REPUBLIC OF TURKEY

ANKARA UNIVERSITY

GRADUATE SCHOOL OF SOCIAL SCIENCES

DEPARTMENT OF INTELLECTUAL PROPERTY RIGHTS, TECHNOLOGY POLICIES AND INNOVATION MANAGEMENT

VIDEO GAMES AND VIDEO GAME ELEMENTS AS COPYRIGHTED WORKS

Master's Thesis

İlay YÜCE

Ankara, 2022

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Date of the Thesis Examination

30.05.2022

DECLARATION

REPUBLIC OF TURKEY

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To the Directorate of Graduate School of Social Sciences,

I hereby declare that all information in my master's thesis titled "Video Games and Video Game Elements as Copyrighted Works (Ankara, 2022)" which has been prepared under the supervision of Assist. Prof. Dr. Zehra ÖZKAN ÜNER has been gathered and submitted in compliance with academic rules and ethical conduct principles and the data obtained from other sources have been duly indicated both in the text and references. I also declare that I have acted according to scientific research and ethical rules during the study process and if it is proven otherwise, I will accept all legal consequences.

Date: …/…/……

İlay YÜCE

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LIST OF ABBREVIATIONS

2D **:** Two-Dimensional

3D **:** Three-Dimensional

CFR **:** Code of Federal Regulations

CGI **:** Computer-Generated Imagery

CJEU **:** The Court of Justice of the European Union

DEC **:** Digital Equipment Corporation

DLC **:** Downloadable Content

ed. **:** editor, edition

EU **:** The European Union

EULA **:** End-User License Agreement

FPS **:** First-Person Shooter

GUI **:** Graphic User Interface

HUD **:** Heads-Up Display

JRPG **:** Japanese Role-Playing Game

MMORPG **:** Massively Multiplayer Online Role-Playing Game

MOBA **:** Multiplayer Online Battle Arena

NPC **:** Non-Playable Character

PC **:** Personal Computer

QTE **:** Quick Time Event

RPG **:** Role-Playing Game

RTS **:** Real-Time Strategy

TBS **:** Turn-Based Strategy

TPS **:** Third-Person Shooter

TRIPS **:** Agreement on Trade-Related Aspects of Intellectual Property Rights

UCC **:** Universal Copyright Convention

US **:** The United States

vol. **:** volume

WCT **:** WIPO Copyright Treaty

WIPO **:** World Intellectual Property Organization

WPPT **:** WIPO Performances and Phonograms Treaty

WTO **:** World Trade Organization

INTRODUCTION

The opportunity of being anyone and anything, going to the places never imagined, wandering the realms never have been in existence, claiming wealth and power beyond reachable extents, living a historical event as the protagonist or a bystander; it is possible through the vast selections of video games offered to the players of the world today.

The video game industry is one of the most significant and impactful industries on the market in this digital era that we live in. The global video game industry is offering the player experience for more than 2.5 billion people in the world and is expected to reach the worth of 256 billion US dollars by the year of 2025.[1] The billion-dollar industry is always under the magnifying glass, being watched closely with anticipation and joy thanks to its undeniable potential. The history of the world may not be able to go centuries back to find video games as we know today, however, the digital age brought so many things unimaginable to human comprehension; and video games with their promises are no exception.

It is without question that the law always is trying to keep up with the progress. We cannot regulate what we did not encounter before. With the technology expediting the progress of humanity in the digital age, the law is always multiple steps behind when it comes to creating solutions for the new problems arising. The first step is always understanding the subject matter at the core of the problem at hand, however, the touch of technology with its accelerating nature, morphs those problems into something entirely new even before the law makers attempt to understand what they are looking for.

[1] Teodora Dobrilova, "How Much Is the Gaming Industry Worth in 2021?" TechJury, December 7, 2021, accessed December 29, 2021, https://techjury.net/blog/gaming-industry-worth.

The human mind's endless creativity has been under the protection of intellectual property laws as it needs. Whether it is a revolutionary invention, a solution for a technical setback so simple but never have been thought before, a secret so fruitful in the course of business, an art piece that is admired by millions, a sign so unique to take place in people's minds that they recognize its commercial worth anywhere and anytime; they are subject to intellectual property law protection. Video games are one of those creations that are to be covered by intellectual property laws. When video games came into existence decades ago, just maybe, they could be considered simple computer codes. However, throughout the years with the fast-paced technological developments, video games in which we generously invest our time have become something else entirely. Video games in today's world are now works of intellectual and artistic value created with immeasurable efforts and extremely complex structures, way beyond a sole computer code.

