Italy prefer more costly dubbing works instead of subtitles (O'Sullivan and Cornu, 2019: 21). However, the subtitle method remains popular among movie enthusiasts. Empirical research on audiovisual translation began in the 1980s, and the topics examined generally concern the experience of the end users (Perego, 2016: 156). In these studies, translation strategies are explored to create high-quality translations that the end user can relate to and enjoy. However, the areas of importance change over time and academic studies in this field have gone through certain stages with the effect of other works from translation studies. Turns in translation studies naturally have a place in the development of AVT, and it is suggested that there are four turns that affect AVT studies, namely descriptive turn, cultural turn, sociological turn, and cognitive turn (Chaume, 2018: 42). With the descriptive turn, focus was on the source and target text and functionalist approaches were applied. With the cultural turn, focus shifted from text to factors such as ideology, patronage, censorship, and identity that affect the text. The sociological turn was shaped by Bourdieu's theories, which some of them also mentioned in this thesis, and brought the agents involved in audiovisual translation to the fore. Finally, with the cognitive turn, brain activities and decision-making processes of both the translator and the audience began to be studied. One of the biggest factors accompanying these stages is the rapidly developing technology. Processes that were carried out manually in the past years are now automated, and as in other professions, translation inevitably begins to intertwine with jobs involving computer technologies.

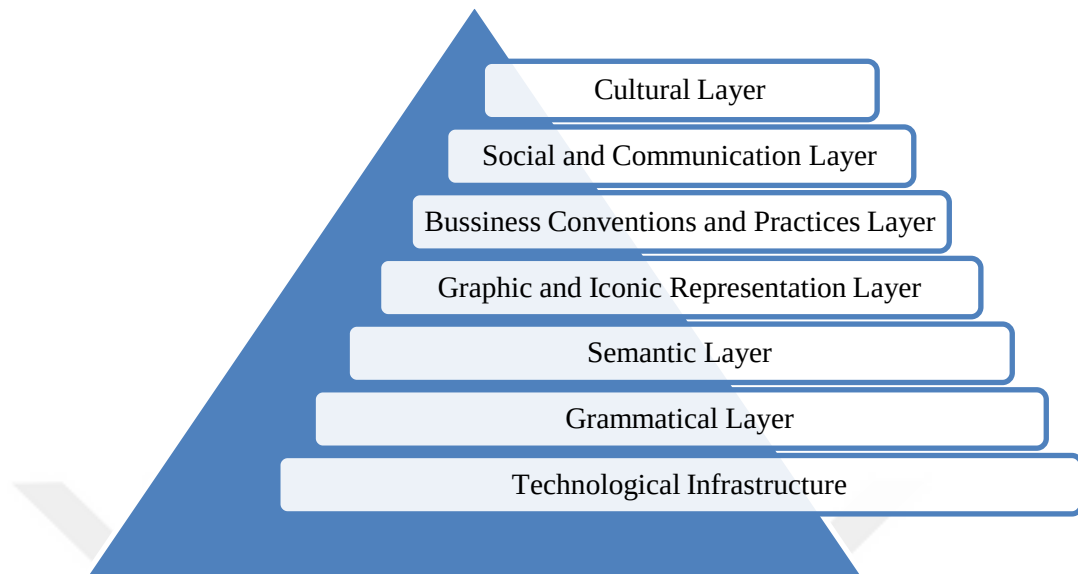
The development of computer technologies has brought the translation industry into interaction with fields such as machine learning and artificial intelligence working with deep learning. Machine translation is widely used in professional translation processes. Instead of using human-assisted machine translation, machine-assisted human translation strategy is now used within computer-assisted translation (CAT) programs, and various technologies like translation memories are present to increase productivity in translation production where human translators are located at the heart of the job (Vieira, 2020: 319). An environment where translation is done entirely by machines is not yet possible, but it

seems possible that technological developments in the coming years will continue to change this field.

2.2. LOCALIZATION

This section will start from localization in general and go into the details of video game localization. Historically, localization studies first started with software localization in the 1980s and shifted to website localization with the spread of internet media in the 1990s and 2000s, and today with Web 2.0, any content produced in the digital environment can be subject to localization (Folaron, 2020: 210). Localization is one of the most important steps in the globalization of software and media products. Localization of an application to a different language increases the interest not only in that application, but also in the follow-up applications of the same developer, increasing the recognition of the developer in the countries that use that language, enabling them to get ahead of other companies (Seljan and Katalinić, 2017: 49). Simply translating products into different languages does not necessarily make them acceptable in the communities where that language is spoken. Therefore, culturalization is important in localization studies; Cultural localization efforts facilitate international cooperation and marketing, enable more complex applications, reduce misunderstandings, and enable better understanding and fulfillment of user expectations (Chroust, 2007: 2). For these reasons, localization has been described as a multi-layered process. The figure below shows these layers of localization.

Figure 2. Layers of Localization



Source: Chroust, 2007: 4.

As in the pyramid in the figure, localization process starts from the technological infrastructure layer and progresses to the upper layers, and the upper layers depend on the success of the lower layers (Šliaučiuė and Liubinienė, 2011: 46). For example, mistakes made in the semantic and grammatical layers may lead to errors in social and communication layer. The Technological infrastructure layer includes the necessary preparations to make the product at hand ready for localization. This includes not only technological tools, but also the determination of standards of the target language, for example the units of measurement used in that language. The Grammatical layer involves adjusting computer-assisted translation texts to the expected grammatical standards. The semantic layer ensures that the use of language in the target text is standardized in terms of meaning. In this part, human translators are more prominent because, for example, it is decided whether to use a technical language or a common language in the target text. Even if the texts go through machine translation, they are checked and post-edited by translators who are experts in their fields. For example, it makes sense for a medical text to be checked and post-edited by a translator who specializes or experienced in the translation of medical texts. Graphic and iconic representation layer ensures that all components

such as symbols and color codes in the visual parts of the product are adapted to the target culture. The business conventions and practices layer, social and communication layer, and cultural layer ensure that the transfer of meaning is healthy by considering the distinctive features of the source and target culture in their respective areas.

One of the differences between translation and localization is that translation is usually done for a finished product that has been released to the market, while localization is usually done while the product is still under development, and this process, which started in the 2000s, is called simultaneous shipment (Šiaučiūnė and Liubinienė, 2011: 47; O'Hagan, 2019: 148). Thanks to this simultaneous shipment, localization is also taken into account in the planning of a product while it is still under development.

2.3. VIDEO GAME LOCALIZATION

Although localization studies started in the 1980s on the basis of computer software, video game localization studies only started after the 2000s. Previously, games that were successful in the domestic markets were translated so that the companies can profit in other countries too, but these translations were insufficient by today's standards (O'Hagan, 2019: 147). Although the translation quality was mediocre, this did not prevent the rapid spread of the games around the world. Moreover, since localization work in Turkey started later than the rest of the developed countries, many children who played the games in English started learning English in this way, albeit partially. Research on the use of video games in English learning and gamification of English learning also shows that such educational methods are beneficial for children (Dehghanzadeh et al., 2019: 12).

One of the first considerations when planning localization is the budget. Companies that develop AAA (Triple-A)¹¹ games may get help from other companies that work on localization. However, studies show that indie developers

¹¹ High-budget games made by large companies.

mostly use community and fan translation (Toftedahl et al., 2018: 15). This may be due to lower budgets for indie¹² games. Translators dealing with video game localization may take part in the stages of the development processes of video games, instead of working with the final product as in other audio-visual products. In order to create successful localization projects, companies include translators at every stage of the video game development process, and this way, integration with the localization layers is achieved.

As a result of the analyzes made by looking at the language use in video games, it has been revealed that the main translation strategies most suitable for use in video game localization are the strategies under the Skopos theory (Šiaučiūnė and Liubinienė, 2011: 53). Skopos theory coined by Hans J. Vermeer focuses on the purpose of translation, which determines what kinds of methods and strategies are needed in order to produce a functionally adequate result (Du, 2012: 2190). The reason for such a functional approach is that the primary purpose of translation is making the target user understand and play the game. Considering that the purpose of video games is to provide entertainment, it is important for translators to provide an equally entertaining translation. Since video games are both visual and auditory interactive media products, it is necessary for the localized video game to reflect the look and feel of the original game to avoid incompatibilities between image, sound, and content, that is, the domestication strategy is not generally used. It is important to be accurate and faithful in the translation, as the contexts and stories in the games are often carefully crafted and commonly fed from past knowledge. This means that intertextuality is a common occurrence in video games. Intertextuality is a form of text interpretation based on different texts borrowing words, concepts, and contexts from each other (Zengin, 2016: 301). All video game developers play or at least browse other games before or during the development process of their games. Either they borrow something from other games, or they are influenced by them. For this reason, a video game always contains echoes and traces of its predecessors, either

¹² Independent video games, developed by small teams or individuals without the interference of a large publisher.

explicitly or implicitly. Of course, intertextuality in video games is not limited to only games. A lot of information from other sources can be found in video games, from historical events to mythologies, from movie references to book quotes. *Northgard*, which is a video game that will be examined in detail in the following chapter can be given as an example here. "Yggdrasil", also known as the world tree in Norse mythology, is a gigantic ash tree believed to carry the universe. One of its roots lies in the underworld of Niflheim, the other in the realm of giants Jötunheim, and the third in Asgard, the home of the gods (The Editors of Encyclopaedia Britannica, 2022). Since *Northgard* is a game based on Scandinavian mythology, it includes all of these elements in it. These elements are also common in other Norse mythology-themed games, such as *Assassin's Creed Valhalla*, *Valheim*, and *Hellblade: Senua's Sacrifice*.

Another issue to be mentioned about video game localization is the various software used in localization processes. For example, *SmartCAT*, which can be used for all kinds of translation work, is also used effectively in localization. The *Unity* game development engine, which is freely available and increasingly popular, also includes several localization software. *Unity*, which is one of the first choices of indie game developers, can offer many new features to users for free or paid with its asset store feature. Here, *Bad Word Filter* is an example of a simple but effective application that translators working on indie games can use. If a game is to be localized to appeal to younger age groups, unwanted words can be quickly removed from the game with such applications.