The complexity of video games creates new problems for debate as a subject matter for intellectual property protection. Video games, whether partially or as a whole, can be observed in different branches of intellectual property law that are patents, trademarks, designs or copyrights. In this study, we aim to address video games as intellectual and artistic works, namely copyrighted works.

The first chapter of this study will focus on explaining video games entirely. We will dwell upon defining what a video game is, the place and progress of video games in the history and how video games came to be in the recent decades of modern digital era. The chapter will consist of not only the definition and history of video games, but also the different types of video games as to their genres and operating platforms, and the separate elements that make a video game when brought together. Finally, the chapter will close with a brief evaluation of how video games can be protected under different types of intellectual property rights, and which one is the most prominent type and option.

The second chapter of this study will focus on the notions of copyright and work. We will lay emphasis on explaining the copyright law and copyrighted works in the Turkish jurisdiction, the European Union and the United States along with regulations taking place in international treaties regarding intellectual property rights. The chapter will consist of the detailed definitions and conditions of a copyrighted work that can be within the scope of legal protection, the types of copyrighted works stated in the Turkish Law No. 5846 of December 5, 1951, on Intellectual and Artistic Works, the European Union directives, and the United States legislations along with relevant international treaties.

The third and final chapter of this study will focus on the issues regarding copyright protection of video games as works in depth. We will provide the analysis of placing different elements of video games under the various categories specified for types of copyrighted works. The closing sections of this chapter and this study will be the evaluation of video games as holistic copyrighted works and the elements of video games that can edge around copyright or cannot be copyrighted at all.

§ CHAPTER I

UNDERSTANDING VIDEO GAMES

I. THE NOTION OF "VIDEO GAME"

"*Hello my friend. Stay a while and listen...*"[2]

Games have been a part of life since forever. When we think of the word "game", we automatically associate it with fun, joy, and a good time. It is possible to see that in the modern age we live in, even the simplest and oldest kinds of games we know from our childhood somehow find their way into our lives through their digital counterparts we call video games.[3]

The varying lexical meanings given for a video game are found as "*an electronic game in which players control images on a video screen*"[4], "*a game in which players use electronic controls to move images on a screen*"[5] or "*a game in which you press buttons to control and move images on a screen*".[6] Basically, these definitions brought together point towards three essential things for defining a video game; the 'digital' nature of the

[2] The memorable phrase heard from Deckard Cain, the elder of Tristram, the last of the Horadrim scholars, in the action role-playing hack-and-slash game "*Diablo*" developed by Blizzard North and released by Blizzard Entertainment on January 3, 1997.

[3] Video games are also sometimes referred to as "digital games" or "computer games"; Derya Doğan and Gürkan Özocak, "Dijital Oyunlar, Multimedya Yaratımlar ve Güncel Hukuki Problemler," *3. UBHK Bildiriler Kitabı*, (June 2013), 3.

[4] "Video Game Definition & Meaning," Merriam-Webster, accessed December 30, 2021, https://www.merriam-webster.com/dictionary/video%20game.

[5] "Video Game (Noun) Definition and Synonyms," Macmillan Dictionary, accessed February 2, 2022, https://www.macmillandictionary.com/dictionary/british/video-game.

[6] "Video Game," Oxford Advanced Learner's Dictionary, accessed February 2, 2022, https://www.oxfordlearnersdictionaries.com/definition/english/video-game.

video game as an electronic product, the 'interactivity' where the player controls the flow of the game through physical actions and decisions they make, and a 'device' necessary to operate the digital product.

Esposito gave the term video game a definition that is slightly wider and narrower at the same time, calling a video game "*a game which we play thanks to an audiovisual apparatus and which can be based on a story.*"[7] According to this definition, there are four key points in need of further emphasis; 'game' as the plain and obvious element, 'play' as the experience element, 'audiovisual apparatus' which points to the interactivity medium, and 'narrative' which leads to the story. The digital product aspect of the game is left out from the definition for it is obvious to see, yet the significance of gameplay and story is brought forward for giving a video game a certain quality. However, it is also mentioned that a story is not always present in a video game.[8] The game simply can be an abstract challenge, such as the well-known puzzle game "*Tetris*".[9]

Frasca defines video games in a broad sense as "*any forms of computer-based entertainment software, either textual or image-based, using any electronic platform such as personal computers or consoles and involving one or multiple players in a physical or networked environment*".[10] Additionally, *Gürünlü* combined the various definitions provided for the concept of "game" itself with the unique nature of video games and eventually defined a video game as "*a complex work of authorship that involves human*

[7] Nicolas Esposito, "A Short and Simple Definition of What a Videogame Is." (Digital Games Research Conference 2005, Changing Views: Worlds in Play, Vancouver, British Columbia, Canada, 2005).

[8] Esposito, "A Short and Simple Definition of What a Videogame Is."

[9] "Tetris," Encyclopædia Britannica, accessed December 30, 2021, https://www.britannica.com/topic/Tetris; Tetris is a puzzle video game created in 1984 by the Soviet computer engineer Alexey Pajitnov who was at the time 29 years old. The game allows players to rotate differently shaped blocks while falling and to strategically clear accumulating levels.

[10] Gonzalo Frasca, "Videogames of the Oppressed: Videogames as a Means for Critical Thinking and Debate" (Master's thesis, Georgia Institute of Technology, 2001), 4.

interaction while executing a rule-based system with quantifiable outcomes through a computer program on specific hardware".[11]

Phil Owen described a video game with a simple and common expression initially as an "*interactive digital entertainment that you 'play' via a computer, a game console (like the Xbox or PlayStation) or a phone or tablet",* followed by a more sophisticated approach consisting of multiple examples reflecting the nature of video games from a player's experience perspective:

> "*Video games are sports that take place in a computer. They're interactive TV shows and interactive movies. They're digital board games and card games. They're rough simulations of everyday life including, probably, whatever you do for a living. Some video games are works of artistic expression.*"[12]

Even though the different brief definitions given for a video game is far from reflecting and describing every single one of the crucial elements that make a video game as a whole, when the points in these definitions are brought together, it is possible to define a video game as an interactive experience in which the player delves into a narrative with a certain purpose of accomplishment, actively communicated through an input device that gives out a visual and auditory output digitally. This definition is more suited for video games that we encounter in the recent decades, since the very first video games that were created did not include these elements altogether.

We can say that the visual element was always there, as well as the computer code that makes the digital product. However, the early history of video games started so very

[11] İsmail Ekin Gürünlü, "Video Games and Copyright Protection Under International, European and U.S. Law" (Stanford-Vienna Transatlantic Technology Law Forum Working Paper No. 59, 2020), 17.

[12] Phil Owen, "What Is a Video Game? A Short Explainer," TheWrap, March 9, 2016, accessed February 2, 2022, https://www.thewrap.com/what-is-a-video-game-a-short-explainer.

simple, they were probably not even given the priority of being an audible experience, let alone holding the purpose of telling the players a story. The history of how video games became what they are today is a colorful journey.

II. THE HISTORY OF VIDEO GAMES

Looking through the history of computer science, the attempts towards the digitalization of anything that one can think of brought many unexpected creations. Whether a coincidence or an inevitable outcome, video games also emerged from the trial and errors of computer coding history. The globalization of a promising industry with great potential that is video games has its own kind of journey through the century. It was never steady, the progress came with "game-changer" leaps that impacted the entire industry, constantly setting up new trends with the help of immersive technologies and ideas never have been thought before. It should be also noted that developments in the history of video games are not always in the technological aspect, there are also crucial development stages that were "purely conceptual".[13]

A. The Very First Video Games

The history of video games starts intertwined with inventions. There are different opinions on the actual first video game as to the starting point of being created, even though it was not publicized, or being commercialized for the first time ever. One thing is for sure about the earliest video games; the machine came before the game. We will go back to the very start, so far as to the 1940's.

[13] Jesper Juul, "A History of the Computer Game," Jesper Juul, accessed January 1, 2022, https://www.jesperjuul.net/thesis/2-historyofthecomputergame.html.