2.3.1. Challenges of Video Game Localization

Seeing video games as child's play leads to the misconception that they are simple productions, and therefore may lead to the thought that video game localization is easy. However, this is clearly a mislead assumption, and there are instances where even high-budget games produce low-quality localizations. Video game localization presents different challenges compared to translation and even other localization processes due to technical limitations and cultural diversity of the video game industry. Technical limitations generally arise from the necessity of fitting the texts to a certain area within the game. These restrictions can be compared

to the subtitle character restriction on platforms like Netflix. The limited areas in video games can be menu buttons, in-game interaction buttons and dialogs. If the translation is too long to fit in the limited space, visual errors may occur. However, these kinds of bugs are usually fixed before the game is released. There are also errors that are more difficult to spot. The most common errors in video game localization are often the result of a misunderstanding or lack of understanding of the context (Czech, 2013: 14). For example, if established technical terms used in a racing game are translated with their meanings from other contexts, the translation may sound unnatural and distort the player's immersion. In this regard, the context of the video game and the terminology in it can be associated with intertextuality. The translator may have to do extensive research to understand the references and elements used in the video game.

Especially large-scale video games with big budgets are products developed with certain profit margins in tight time periods. In this time-limited environment, people who are experts in different fields develop different areas of the game at the same time. Naturally, it is preferable that the localization work is done by a team of translators, not by a single translator; For example, one person does the translation, another person manages the translation memory, and another person handles the communication with the game developers as the query manager (Dietz, 2007: 4). However, it has become common for games to receive updates after the release, as games move from physical discs to virtual platforms. Such content updates may also require updating the localization. In cases where it is skipped, errors and omissions will occur. An example of this is in Chapter 3. In that example, it is seen that *Northgard* has received an update, but the translation of the new content is missing.

2.3.2. Interaction and Variability

The biggest disadvantage of computer-mediated interaction compared to face-to-face interaction is that it is less intuitive and therefore nonverbal cues are difficult to detect (Manninen, 2003: 3). For this reason, there are many different forms of interaction in video games that may vary by genre.

Table 3: Interaction forms in Collaborative Virtual Environments

Interaction Categories	Interaction Forms	
Language-based Communication	Chat	
	Speech	
	Phrases	
	Sign Language	
Spatial Behaviour	Orientation	
	Proximity and Distance	
	Positions and Locations	
Physical Contact	Tactile	
	Defensive	
	Signals	
	Emotional	
	Agressive	
Environmental Details	Setting	Destruction
		Construction
		Object Moving
	Mutual Affects	
	Artefacts	Use of Object
		Object Exchange
Modification		
Autonomous AI	Follow-me	
	Auto-actions	
	Reflection	
Facial Expressions		
Occulesics	Eye Movement	
	Eye Contact	
	Visual Orientation	
Kinesics	Postures	
	Body Movement	
	Head Movement	
Avatar Appearance	Clothes	
	Physique	
	Hair	
	Adornment	
	Face and Skin	
	Equipment	
Chronemics		
Non-verbal Audio	Silence	
	Music	
	Paralanguage	
	Sound Effects	
Olfactics		

Source: Manninen, 2003: 4.

Looking at the items in this table, it can be seen better what video game developers think down to the smallest detail to create an interactive experience. These interaction forms serve to reflect the actions and the feedback to these actions in the virtual world of the video game. It enables players to do what they want with the game's content or other players, within the limits of the game. Interaction forms the basis of gameplay. The variability in the game content increases the load and technical dimension of the translation work. For example, character dialogues in a role-playing game may contain more than one dialogue option that the player can choose from. When this kind of design is adopted in a game, instead of a linear storytelling like a movie or TV series, there would be an interactive and variable storytelling. A dialogue chosen by the player can also change subsequent dialogues and the course of the game. The job of the translator is to translate all possible dialogue and other variable content.

2.3.3. The Effect of Video Game Genres on Translation

Video game genres are diverse in content, context, and culture. Within this diversity, certain patterns of language use occur. These patterns may be transferred from older games to newer games like a cultural transfer and players get used to these language usages and word choices. While translating, a translation other than the well-established equivalents of these usages will break the immersion of the players. This is how video game subcultures are shaped. This subject is still relatively new in the field of translation and is open to further studies. Although the number of studies especially in Turkey is limited, new studies are gaining momentum with the growth of the video game industry. For example, Seçkin İlke Önen's thesis titled "Approaches and Strategies to Cope with the Specific Challenges of Video Game Localization", is one of the prominent examples among detailed studies conducted in Turkey on examining the connection between video game genre and video game localization. It is a study that approaches this subject with deeper analysis through only two different types of games. Since a football team management game and a fantasy-themed multiplayer online battle arena (MOBA) game were compared in that thesis, different types of games were selected in the

analysis part of this thesis. The reason why that thesis is mentioned here is to direct people who are interested in the translation of those other two genres, which are very popular too.

The genre of a game, the content it is filled with and the context it presents also influences word choices. For example, technical terms about cars and racing predominates in a car racing game, or terminology related to sports and football is used in a football game. In translation, if a word is translated without the consideration of the context in which it is located, inappropriate usages that can disrupt the immersion of the player may occur. For this reason, the genre, context, and content of a game should be considered when localizing. Terminology in video games is discussed in more detail in chapter three, along with real-life examples.

2.3.4. Culturalization

Localization and culturalization, which are generally used in close sense, are related but different concepts. The goal of video game localization is to make a game sufficiently accessible for foreign players. Game culturalization is the expansion of the target audience by adapting a video game to different cultures in the localization process. In this process, features such as language, norms, manners, values, gender, music, fashion, religion, art, geography, history, laws, and technology that make up the culture should be taken into account (Pyae, 2018: 110). Game developers may be familiar with the culture in their geography, but they may not be familiar with the traditions of the distant cultures where they market their games, and a cross-cultural incompatibility may arise. The ultimate goal is to make games acceptable in different cultures. For this, the target culture should be able to understand the translated content and internalize it within the framework of their own worldview. In this way, players can have a deeper and more meaningful interaction with the content offered by the game.

Since translation is a language-oriented approach, it may not be sufficient on its own for the integration of video games into different cultures. In order for game companies to profit from games they marketed abroad, they need to come up with products that can adapt not only to the languages of the target countries but also to their cultures. Offensive content that occurs when cultural integration is not achieved

can cause bad reactions from gamers and also from non-gamers. The reactions of gamers and non-gamers are also a reflection of their habitus¹³; In other words, their perspective on games is shaped around the norms of the culture in which they were born and raised. Interestingly, the reactions of non-gamers are generally harsher than the gamers. This is because gamers can more easily understand the difference between the fictional context in the game and their own cultural context in real life. Non-gamers who already have a negative attitude to video games may be more sensitive to offensive content (Edwards, 2011: 22). The parts of the games that can be offensive without the will of the developers can be solved in the culturalization process. Especially, in the games developed in recent years, care has been taken to prevent the misrepresentation of indigenous peoples. If an in-depth analysis is made on games older than 10 years, the probability of encountering stereotypical characters in video games under the influence of orientalism¹⁴ is higher than today. In addition, many video games are now more sensitive to gender issues and attention is paid to the way people are represented. While this is welcomed by most gamer communities, some are also dissatisfied with the way some games impose certain themes on people. For example, *Hogwarts Legacy*, developed by Avalanche Software and released in 2023. Although this video game is set in England in the 1800s, the portrayal of Asian and African characters as if racism and slavery never existed in history has been the subject of great controversy. Many argued that this meant ignoring the suffering and struggles of these peoples throughout history.

2.3.5. Qualifications Required for Video Game Localization

This section summarizes the skills required of translators for video game localization in the light of the information in the previous sections. It is necessary to have certain qualifications to provide a video game localization service where

¹³ Characteristics that determine the way people perceive and react to the social world.

¹⁴ Coined by Edward Said, it is the imitation and depiction of the Eastern world by Western world writers and artists with their own biased perspectives. According to Said, Orientalism imposes that the West is superior to the East (Said, 1979: 40).

intercultural qualities are important. First of all, one should be aware of the cultural differences between the relevant source and target cultures. Then, one should be able to respect these cultural differences. In this way, the accepted norms of these cultures can be familiarized by the translator so that people can identify the context with themselves, and offensive content is kept at a minimum in the translation. For localization to be realized, one must be able to reconcile these cultures. Lastly, to achieve reconciliation, the person must have the capacity to perform these necessary actions (Hampden-Turner and Trompenaars, 2000: 7). In order to broaden their perspective in this direction, a translators must undergo a level of training that can meet these standards.

Translators need to know not only about culture, but also about games. Video game localization requires not only translation skills (mastery of source and target languages, etc.), but also context knowledge and familiarity with the target language's uses in that context. For example, it is necessary to be familiar with the established jargons in certain video games. In addition, it will be much better if the translators are gamers to some extent and had a chance to play the game to be translated. Of course, it is sometimes not possible to test the games while they are under development because it is desired to prevent the leaking of the game's information and source codes. Still, the localization work is generally supported, at least by sharing the game's theme and screenshots. Also, being aware of the expectations of the players who prefer certain game types will make translators' job easier and would be beneficial for the final product. Game companies can provide freedom to translators in this regard, and under the name of transcreation, translators can produce creative and more acceptable translations by using popular jokes, word plays, or references from local cultures (Chiaro, 2009:154).