The very first system in the history video games was presented by nuclear physicist Edward Uhler Condon for the "Westinghouse Pavilion" at the "New York World's Fair" in April 1940.[14] The device that was created, designed, and patented[15] by Condon was named "*Nimatron*".[16] It was an "electromechanical machine" that would allow people to play an ancient mathematical strategy game called "*Nim*", where players are trying not to be the one who ends up with the last matchstick.[17] Rather than being classified as a video game, this landmark invention is considered more like a game machine, a computer designed to play games. The game operated by *Nimatron* was visually displayed by a series of illuminating lightbulbs.[18] *Nimatron* was not a huge leap in the video game industry, but it was definitely an important creation.

The second landmark machine that came into existence was the "*Cathode-ray tube amusement device*" that was created by physicists Thomas Toliver Goldsmith Jr. and Estle Ray Mann in 1947.[19] It was a game based on the World War II radar displays where "*players use knobs to adjust the trajectory of light beams in an attempt to hit targets printed on clear screen overlays*".[20] It consisted of an oscilloscope connected to a

[14] Charlie Fish, *The History of Video Games* (Yorkshire: White Owl, an Imprint of Pen & Sword Books, 2021), 6-7; "Nimatron: An Early Electromechanical Machine to Play the Game of Nim," History of Information, accessed December 31, 2021, https://www.historyofinformation.com/detail.php?entryid=4472

[15] Edward U Condon, Gereld L Tawney, and Willard A Derr, Machine to Play Game of Nim, US Patent US2215544A, filed April 26, 1940, and issued September 24, 1940.

[16] Fish, *The History of Video Games*, 6-7.

[17] "Video Games Archive," The Strong National Museum of Play, accessed December 31, 2021, https://www.museumofplay.org/video_games.

[18] Fish, *The History of Video Games*, 6-7.

[19] Jr Thomas T Goldsmith and Estle Ray Mann, Cathode-ray Tube Amusement Device, US Patent US2455992A, filed January 25, 1947, and issued December 14, 1948.

[20] D.S. Cohen, "Cathode-Ray Tube Amusement Device: The World's First Video Game?" Lifewire, March 14, 2019, accessed January 1, 2022, https://www.lifewire.com/cathode-ray-tube-amusement-device-729579.

television screen where the player utilized the cathode-ray tube's gun to simulate firing missiles.[21]

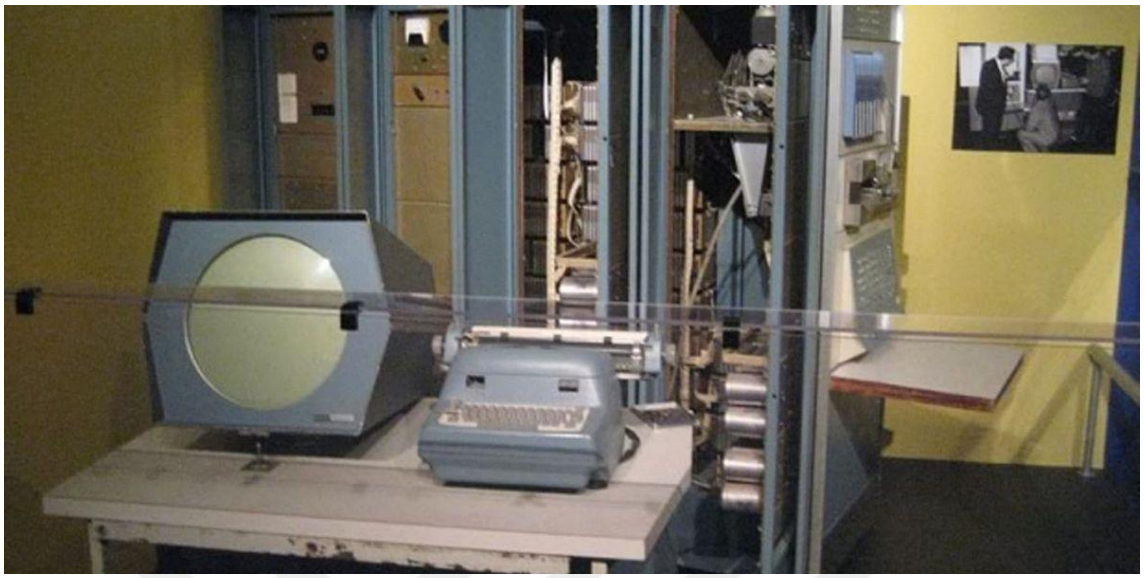

Figure 1. "Cathode-ray tube amusement device" invented by Thomas Toliver Goldsmith Jr. and Estle Ray Mann in 1947.[22]