Considering that a lot of video games profit more than movies and music today, and the revenue of the video game industry in the world exceeds one hundred billion dollars (Esqueda, 2020: 712), it is natural that the need for video game localization is increasing. To meet this need, localization studies courses should be offered to students in schools. The primary requirement of these courses is computer aided translation courses. Translators must have technical knowledge. A translator dealing with software localization must know how to translate the strings, i.e. words,

contained in the software, in this case the video game, with the programs at hand. In order to do this, translators must be computer literate, that is, they must have knowledge of the necessary hardware, software and terminology (Dietz, 2007: 2). Most of the already mentioned requirements for video game localization are achievable with computer literacy. Having the ability to search quickly and accurately on the Internet is one of the most useful skills in this field, and it is more difficult than it seems. If the universities that provide translation and interpreting education in Turkey update their curricula and give more importance to localization and computer-aided translation studies, the trained students will adapt to the market more easily, and the students who want to work on localization will be more familiar with the technical requirements of this field.

2.4. VIDEO GAME REVIEWS

In this section, video game reviews, one of the building blocks of the video game industry, and the effect of video game reviews on video game localization are examined. Video game reviews are one of the main types of journalism in the video game industry, and they affect game developers as well as influencing players' perspectives on games (Zagal et al., 2009: 215). Although these reviews are used as a video game buying guide, they actually vary greatly in terms of quality and content, depending on the person and company making these reviews. Both professionals and amateurs conduct video game reviews, and they all have the potential to guide gamers and game developers. This potential is also generally linked to people's ability to reach large audiences. People and platforms that can capture a certain number of followers naturally begin to have a say in the sector. Positive game reviews for advertising purposes can sometimes be received badly by players due to lack of honesty. In these situations, people may shift their interest from corporate review firms to independent reviewers.

Video game reviews can touch on anything related to video games, including localization. Reviews made by individuals and companies who are well-known on social media can reach large audiences. For example, the leading video game and entertainment media website IGN has been around since 1996. Announcements and

reviews of almost every newly released game are shared on this site. As IGN Türkiye, they also carry out their work in Turkey. It is probably one of the first resources that many gamers will refer to when buying a new game. Since such sites reach large audiences, mentioning, commenting, and criticizing localization in reviews may create awareness in people who read and watch these reviews. From a gamer's point of view, people who become aware of localization quality may want better localization in video games. As a result of these requests, video game developers may give more importance to localization processes. It is therefore possible that these reviews may have an impact on the quality of video game localization. User feedback and comments are very important for institutions and companies, and this type of feedback is used even in government offices today. Considering that video game reviews are also a form of user feedback, it's not surprising that video game reviews are influencing the video game industry. One of the biggest platforms where localization is encouraged with user feedback is Steam. People can leave reviews and comments about the games they buy on Steam. Among the reviews and comments made in Turkish for a game that does not offer Turkish localization, it is possible to encounter many people who voted negatively because there was no localization. The potential impact of video game reviews on translation is further explored by the data analysis in Chapter 3.

2.5. CONCLUSIONS

Today, the shift of all media types towards digital channels leads to the increasing prevalence and development of audio-visual translation. Audio-visual translation, which in the past was mostly limited to movies and TV series, is now included with localization in all software products. Since video games are also a kind of software product, video game localization strengthens its place in the industry. Moreover, increasing the accessibility of the media for the visually and hearing impaired is a big step forward. Techniques such as audio description are also becoming common in video games. Video game localization has its own challenges and subtleties over traditional translation. For example, the time and space restrictions in subtitle translation, which is one of the most utilized audio-visual translation methods, apply to video games as well. In addition, the interactivity and

variability unique to video games increase the translation load. The wide range of content offered by video game genres and contexts, which is the highlight of this study, is the most important point to be considered in translation. Because these directly affect the language use and terminology in the games. Being aware of the genre and context can help to determine more easily what difficulties will arise in the game to be translated and how to find solutions to these difficulties. To create this awareness, translator training should better incorporate audio-visual translation and video game localization. For this, technical infrastructure should be established, and computer literacy should be emphasized. Although education in this field has not yet reached the ideal level in Turkey, an improvement may be seen in the coming years in line with industry requirements and market demands. Finally, since video game reviews are an important part of the video game industry, they are included in this study and their potential impact on localization is examined.

CHAPTER THREE

ANALYSIS OF THE SELECTED VIDEO GAMES

In this chapter, the information given in the previous chapters will be brought together and analyzed comparatively with examples from various video games. The challenges and requirements of video game localization mentioned in chapter two will be evaluated with the examples reviewed in this chapter. Finally, the topic of video game reviews, which is covered in each chapter, will be reexamined here with a data analysis.

3.1. VIDEO GAME ANALYSIS

In this section, texts and images taken from video games will be examined in terms of translation under the interaction, context and genre, terminology and technical constraints headings and a basis for comparative analysis will be established. The games will not be examined one by one, but together with the selected examples under the relevant headings. In addition to games selected from different genres, games that offer different contexts in the same genre will also be discussed. The effect of video game development budgets on the number of localized languages will also be examined. All the games, from which the samples were taken were purchased under original license and were examined in their current versions at the time this thesis was written. All the reviewed games can be accessed via the Steam platform.

3.1.1. Interaction

Interaction is the feature designed to allow players to experience the story, mechanics, and environment of the video game. The highlight here is to experience, because the function of interaction is to help players experience the game. The better the experience the game creates, the deeper the immersion of the player, which increases the believability of the game. Since the interaction in video games and giving the player the ability to make decisions that can change the story directly affect the translation workload, this issue will be examined first. In the first chapter,

it was stated that cutscenes are non-interactive content. However, in the following example, the developers took a hybrid approach and managed to create an interactive cutscene. They achieved this by placing an interactive choice dialog between the cutscenes and giving the player time to make a choice. Moreover, the player is given a limited amount of time for some moments where quick decisions are required due to the story. This has been very effective in increasing the excitement in the game. The game in question is *The Witcher 3: Wild Hunt* (CD Projekt Red, 2015). It is an action role-playing game (Table 2) developed by CD Projekt Red and published by CD Projekt in 2015.

Figure 3. Dialogue Options in *Witcher 3*



Example above shows a section from *The Witcher 3: Wild Hunt*. In this part of the game, the main character “Geralt of Rivia” is given the choice to bow or not to bow before the emperor. This decision of the main character will cause different dialogues in the next scene. If Geralt of Rivia bows before the emperor, the emperor will say, “I thought you bowed before no man.”. If he doesn't bow, the emperor will

respond with “So many months at Foltest's court... yet you still haven't mastered the basics of etiquette.”. The player will only see one of these dialogue options and continue the game. While some decisions taken in such games only affect the dialogues, they can sometimes affect the course and end of the whole game. As such dialogues become more frequent, the localization workload also increases. Looking at the game at hand, some dialogue options do not affect the course of the game, while some dialogue options can lead to completely different routes for the missions and the story. There are also player-controlled story-driven games that progress through purely interactive dialogue, such as *Wolf Among Us*, *Life is Strange*, and *Detroit: Become Human*.

3.1.2. Context and Genre

One of the most important components of a video game that needs to be considered before translation is the context and the genre of that game. For example, *Northgard* is a strategy video game that Shiro Games developed in early access in 2017 and released in 2018 (Shiro Games, 2018). When localizing, it should be noted that it is a real-time strategy game and contains elements from Norse mythology. Here, looking at the theme of the game, it can be predicted what kind of terminology will be encountered. It should also be taken into account that it is released as an indie game because it was developed by a small company, and it combines different genres by incorporating survival elements into the strategy genre. Here is an example taken from the introduction of a mission in the game's main campaign.

Source Text 1a:

We have to cross Jötunnheim, the land of giants, on our journey to the Runestone of Asgard. The Jötnar are a peaceful people. What could go wrong?

Target Text 1a:

Asgard'ın Gizemli Taşına giden yolda devlerin diyarı olan Jötunnheim'den geçmek zorundayız. Jötnar devleri genellikle barışçıldır. Ne ters gidebilir ki?

As expected, there are words borrowed from Scandinavian languages in the game. The word Runestone is frequently encountered in games containing fantasy elements and it is generally translated into Turkish as “Rün”. Knowing the usages associated with a genre will provide a better-quality translation. A nice addition in

this example is the elaboration of Jötnar with the word “devleri”. In this way, for people who do not know Scandinavian mythology in Turkey, it was explained that Jötnars are giant creatures.

A second example was examined in order to see the effect of different contexts in the same game genre. This example is from *Age of Empires III: Definitive Edition*, which is also a real-time strategy game like *Northgard*. It is developed by Tantalus Media and Forgotten Empires and published by Xbox Game Studios. It is a remaster of the original *Age of Empires III* developed by Microsoft Corporation's Ensemble Studios. Unlike the fantasy elements of *Northgard*, this game has a semi-historical context. The example excerpt is from the compendium section, which gives information about the content of the game. There is an information page in the compendium about the Janissaries, the core military unit of the Ottoman Empire.

Source Text 2a:

Without families of their own, when a janissary died his property passed to his regiment, or ocak – a Turkish word meaning hearth. Their ranks were peppered with culinary terms; the commander was called the “head cook” and the next in command, the “soup distributor” ... The janissaries were slaughtered in Constantinople in 1826, during an event now called the Auspicious Incident.

Target Text 2a:

Kendi ailelerinin olmamasıyla, bir yeniçeri öldüğünde sahip oldukları birliğine veya ocak anlamına gelen -orta- ya verilirdi. Safları aşçılıkla alakalı terimlerle bezenmiştir; komutana “Aşçıbaşı” ve ikinci komutana “Çorbacı” denirdi ... Yeniçeriler; 1826 yılında, bugün Vaka-i Hayriye diye bilinen olayda, Konstantinapolis’de öldürülmüşlerdir.

In games that contain historical information, research before translation becomes important especially when it comes to the historical values of a country. Here, it can be seen that the historical significance of the word “Auspicious Incident” has been researched by the localizers because it is translated correctly as “Vaka-i Hayriye”. The Ottoman name Vaka-i Hayriye, which means “Fortunate Event” is the name given to the event that resulted in the destruction of the Janissary Corps by shelling and the execution of the survivors by the Ottoman Sultan Mahmut the Second on June 16, 1826 (Beydilli, 2012: 454). Later, a more modern army was established in its place.

Pun, also known as paronomasia, is a play on words for a humorous or rhetorical effect. It is performed using multiple meanings of a term or similar-

sounding words (Merriam-Webster, 2023). Puns are common in video games and are often difficult to translate because they are cultural elements. The example below shows a pun that references to the American popular culture that is not understood and translated word for word, resulting in a loss of meaning and function. The reason why this error stands out is that the player encounters this text in the first scene of the game. These kinds of mistakes don't make a good first impression. This image taken from the open world racing game (Table 2) *Forza Horizon 5*, developed by Playground Games and released in 2021 by Xbox Game Studios (Playground Games, 2021). It is from the *Forza Horizon 5*'s first intro mission, and the player starts the game by jumping from an airplane in an off-road vehicle to the top of a snowy volcano.

Figure 4. *Forza Horizon 5* Intro Mission



To understand the cause of the problem here, the reference needs to be explained. “Drop It Like It's Hot” is used as a slang term with various meanings in rap and hip-hop culture. It can mean performing certain dance moves or creating a song suitable for hip-hop dances. The most famous usage of it is the 2004 hit song “Drop It Like It's Hot” by Snoop Dogg. In the source text, a pun is made with the player being dropped from an airplane to a hot volcano. This pun does not make any sense in Turkish as it is translated without considering the reference. What needed to be done was either a similar reference from Turkish popular culture or a simplification strategy like “Volcano Jump”, that is, “Volkan Atlayışı” in Turkish. In addition, the Mexican name of the volcano “La Gran Caldera” was left the same using the foreignization strategy. Foreignization, formulated by Lawrence Venuti, is a strategy in which foreign names in the source text are preserved and transferred to the target text (Gile, 2009: 251-252). As can be understood from its use here, the domestication strategy, which is the opposite of foreignization strategy, is not used much in games. This is because the context in the video game is left as it is. In this way, the game experience carefully planned by the developers is equal for everyone in every language.

The next example is from *Deep Rock Galactic*, developed by Ghost Ship Games in early access in 2018 and released as a full version in 2020 (Ghost Ship Games, 2020). In this example shown below, a pun is translated quite successfully this time. Successful translation of a pun can indicate whether the text has been machine-translated and gone through the creativity of a translator. This image is taken from the equipment and weapon selection screen of the game.

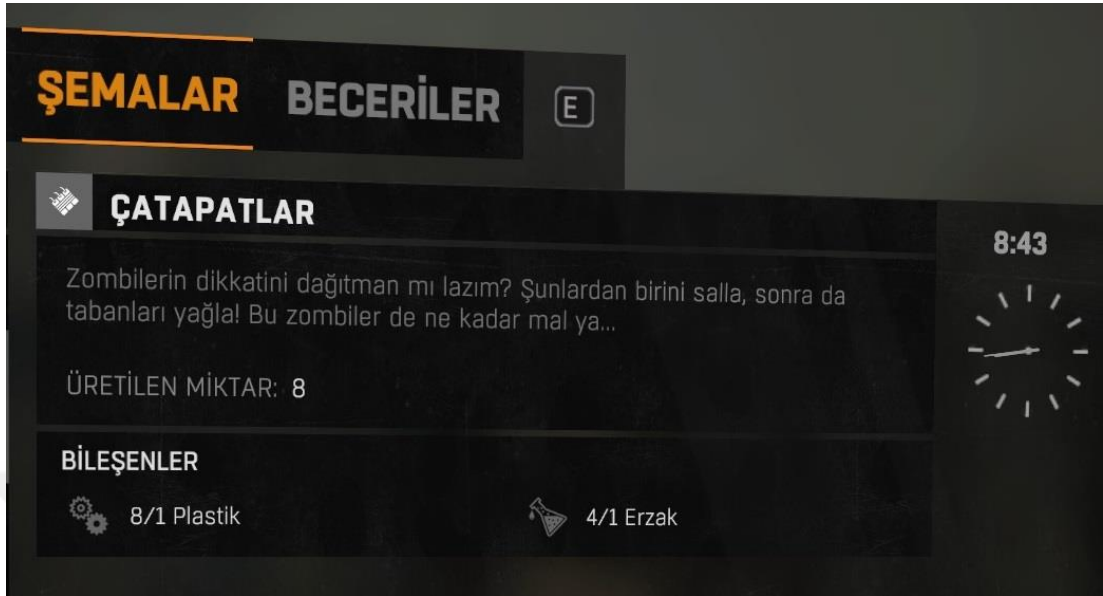
Figure 5. Pun in Deep Rock Galactic



The original name of the weapon, “CRSPR Flamethrower” is a pun created with the consonants of the word “crisper” since it is a fire-throwing weapon. The word “cızbız” was deemed appropriate as the Turkish equivalent of this pun, and the same effect was successfully created by removing the consonants in the word. This pun is a testament to how great results can be achieved when translators get creative. The only thing that stands out in this image is that the uppercase “I” is written as a lowercase “i”, and the “Ğ” and uppercase “İ” don’t fit the game’s character style. This subject will be discussed in more detail in the Technical Constraints section.

Translation of puns can also show the use of domestication strategy along with culturalization in localization. This is examined in the next example. *Dying Light* is an open world survival horror game developed by Techland and released in 2015 (Techland, 2015). The screenshot in the figure shows the description of the firecrackers item in the game's blueprints menu.

Figure 6. Culturalization in *Dying Light*



Let's look at the English version of this example first: “Got some zombies that need distracting? Just toss these little babies at 'em and run right past! ... GOD, zombies are dumb”. Since the source text is written in a slang way, the target text is also translated using a slang suitable for Turkish. Culturalization aims to make the target audience feel as familiar as possible with the content. If this text were translated word for word, it would not sound natural in Turkish. One more small point can be mentioned here, although it does not affect the game experience much and will be overlooked by many. The hour on the right is written as “8:43”, but in Turkish hours are written in the “8.43” format. This is a good example to remind us that localization includes not only translation but also formats and standards of the target culture.

3.1.3. Terminology

The issue of terminology, which is closely related to the game genre and context should also be emphasized because it greatly affects the immersion of the players in the games. An error in the terminology will likely annoy players who are familiar with that context. Here's a sample excerpt from *Forza Horizon 5*. This

excerpt is from the upgrade shop menu of the game which lets the player upgrade their car's performance.

Source Text 1b:

Engine upgrades can improve your car's acceleration and speed. You can add a more aggressive cam, stiffer valve springs, improved intake, and exhaust systems as well as a turbo or supercharger to get more power out of your engine. Combine several engine upgrade types to get the most out of your engine. But remember: extra power alone will not win races. Winning performance calls for a balance between power and handling.

Target Text 1b:

Motor yükseltmeleri aracınızın hızlanmasını ve hızını iyileştirebilir. Daha agresif eksantrik, daha sert vana yayı, geliştirilmiş giriş ve egzoz sistemi, ayrıca turbo veya süperşarjör kullanarak motordan daha fazla güç çekebilirsiniz. Birkaç tane motor yükseltme tipini birleştirerek motorunuzdan en iyi şekilde yararlanınız. Fakat unutmayın: ekstra güç yarış kazanmak için yeterli değil. Galibiyet performansı güç ile yol tutuş arasındaki denge ile alakalıdır.

Here, those familiar with automobile technology will notice that some uses in the Turkish translation do not sound natural. Examples of correct use would be valve spring as “subap yayı”, intake as “hava girişi” and supercharger as “süperşarj”. A person who plays car racing games is likely to be familiar with these terms as well. There are also some strange sounding uses. Instead of “Birkaç tane motor yükseltme tipini birleştirerek motorunuzdan en iyi şekilde yararlanınız.”, “Motorunuzdan en yüksek gücü alabilmek için farklı türde motor parçalarını birlikte kullanabilirsiniz.” would be much more fitting for this game. The error here is related to colloquial use of Turkish, rather than terminology. Games that contain more technical and field-specific terminology than semi-realistic racing games such as *Forza Horizon 5* are usually simulation games. The next example is one of the most popular and accessible among simulation games. Developed by SCS Software and released in 2012, *Euro Truck Simulator 2* is still being actively updated and expanding its player base (SCS Software, 2012).

Figure 7. Truck Terminology in *Euro Truck Simulator 2*

Your money:	€116,084	Bakiyeniz:	116.084 €
TRUCK ANALYSIS		ÇEKİCİ ANALİZİ	
Normal Cargo		Normal Yük	
Heavy Cargo		Ağır Yük	
Maneuverability		Manevra Kabiliyeti	
Hills Traversal		Yokuş Tırmanma	
Uneven Terrain		Engebeli Arazi	
Truck Configuration		Çekici Yapılandırması	
Torque	1,420 Nm	Tork	1.420 Nm
Engine Power	360 hp (265kW)	Motor Gücü	360 bg (265kW)
Gears Count	12	Vites Adedi	12
First Gear Ratio	9.00	İlk Vites Oranı	9,00
Last Gear Ratio	0.84	Son Vites Oranı	0,84
Differential Ratio	4.20	Diferansiyel Oranı	4,20
Effective Wheelbase	4,596 mm	Geçerli Dingil Açıklığı	4.596 mm
Retarder	Yes	Rötarder	Evet
Axle Count	3	Dingil Adedi	3
Powered Axles	2	Tahrikli Dingiller	2

Example above shows the truck analysis tab in the truck modding menu in the game. All trucking terms in this tab, such as “çekici”, “diferansiyel oranı”, “rötarder” and “tahrikli dingiller” are contextually and correctly translated. Let's go over the word “çekici” here. Trucks that pull trailers are generally called “TIR” in Turkish. Actually, this is not a Turkish word, but a shortened version of the name of an international agreement. In other words, TIR is the initials of “Transports Internationaux Routiers”, which is the French equivalent of the Convention on International Transport of Goods Under Cover of TIR Carnets. The names change according to the way the vehicle carries the load, while the fixed-frame cargo vehicles are called “truck”, that is, “kamyon” in Turkish, the cargo vehicles that pull removable trailers are called “çekici”. It is important to consider such terminological details in games of this type. A successful localization makes a game accessible in

the target culture and does not break the player's immersion. Unfortunately, there are minor errors in this game as well, but it will be mentioned in the technical constraints section. In the following example that concerns context and terminology, it can be seen that there is an obvious mistake in *Age of Empires III: Definitive Edition*.