The device was so expensive, it never found its way to the public market and remained a prototype.[23] This invention also is not considered the first video game because it lacked "*programming or computer-generated graphics, and no computer or memory device is used at all in the creation or execution of the game*".[24] However, it remains with its importance as it inspired many other creations that became the very first video games in the course of history.

In 1952, the first video game with a graphic display element, named "*OXO*" was created by Alexander Sandy Douglas for his Ph.D. thesis at the University of

[21] Fish, *The History of Video Games*, 6.

[22] "Cathode-ray tube amusement device" (original), Matt Blitz, "The Unlikely Story of the First Video Game," Popular Mechanics, accessed March 3, 2022, https://www.popularmechanics.com/culture/gaming/a20129/the-very-first-video-game.

[23] Fish, *The History of Video Games*, 6.

[24] D.S. Cohen, "Cathode-Ray Tube Amusement Device: The World's First Video Game?".

Cambridge.[25] The game was an electronic version of the game we know as "*Tic-Tac-Toe*", where players put "X"s and "O"s aligned to win. It was a testing attempt programmed to operate through the "Electronic Delay Storage Automatic Calculator", in short "EDSAC", and players were playing the game against the computer itself. The purpose of this creation was to study the "interactions between human and computer".[26] The connection to Goldsmith's Cathode-ray tube amusement device is that *OXO*'s graphic display was thanks to the "Cathode-Ray Tube" attached to the "EDSAC" computer.[27] This game also was never made public and remained in the labs of the University of Cambridge because there was no other EDSAC.

Next comes the game "*Tennis for Two*" created by nuclear physicist William Higinbotham in 1958, which was created purely for entertainment purposes unlike its predecessors.[28] It was the first video game created for fun and entertainment and was showcased at the exhibition of Brookhaven National Laboratory.[29] The game operated on an analogue computer with a decent size, also with an oscilloscope display and aluminum controllers designed and made specifically for playing the game of, as stated by its title, tennis.[30] Arguably, while some people consider *Tennis for Two* the first video game, others give the title of the first to another creation called "*Spacewar!*".

As computers improved regarding their technological capabilities and started to become slightly more accessible both in terms of size and price, it led to the creation of other video games. "*Spacewar!*" is one the many firsts in the video games history.

[25] D.S. Cohen, "OXO Aka Noughts and Crosses - The First Video Game," Lifewire, March 12, 2019, accessed January 1, 2022, https://www.lifewire.com/oxo-aka-noughts-and-crosses-729624.

[26] "The First Video Game?" BNL, accessed January 1, 2022, https://www.bnl.gov/about/history/firstvideo.php.

[27] D.S. Cohen, "OXO Aka Noughts and Crosses - The First Video Game".

[28] BNL, "The First Video Game?".

[29] Fish, *The History of Video Games*, 8-9.

[30] Fish, *The History of Video Games*, 9.

Towards the end of 1959, one of the "PDP-1"[31] computers created by Digital Equipment Corporation ("DEC") ended up in Massachusetts Institute of Technology. Steven Russell and his friends desired to test out the capabilities of this wonder machine and ended up creating the game called "*Spacewar!*" in 1962.[32] The idea and focus behind the creation of this game was to "*create a demonstration program that utilized as many of the computer's resources as possible and taxed those resources to the limit, remained interesting even after repeated viewings, which meant that each run needed to be slightly different and was interactive.*"[33] *Spacewar!* was a "PvP"[34] game where two players controlled two spaceships to fire torpedoes at each other, while circling in the hyperspace and around a deadly sun with a destructive gravitational pull.[35] *Spacewar!* was a huge success despite its limited accessibility remaining in computers in the research centers. It was the very first video game which had the possibility to be operated on multiple computer installations.[36] It was never meant for and made for public, but Russell allowed the game's code to be accessible by everyone and DEC also included the game in PDP-1 computers they sold later on, so it spread around universities, inspiring the coders for the first commercial attempts of video games.[37]

Inspired by Russell's "*Spacewar!*", two coin-operated variations of this game came into light in 1971. The first one was "*Galaxy Game*" developed by Bill Pitts and

[31] The name "PDP-1" stands for "Programmed Data Processor-1".