Figure 8. *Age of Empires III* Compendium

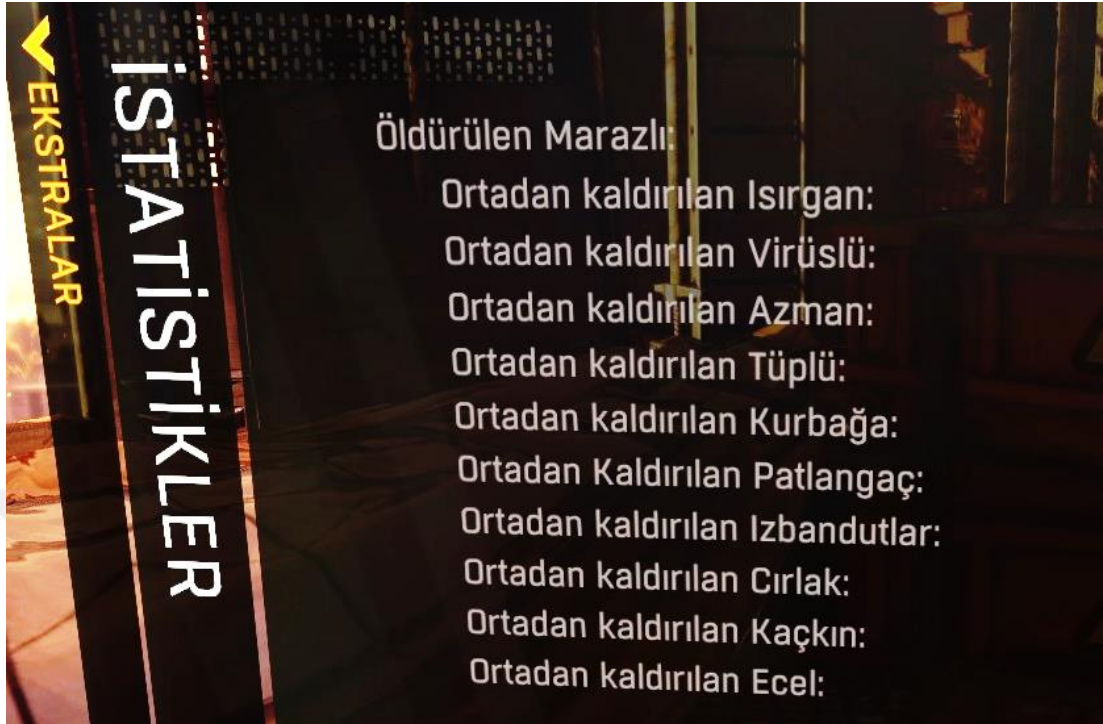


The error in this example, taken from the compendium part of the game, is due to a misunderstanding caused by not paying attention to the context. In this text, in which a military issue is explained, the word “drilling” in the “Modern drilling and the use of bayonets were among the improvements made to these new Ottoman infantry units” is used in a way that is out of context in the translation. The word drilling, which is used in the sense of military training, was translated into Turkish as drilling with its meaning in mining industry. As a result, the sentence lost its meaning and function. Words that seem commonplace to outsiders may actually be

part of a particular terminology. Especially if the translation is done with the help of machine translation, such errors may increase. The importance of post editors is again better understood here.

In terms of terminology, the word “Heyula” in *The Witcher 3: Wild Hunt* is a good example in the context of fantasy games. The name “Wraith”, which is given to the ghostly beings in the game, is translated into Turkish in a more specific way, knowing that Witchers use a more specific terminology between them as they are professional monster hunters. This can also be seen in the “Bestiary” part of the game. The monster types in the game are divided into different subclasses such as Beasts, Cursed Ones, Draconids, Elementa, Hybrids, Insectoids, Necrophages, Ogroids, Relicts, Specters, Vampires, and detailed information about all of them is included. All these creature names have been translated into Turkish, although some have been translated using the borrowing technique. Borrowing technique is to transfer the source language expression verbatim into the target language (Qizi and Hulkar, 2023: 97). The Turkish translations are as follows, in the same order; “Hayvanlar”, “Lanetliler”, “Drakonidler”, “Elementalar”, “Melezler”, “Böceksiler”, “Nekrofagiler”, “Ogroidler”, “Direngenler”, “Hayaletler” and “Vampirler”. Looking here, it is clear which ones are borrowed because only the Turkish plural suffix has been added to English words. Among the possible reasons for this may be that there is no Turkish equivalent for these words or that the names of creatures are not wanted to be oversimplified. The translation strategy here makes sense, as there are on average 10 different named creatures under all the subclasses mentioned above. That is, names that are easy to translate and have equivalents in the target culture are translated, and the rest are borrowed. So, can such games be translated without using the borrowing strategy? Here is the answer to this question in the next example. The screenshot in the figure is taken from the statistics section of the *Dying Light*’s extras menu.

Figure 9. Translation Creativity in *Dying Light*



The image shows the types of zombies that the player has killed throughout the game. These zombie types are as follows in the source text: "Infected, Biters, Virals, Goons, Gas Tanks, Toads, Bombers, Demolishers, Screammers, Bolters and Volatiles". There is creativity in the translation of these words, because even words that can be conveyed with their simple meanings seem to have been specially chosen to have a better effect in Turkish. The prominent word here is "İzbandut" which is the translation of "Demolisher". The origin of ızbandut comes from the name given to the Greek sea brigands in the Ottomans, but in Turkish this word is used to describe a big scary person. So why did they choose such a word? It is obvious that the translators thoroughly studied the content of the game, because the demolisher type zombies in the game are very large and scary creatures. Instead of literal translation into Turkish as "Yıkıcı", a more familiar and functional word was chosen.

In the second chapter, it was stated that video games could receive various updates after their release. With updates, bugs can be fixed, performance can be improved, and content can be added alongside these technical fixes. While making such updates, the team responsible for localization in the company that developed the game or the subcontractor responsible for localization should also actively update the

localization in the game. Situations similar to the following example are possible when the localization team can't keep up with the game updates. Next example is an image taken from the Ornaments tab in the Treasures section of *Northgard* main menu. In this tab, there are various rewards that players can obtain by completing certain challenges. The thing that stands out in this example is that although the game is set to Turkish in the settings, the items on this screen are still in English. It can be understood from the blue word “Özel” under the items that the game is set to Turkish.

Figure 10. Untranslated Parts in *Northgard*



The names of the playable clans in the game have been translated into Turkish. For example, Wolf Clan is translated as “Kurt Klanı” and Raven Clan is translated as “Kuzgun Klanı”. A player who does not speak English will be confused

when encountering the English names of clans on this screen. However, in other parts of the game, “Fenrir”, the name of the mythological monstrous wolf taken from the old Norse language, remains the same. Other Scandinavian names such as “Eikthyrnir”, “Himminbrjotir”, and “Hræsvelg” are also left the same. In this respect, the foreignization strategy stands out again. Thanks to this strategy, the Scandinavian mythology-based theme of the game is preserved in every language. This image was taken in March 2023 and the untranslated parts are likely to be fixed in a future update.

Untranslated parts are generally more common in games that receive frequent updates. As with *Northgard*, the next example is a relatively small developer's game that receives frequent updates. In development since 2016 and released as Early Access in 2019 by Coffee Stain Studios, *Satisfactory* is an open world factory simulation game (Coffee Stain Studios, 2019). The screenshot in the figure below is taken from the milestones menu in the game.

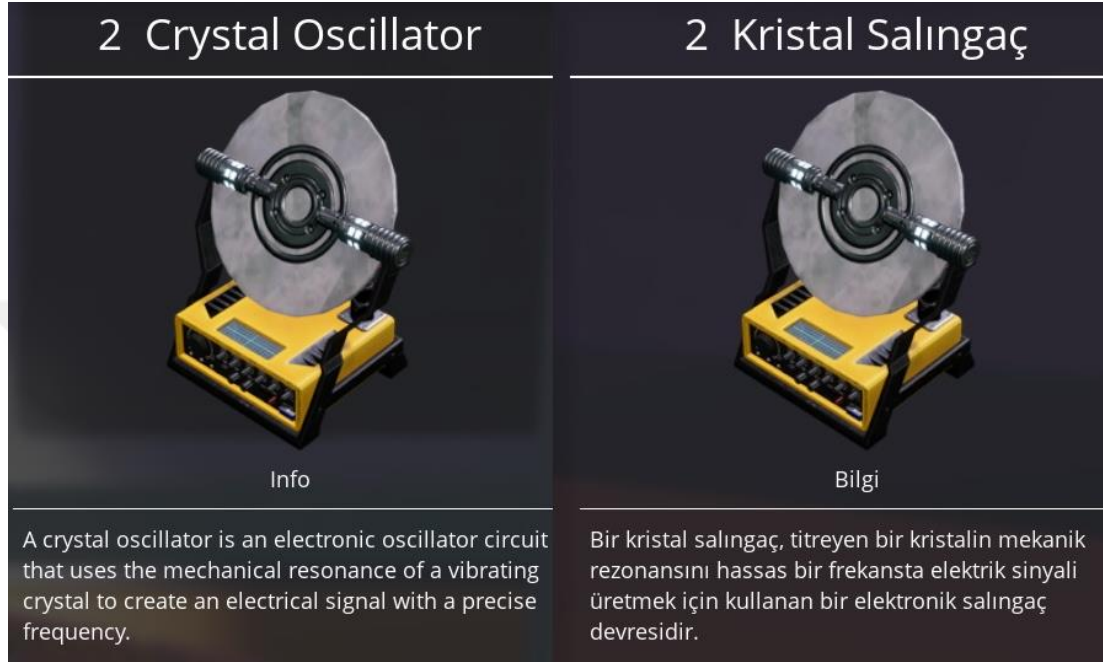
Figure 11. Untranslated Part in *Satisfactory*



The productivity display item, which remains untranslated in the Turkish menu, draws attention. Games like Satisfactory receive regular updates and such oversights may occur in localization processes. Since this game is about building a factory, there is a lot of technological and technical terms in it. Doing research for the translation of these terms and determining which words are specific to this field

will directly affect the translation quality. The next example from the same game is a description of a part that can be crafted on production lines in the game.

Figure 12. Technical Term in *Satisfactory*



The word oscillator is a technical term related to electricity, as can be understood from the description in the game. Although this term is commonly used as "osilatör" in Turkish, "salıngaç" can also be used as its pure Turkish form. In such cases, the translators' word choices come to the fore. When translators come across such a word, they do research and usually choose whichever word is used more often because a frequently used variation will be more familiar to those who are interested in that field. This is a sensible strategy, given that players are generally knowledgeable about the context of the games they are playing. When I researched this word, I saw that it is used more often as "oscillator", so I would translate it that way.

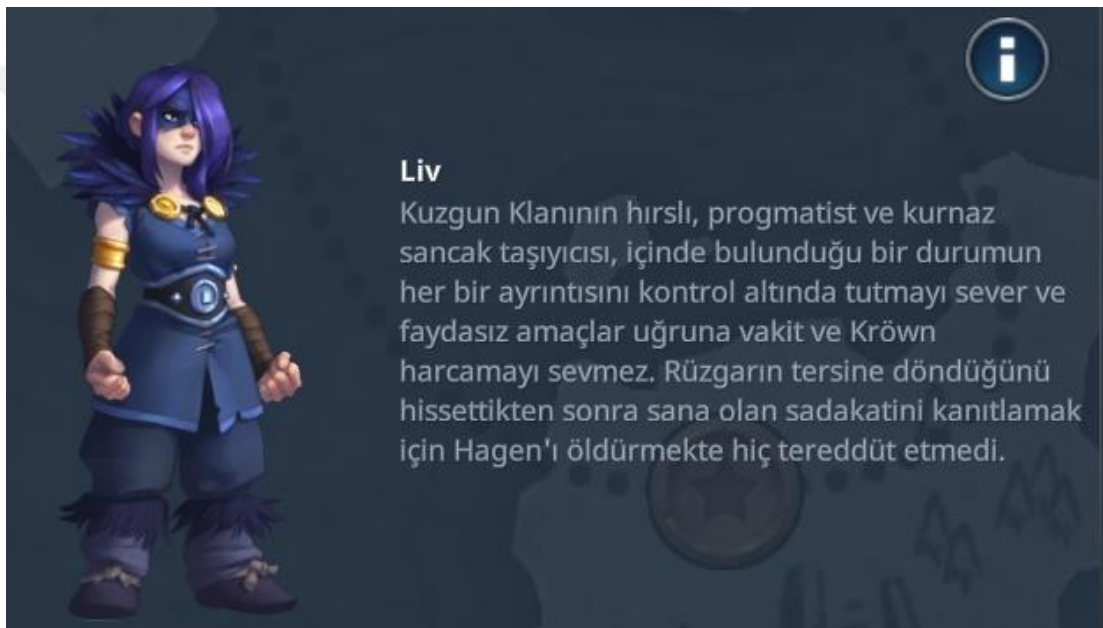
In the next example from *Northgard*, there are various odd choices regarding word usage and sentence structure. It is unclear whether these choices were made on purpose or whether they were the product of machine translation. To better examine the Turkish translation, the source text should be looked at first. Source Text 2 and

the screenshot are taken from the description of one of the missions in the game's main campaign menu. This text describes one of the side characters in the main story of the game.

Source Text 2b:

Ambitious and pragmatic, the cunning bannermaiden of the Raven Clan likes to control every parameter of a situation and hates wasting time or Kröwns on futile pursuits. Seeing that the tide was turning, she didn't hesitate to kill Hagen, her mentor, to prove her loyalty to you.

Figure 13. Northgard Word Choice and Sentence Structure



The first thing that catches the eye here in terms of word choice is the translation of the word “Pragmatic” as “Progmatisit”. There is no such word in Turkish, it should have been “Pragmatik” or “Pragmatist”. One of the things to consider on a word-by-word basis while translating is preserving the meaning of words. Based on the example here, the effect of the word “hates” diminishes when it is translated as “sevmez” which means “doesn't like”. It should be translated as “nefret eder”. In video game translation, as in most books and movies, character names are often left the same. There is no difference here either. At the same time, “Kröwn”, the currency in the game, is also left the same. Again, it is normal to use foreignization.

3.1.4. Technical Constraints

The problems arising from Turkish letters and character limits in video games will be examined in this section. The unique characters in the Turkish alphabet, ç, Ç, ğ, G, ı, İ, ö, Ö, ş, Ş, ü and Ü can cause problems in software if they are not considered during the localization process. To integrate these letters into the software, the character encoding formats must be set accordingly. For Turkish, UTF-8 i.e., Unicode (or Universal Coded Character Set) Transformation Format - 8-bit character encoding is required (Diri, 2019: 51). The Turkish version of *Age of Empires III: Definitive Edition* has an example of how language-specific features can cause bugs when faced with technical limitations in software. This image is taken from the Tools tab in the main menu of the game.

Figure 14. *Age of Empires III* Tools Menu



It is visible that the game actually supports some special characters like “ç”, “ğ” and “ü” in Turkish, but the capital “ı” is misspelled as the capital “i”. This problem continues in the same way in other parts of the game. There may be two reasons for this situation. Firstly, this letter may not really be supported in the game,

second and more likely reason is that it was overlooked during localization. That's why it's important to identify the unique features of the target language before any localization is done. This lowercase letter “I” problem between Turkish and English is not unique to Age of Empires III. This issue is addressed again in the next example from *Deep Rock Galactic*. The screenshot in below is taken from the Bestiary tab of the game.

Figure 15. *Deep Rock Galactic* Bestiary Screen



There are some inconsistencies in this screenshot. Just like in the previous example, the game's support of the capital letter “İ” can be clearly seen in the text “YARATIK ANSİKLOPEDİSİ” at the top. However, in creature names, capital “İ” appear as “I”, and capital “I” appear as a lowercase “i”, which also does not fit the character style. Since this situation is similar in both examples, it can be said that the

error here is either due to the inability to fully adjust the character support in the game or the inability to set the uppercase and lowercase words correctly in the localization process. Let's briefly return to the topic of terminology, as it is included in this example. Another remarkable issue on this screen is the translation of creature names. For example, "Swarmer" is translated as "Böcekçik" and "Grunt" is translated as "Savaşçı". However, the translators must have been unable to find an equivalent for "Praetorian" because it was left the same. Such translations disrupt the order and harmony in the game. If the names are to be translated, they should all be translated, if not, all should be left the same.

Figure 16. Subtitles in *Witcher 3*



Just like movies and television series, game subtitles should be in accordance with the standards set by the companies. Example above shows a Turkish localized version of a dialogue in *The Witcher 3: Wild Hunt*. Here, the dialogue subtitles cannot exceed certain lengths. In particular, selectable dialog options have a more limited area on the screen. Sometimes in the game, the player is expected to make a quick choice, and this is done with a time limit. If the player cannot make a decision in the given time, they may face bad results. The thing to note here is that the

dialogues that need to be selected quickly should be kept exactly equivalent to the source text in terms of length and intelligibility. In this way, the player can have the same experience in every language, without any advantage or disadvantage.

In the previous example, the translated sentences fit perfectly to their designated spots, but in the next example, you can see that the source text takes up more space than the target text and causes problems.

Figure 17. *Euro Truck Simulator 2* Truck Service



In this screenshot taken from the truck service tab of *Euro Truck Simulator 2*, the last letters of the text of the bottom two options are missing. The error here is due to the character or area limit of the text box in this part of the game. While the word "Configurator" in English contains twelve letters, the word "Yapılandırıcısı" in Turkish contains fifteen letters. The Turkish translation is incomplete because it does not fit in the space reserved for this word. The simplest solution here would be to write this word as "Yapılandırıcı". If the game had been adequately checked for bugs

after localization, the rate of encountering such simple bugs would have been considerably reduced.

3.2. COMPARATIVE ANALYSIS OF THE SELECTED GAMES

The games covered so far will be analyzed and compared in the table below in terms of genre, context, and terminology.

Table 4. Comparison of games in terms of genre, context, and terminology

Game	Genre	Context	Terminology
<i>Age of Empires III: Definitive Edition</i>	RTS, Base Building, Multiplayer	European colonization of the Americas (approx. 1492–1876)	Military terminology, historical and cultural items
<i>Deep Rock Galactic</i>	FPS, Co-op, Exploration	Space mining, dwarves	Fantasy elements (creatures, resources), weapon types, puns
<i>Dying Light</i>	FPS, Open world, Co-op, Parkour, Survival, Horror	Zombie apocalypse, fictional city of Harran inspired by eastern Turkey	Fictional zombie types, weapon types
<i>Euro Truck Simulator 2</i>	Driving, Transportation, Simulation	Trucking in Europe	Truck and trailer components
<i>Forza Horizon 5</i>	Racing, Open world, Multiplayer	Car culture, Mexican culture	Car components, Mexican words, puns
<i>Northgard</i>	RTS, Base building, Survival	Nordic mythology	Fantasy elements, mythological elements (creatures, geography), Nordic cultural items
<i>Satisfactory</i>	FPS, Open-world, Base building, Automation	High-Tech factory building on an alien planet	Factory terms, production raw materials, fictional gadgets and materials, alien creatures
<i>The Witcher III: Wild Hunt</i>	Third-person, Action RPG	Fantasy, medieval, The Witcher Universe ¹⁵	Fantasy elements (creatures, spells, vegetation), fictional weapons

¹⁵ Fantasy universe created in The Witcher novels by Polish author Andrzej Sapkowski.