[32] Corie Lok, "The Start of Computer Games," MIT Technology Review, June 5, 2005, accessed January 1, 2022, https://www.technologyreview.com/2005/06/01/230884/the-start-of-computer-games.

[33] "Video Game History," Smithsonian Institution, accessed January 1, 2022, https://www.si.edu/spotlight/the-father-of-the-video-game-the-ralph-baer-prototypes-and-electronic-games/video-game-history.

[34] The term "PvP" stands for "Player-versus-Player".

[35] "Spacewar!" The Strong National Museum of Play, November 10, 2021, accessed January 1, 2022, https://www.museumofplay.org/games/spacewar.

[36] "Video Game History," History.com, June 10, 2019, accessed January 1, 2022, https://www.history.com/topics/inventions/history-of-video-games.

[37] Lok, "The Start of Computer Games".

Hugh Tuck, and following that, Nolan Bushnell and Ted Dabney created the famous adapted version of *Spacewar!* called "*Computer Space*".[38] *Computer Space* was the very first commercialized video game that went public with the help of Nutting Associates manufacturing, though it was not very successful.[39] True commercial success came with another game, from the game company Atari founded by Bushnell in 1972.

B. Evolution of Video Games Through Commercialization

Going back in time just a few years, in 1967, a "prototype multiplayer, multi-program video game system that could be played on a television", known as "*The Brown Box*", was invented by Ralph Baer and his team.[40] This device later on served as the basis for a device released to the market under the name "*Magnavox Odyssey*" in 1972 and it was the very first home type gaming console.[41]

The first commercially successful video game in its course of history was "*Pong*" that came out in 1972. The game was developed and released by the famous game company Atari. *Pong* was the arcade game everyone loved and still remembers as the first video game ever due to its popularity and success, and it was believed to be inspired by one of *Magnavox Odyssey*'s games, "*Table Tennis*".[42] In 1975, the home version of *Pong* was released, and more than 100.000 games were sold.[43] Following this success, Atari ended up in a legal conflict with Magnavox, which was finalized with a settlement and

[38] Fish, *The History of Video Games*, 9-10.

[39] ""Computer Space," the First Commercially Sold Coin-Operated Video Game," History of Information, accessed January 1, 2022, https://www.historyofinformation.com/detail.php?entryid=2709.

[40] History.com, "Video Game History".

[41] History.com, "Video Game History".

[42] Andy Bossom and Ben Dunning, *Video Games: An Introduction to the Industry* (London: Fairchild Books, an Imprint of Bloomsbury, 2016), 22.

[43] Oliver Hotham, "A Video Games Timeline: From Pong to the Console Wars," Tech Xplore - Technology and Engineering News, November 5, 2020, accessed January 2, 2022, https://techxplore.com/news/2020-11-video-games-timeline-pong-console.html.

Atari getting a license.[44] *Pong* and its many copycats released to the market led to countless lawsuits filed by Magnavox and being victorious; being the first patent lawsuits about video games in the video game history.[45]

Figure 2. "Atari Hockey Pong" C-121 model (1976). Picture taken at Retro Gathering, Stockholm, September 27, 2008, by Staffan Vilcans.[46]

[44] John Quagliariello, "Applying Copyright Law to Videogames: Litigation Strategies for Lawyers," *Harvard Journal of Sports and Entertainment Law* 10, no. 2 (Spring 2019): 265.