Since *The Witcher III: Wild Hunt* is set in a highly detailed fictional universe created in 8 different novels and short story books written between 1990-1999, fantasy elements are plentiful. However, it is not only fantasy elements that increases the translation load, but also the fact that the game is a story-heavy roleplay game. With the abundance of dialogues, it can be argued that the highest translation load in this comparison is in *The Witcher III: Wild Hunt*.

Among the games discussed, *Forza Horizon 5* and *Euro Truck Simulator 2* are the games with the most real-life technical terms. In the former, there are contributions from many terminologies such as vehicle names, components, modification parts and racing terms. Whereas in the latter, truck and transportation terminologies are predominant. It can be assumed that people who play such racing and simulation games are more or less familiar with these terminologies. It can be said that especially those who are very knowledgeable about this subject are sensitive in the use of terminology. Therefore, it is unacceptable to make mistakes in terminology in the translation of these kinds of genres. Of course, in general, this is true for all video games. However, one should be especially careful with games that come from a large body of knowledge.

While *Age of Empires III: Definitive Edition* is a semi-realistic game based on historical facts, *Northgard* is full of mythological and fantasy elements. The reason why two games from the same genres, Strategy and RTS, were chosen in this study is that the two games offer similar terminologies in terms of genre but different in terms of subject due to their very different contexts. For someone unfamiliar with their context, both are strategy games on the surface, however, their content is very different from each other.

As a first-person shooter, the reason why *Deep Rock Galactic* was chosen instead of a more familiar and popular game is to highlight the success of the indie games. Looking at the games at hand, it is apparent that *Deep Rock Galactic*, which was developed with a much lower budget, can offer better examples of pun translation than *Forza Horizon 5*, which was developed with a much larger budget. From the outside, *Deep Rock Galactic*, and *Dying Light* look alike, as they are both first person and co-op games. But they are quite different in context and gameplay. Still, from the translator's point of view, they both have plenty of realistic and

fictional weapon terminology, fictional creature names and puns. In this case, it is reasonable to expect that gun terminology will be abundant in a first-person shooter game. The context of the game determines whether the terms will be realistic or fictional. Although shooting aspect is in the background, the same is true for *Satisfactory* too. However, since the goal of the player is to set up a factory and automate production, technical terms in this direction are much more abundant in it.

In the previous parts of the thesis, it was mentioned that one of the most important factors affecting localization is the budget. However, based on the examples in chapter 3, it has been revealed that there can be quality translation examples in low-budget games as well. Therefore, in this section, not the quality, but the quantity will be examined. Video games with official or estimated budgets will be collected. Then, the number of languages in which these games are localized and whether they are translated into Turkish will be checked. In this way, it will be tested whether the relationship between budget and localization is directly proportional. The number of languages in which the video games are localized, and availability of Turkish localization are obtained from the Steam platform.

Table 5: Comparison of games in terms of budget and localization

Game	Budget	Number of Languages Supported	Turkish Localization
<i>Cyberpunk 2077</i> (2020)	1.2 million Polish Zloty	18	Available
<i>Call of Duty: Modern Warfare 2</i> (2009)	200 million US Dollars	5 at launch, 13 at remastered edition	Not Available
<i>Rocket League</i> (2015)	Less than 2 million US Dollars	12	Available
<i>Dinkum</i> (2022)	Unknown (Developed by one person)	1	Not Available

Cyberpunk 2077, released in 2020, was developed by CD Projekt RED with a budget of 1.2 billion Polish Zloty (Sinclair, 2021) and is localized to 18 different languages. Of these 18 languages, 11 are dubbed and 7 are interface and subtitle translation only. Turkish is among these 7 languages. Another high-budget game like *Cyberpunk 2077* is *Call of Duty: Modern Warfare 2*, which was released in 2009.

Developed by Infinity Ward with a budget of 250 million USD (Fritz, 2009), this game becomes very close to *Cyberpunk 2077* when its budget is adjusted according to current inflation rates. However, when this game was released, only 5 different language options were available, and Turkish was not one of them. The difference in the number of languages is due to the rapid development in the video game industry over the last 10 years. The widespread use of audio-visual translation is also effective in this regard. The number of languages supported by *Call of Duty: Modern Warfare 2*, which was re-released as *Call of Duty: Modern Warfare 2 Campaign Remastered* in 2020, has increased to 13.

The high number of localized languages offered by big-budget games is expected. However, there are also games with small budgets but with great financial success. Although these games are usually initially offered in English, there are cases where more languages are integrated with the revenues obtained. An example of this is *Rocket League*, developed by Psyonix in 2015. Although it was developed with a budget of less than 2 million US Dollars (Needleman, 2015), it has a similar number of language options as most big budget games today. *Rocket League* offered fewer localized languages when it first launched, but that number has grown to 12 thanks to the game's earnings and microtransactions¹⁶. It can be understood from this that localization can be added not only during the development phase of a game, but also through updates even years after the game is released. However, in this case, the low-budget game turned into a big-budget game by achieving great success. As a result, as the budget increases, the number of languages in which games are localized also increases.

Dinkum, which a person named James Benton developed alone for 3 years and released in 2022, can be considered as an example of a low budget indie game. This game, which is in the process of early access¹⁷, offers only one language option,

¹⁶ Microtransaction is a business model in video games where players can purchase virtual assets with small payments.

¹⁷ Early access is a model in the video game industry where players can purchase and play a game in pre-release development cycles. With these revenues, the developers continue to develop the game and eventually aim to release the full version.

which is English. *Minecraft*, which is quite famous, is also started as an indie game developed by one person in 2011. These kinds of games generally expand their language options as they increase their budgets.

3.3. LOCALIZATION AS A CRITERION IN VIDEO GAME REVIEWS

To evaluate the influence of video game reviews on localization, it is first necessary to see how often localization is used as a criterion in these reviews. In this section, two video games from different genres have been selected. These games are the real-time strategy game *Age of Empires III Definitive Edition* and the open world racing game *Forza Horizon 5*. As of October 2022, all accessible Turkish video game reviews made by both companies and individuals are present here. Article-type reviews were accessed from the websites of individuals and companies, and video-type reviews were accessed via the YouTube platform. Thirteen Turkish video game reviews for *Age of Empires III Definitive Edition* and seventeen for *Forza Horizon 5* were available. The reason for the difference in number may be that *Forza Horizon 5* is a game played by a wider audience. These reviews will be examined, and it will be noted whether localization is mentioned or not. The resulting rate will set an example for the localization awareness of reviewers in Turkey. The data collected in this study can be seen in Table 6 and Table 7.

Table 6: Localization in reviews of *Forza Horizon 5*

Reviewer	Company / Individual	Type	Localization Criterion
TAMER	Individual	Video	No
Mavi Kol	Individual	Article	Yes
Tekno Seyir	Company	Video	Yes
Hardware Plus	Company	Video	No
Tekno Safari	Company	Video	No
Donanım Haber	Company	Video	No
OYUNGEZER	Company	Article	Yes
Merlin'in Kazanı	Company	Article	Yes
Chip	Company	Article	Yes
Oyun Günlüğü	Company	Article	Yes
Tekno Parse	Company	Article	Yes
Pckoloji	Company	Article	Yes
MediaTrend	Company	Article	No
Posta	Company	Article	No
Technopat	Company	Article	No
Gamer Community	Company	Article	No
ABC Gazetesi	Company	Article	No
Ludenoid	Company	Article	No

Of the 18 reviewers of *Forza Horizon 5*, 8 mentioned localization as a criterion in their reviews.

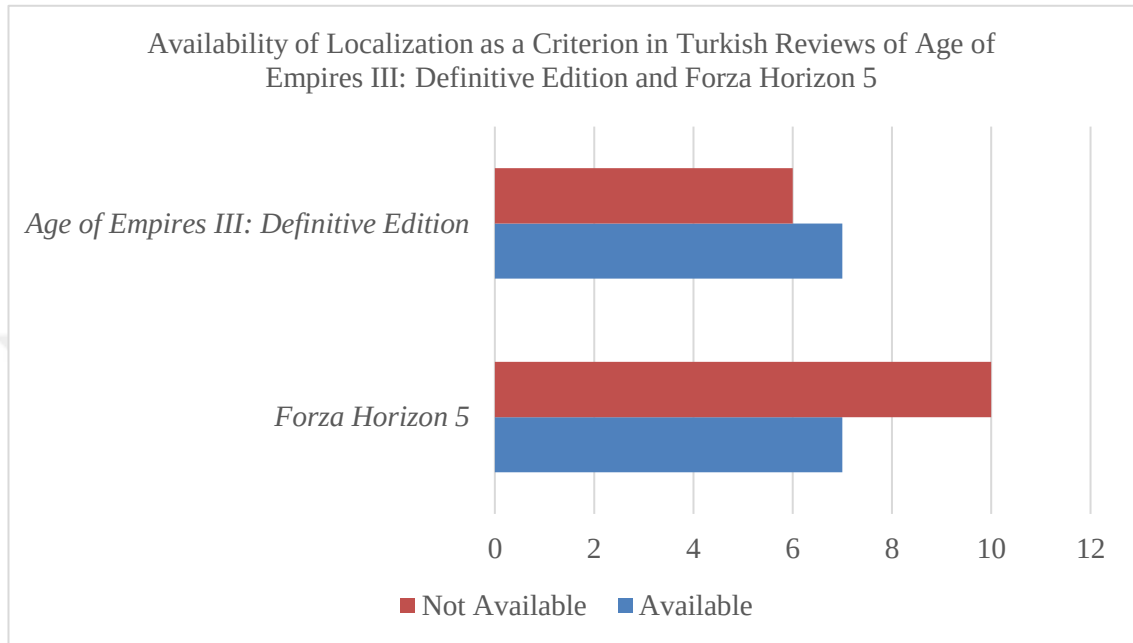
Table 7: Localization in reviews of *Age of Empires III: Definitive Edition*

Reviewer	Company / Individual	Type	Localization Criterion
Mavi Kol	Individual	Article	Yes
Oğuzhan Temiz	Individual	Article	Yes
YabguNizamPasha	Individual	Video	Yes
Swaggybark	Individual	Video	No
Praeceptium	Individual	Video	No
Technopat	Company	Article	Yes
Bölüm Sonu Canavarı	Company	Article	Yes
Monster Blog	Company	Article	Yes
Fabrikatik	Company	Article	Yes
Red Bull	Company	Article	No
Oyungezer	Company	Article	No
Chip	Company	Article	No
MediaTrend	Company	Article	No

Of the 13 reviewers of *Forza Horizon 5*, 7 mentioned localization as a criterion in their reviews. According to the collected data, the fact that the reviewer is a person or company does not change the rate of mentioning localization as a

criterion. The results from the collected data in Table 6 and Table 7 are summarized in the following figure.

Figure 18. Availability of Localization as a Criterion in Reviews



Source: Table 6 and Table 7.

According to the results, the rate of mentioning localization is 44% in *Forza Horizon 5* reviews and 54% in *Age of Empires III: Definitive Edition* reviews. In addition, in these reviews, reviewers only indicate whether the localization is available, and they don't comment on the quality of the translation. Looking at the results, it can be concluded that video game localization in Turkey has not yet been fully established in terms of awareness of game reviewers. These results may vary in studies dealing with reviews of different games. This variability may be due to the popularity of the game in the country and the priority given by the developers to its localization.

3.4. CONCLUSIONS

In this chapter, as a result of the samples examined, some conclusions were reached. Interaction in video games is not difficult for translators other than increasing the number of texts to be translated. The examples showed that the most important point that the translators should pay attention to and where the most errors occur is usually the terminology. Terminology is directly related to the genre and context of a game. One of the biggest factors affecting the context is intertextuality, and here most of the time the translator needs to do background research before translation. It has been revealed that technical restrictions in localization as well as in most sub-fields of audiovisual translation are also present in video game translation. In terms of technical glitches, it was found that one of the most common mistakes in Turkish translations was the mistakes made in the unique letters of the Turkish language. As a result of the examination of the relationship between budget and localization in the video game industry, it was concluded that games with high budgets can naturally offer more language options, but low budget games can also receive localization updates if they achieved financial success after release.

The results obtained in the additional study on video game reviews in Turkey concluded that the rate of referring to localization in video game reviews was mediocre. However, the increase in the number of players in the country and the increase in original game purchase rates in the last ten years contribute to localization efforts. The only thing that draws back the video game sector and localization efforts in Turkey is that the gamers find it hard to buy games due to the decrease in purchasing power resulted from the high inflation. A relatively affordable hobby in first world countries, video games are a luxury in economies where it's hard to make a living. Consequently, Playstation and some other service providers, are starting to think about withdrawing from the country. Until this time, PlayStation Turkey had a very important position in the Turkish localization of all games on this platform. They have made great contributions, especially in promoting the Turkish market abroad, and their support for localization was highly appreciated. The withdrawal of such firms may result in a setback in the video game industry in Turkey because the support for professional localization will greatly decrease. In such a case, just like 20 years ago, the sector will inevitably be left in the hands of amateur translators.

CONCLUSION

In the first chapter, starting with game and play, two of the basic concepts of video games, narrative and interactive features were introduced. Since video games are an interactive entertainment media environment, the gamers who provide this interaction were also considered. To become familiar with the general context of the video games, its history, classification, and culture were discussed. By explaining video games and the context surrounding video games in the first chapter, the groundwork was prepared for the next chapter. Starting from audio-visual translation and moving through localization, video game localization is explored in the second chapter. By presenting the techniques, challenges, and intricacies of this job, a baseline was established for determining the skills required for video game localization. In addition, video game reviews were introduced in connection with the video game localization. With the analyzes made in the third chapter, the presented information was tested and exemplified. *Age of Empires III: Definitive Edition* and *Northgard* from the strategy genre revealed the difference between the contexts of history and mythology. While historical facts were at the forefront in the first, fantasy elements were abundant in the second. However, since mythology is also part of a culture, it must be carefully translated and preserved. *Deep Rock Galactic* and *Dying Light* from the FPS genre revealed the differences and similarities between two quite different fantasy contexts, space-mining dwarves and surviving a zombie invasion. *Forza Horizon 5* from the racing genre and *Euro Truck Simulator 2* from the simulation genre showed how technical terms are used in games. *The Witcher III: Wild Hunt* from the action-adventure genre highlighted the potential of content in games that are dialogue-heavy and offer player choices. Lastly, *Satisfactory* from the factory-building genre showed that the terminology that can be used in games can come from any kind of field. The argument in the first chapter that the video game genres are not defined with strict boundaries and that the games create hybrid genres by taking components from different genres became clearer in these selected games. For example, *Satisfactory* may seem like an FPS at first glance, but it includes features such as base building, automation, survival, exploration and many more. The same can be true for other games too.

In this section, the research questions of the thesis will be answered in the light of all the work done. First question: How does the genre and context of a video game affect the localization processes of that video game? The research of video game genres and the analysis with samples from selected video games gave the following results: Knowing the genres of the video game helps to determine in advance what kind of terminology and translation load a video game to be localized can impose. Knowing the context in the video game not only helps with the terminology, but also enables the intertextuality and cultural elements in it to be researched more easily and therefore to be translated more smoothly. Looking at the topics discussed in this thesis, it can be seen that the scope of the first research question can be comprehensive. There are two reasons for this. The first reason is that video games contain a wide range of features from many different fields such as literature, cinema, computer technologies, and entertainment industry. There are games that are supported by literary works such as *The Witcher* novels, offer cinematic quality cutscenes, display hyper-realistic graphics, and all these aspects are designed with the interaction of the player in mind. Video game localization requires familiarity with all this technicality and context surrounding the video game industry. Therefore, especially in the first and second chapters, information about video games, video game consoles, the most preferred platforms by video game developers, and video game genres provides a glimpse of the versatility of video games and the required background knowledge for video game localization. The second reason why the first research question has a broad scope is that video games may open the door to sociological issues based on the relations and interactions between gamers, both in-game and in real life. In order not to deviate too much from the subject of the thesis, without an in-depth analysis, Pierre Bourdieu's capital concepts were introduced to provide an understanding for the Mia Consalvo's gaming capital concept. This concept provides a way for researchers to understand how people interact with video games, information about games, the game industry, and other gamers. When this concept is applied to video game reviews, it helps to understand how they affect the video game industry. In addition, it should be noted that video game reviews sponsored by game companies often do not go beyond an advertisement.

After presenting the necessary information about video games, the second research question of the thesis comes to the fore. In which direction translators develop themselves to be better at video game localization? The answer to this question includes the answer of the first research question, because translators must become familiar with video game genres and contexts in order to improve themselves in this field. However, there are certain skills required for a translator to deal with audiovisual translation and localization. The first of these is computer literacy. Being able to use the necessary programs on the computer and adapting to new applications is a necessity in this rapidly changing industry. The best way to develop translators in this direction is to provide them with computer literacy while they are still at university or even high school. The fact that people can use computers at a basic level does not indicate that they are at the required level of computer literacy. It is an important skill to be able to research effectively on the internet and to reach the right information by eliminating the wrong information. For example, when an unknown word encountered in a game is translated without doing the necessary research, it is inevitable to make mistakes, just like some of the examples in this thesis. These issues are addressed with the assumption that the translator, who will focus on video game localization, has a solid traditional translation training. Because before acquiring the extra skills required for video game localization, basic translation theories and techniques must be internalized.

The third research question of the thesis and the analysis made within the scope of this question are as follows. What is the impact of video game reviews on the video game industry and video game localization? As the main genre of journalism in the video game industry, video game reviews are not only a buying guide but also a tool with the potential to shape the industry. Looking at this through Turkish localization, it has been argued in this study that mentioning localization in Turkish video game reviews may have an impact on both gamers and developers. It is not unreasonable that when it raises awareness of localization in consumers, it will increase the demand for translation and developers will listen more to these demands. In the results of the analysis, it has been observed that this awareness has not yet been fully established in reviews made in Turkey. In video game reviews of *Age of Empires III: Definitive Edition* and *Forza Horizon 5*, localization was mentioned at

an average rate of 49%. Looking at the course of the market, it can be argued that this will increase in the coming years. However, since the video game industry in Turkey cannot escape the effects of the economic and political unpredictability in the country, its future is not certain for now.

It is seen in this thesis, which has reached similar results with the limited number of studies on video game localization in Turkey (Önen, 2018: 113), that there is still no complete agreement between translation studies and the localization industry. It would be beneficial to further such studies that will help to build a bridge between translation studies and localization. In order to advance this field both academically and professionally, the relationship and understanding between them should develop mutually. Innovative video game localization companies newly established in Turkey, such as BeLocal, play an important role in leading the video game localization industry to produce higher quality work. Although artificial intelligence applications such as ChatGPT developed by OpenAI cause concern among translators, it can be said that people who have developed themselves in the right direction will always be in demand. Because although artificial intelligence seems to be able to make quality translations, it is still not sufficient for the translation of technical jargons, cultural understanding, and idiomatic expressions. This is where skilled translators come into play. It is a fact that translators who cannot develop themselves sufficiently will have difficulty in finding a place in the developing market. However, those who can effectively use computer technology and artificial intelligence will always be sought after.

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