[45] Ralph Baer, "Genesis: How the Home Video Games Industry Began," Ralph Baer, accessed January 2, 2022, http://www.ralphbaer.com/how_video_games.htm. "*Atari, the pioneer arcade video game manufacturer of the period was joined in that first lawsuit with Seeburg and some others. Once the trial began, Nolan Bushnell, Atari's president, was having second thoughts and settled with us out-of-court... our first licensee! Atari got a relatively low-cost paid-up license which acovered past infringement for US-sold products, but not foreign rights. Those were negotiated five years later. That initial Agreement was dated June 6, 1976. It was the first of two Agreements with Atari. The second one was signed in 1981. By then, Atari dominated the video game world. That Chicago lawsuit was just the first one in a series of legal actions against infringers of our patents. We later litigated against Mattel, Activision, Nintendo and Sega and won all of those lawsuits over the period of the next ten-plus years. They ran longer than any Broadway play ever did. Much money changed hands as a result and went into the coffers of Sanders (now a Lockheed company) and Magnavox'; of course the lawyers collected their share.*"

[46] "Atari Hockey Pong" (edited), Staffan Vilcans, "Pong," Flickr, September 28, 2008, accessed March 3, 2022, https://www.flickr.com/photos/8543480@N06/2894903938.

Video game industry took off after the first arcade games and home consoles were introduced to the market and many different games and devices inspired by the success of *Pong* surfaced in the following years. In 1977, Atari released a home gaming console called "*Atari 2600*", also known as Atari "*Video Computer System*", entering the homes of millions of people.[47] *Atari 2600* remained on the market until 1992 and sold around 30 million products.[48] Many popular arcade games like "*Space Invaders*" and "*Pac-Man*" were licensed from Japan and adapted for this machine and sold millions of copies.[49]

A landmark video game that came out during this period is "*Donkey Kong*" which was a total sensation. The platform action puzzle game released on arcades in 1981 by Nintendo also included a very famous character called "*Jumpman*", who later became known as everyone's favorite plumbing man; "*Mario*".[50] The rising popularity of arcade and home gaming consoles also led to portable handheld gaming machines jumping into the market along with home computers and their potential for video games in the following years. One example is Nintendo's "*Game & Watch*" series released in 1980, separately including 60 games which sold millions of copies for years.[51]

The growing video game market with arcade games, home console games and portable games eventually caused an uncontrollable production of countless machines and games, which brought a huge crash in the United States ("US") market around 1983. So many low-quality games were being released, it caused an inevitable surplus in the video game market. The rise of home computers also dealt damage for way too many

[47] The Strong National Museum of Play, "Video Games Archive".

[48] Fish, *The History of Video Games,* 14.

[49] Fish, *The History of Video Games,* 15.

[50] The Strong National Museum of Play, "Video Games Archive".

[51] Fish, *The History of Video Games,* 16.

game consoles and game cartridges available to consumers.[52] Many games already manufactured were rejected by consumers and ended up being discarded.[53] The infamous *Atari 2600* game "*E.T. the Extra-Terrestrial*", based on Steven Spielberg's renowned movie, is one of the most memorable video games remembered from this era of disaster.[54]

Onwards this short period of struggle, video game industry only kept soaring higher. New consoles entered the market, keeping the competition going with home computers; new video games with new genres emerged, offering the players unique forms of entertainment. Following the introduction of "*Nintendo Entertainment System*", in short "*NES*", in 1985, players were welcomed with improved graphics in color, sound and gameplay over previously released consoles. Legendary titles such as "*Super Mario Bros*." and "*The Legend of Zelda*" met with players.[55]

The competition went on with multiple industry giants racing their consoles and games. In the early 1990's, the "console wars" between Sega's "*Genesis*" and Nintendo's "*Super Nintendo Entertainment System*", in short "*SNES*", introduced a concern regarding violence in video games, especially fighting games like "*Street Fighter*" and "*Mortal*

[52] Smithsonian Institution, "Video Game History".

[53] "Atari Parts Are Dumped," *The New York Times*, December 28, 1983, National ed., sec. D, accessed January 2, 2022, https://www.nytimes.com/1983/09/28/business/atari-parts-are-dumped.html. "*With the video game business gone sour, some manufacturers have been dumping their excess game cartridges on the market at depressed prices. Now Atari Inc., the leading video game manufacturer, has taken dumping one step farther. The company has dumped 14 truckloads of discarded game cartridges and other computer equipment at the city landfill in Alamogordo, N.M. Guards kept reporters and spectators away from the area yesterday as workers poured concrete over the dumped merchandise. An Atari spokesman said the equipment came from Atari's plant in El Paso, Tex., which used to make videogame cartridges but has now been converted to recycling scrap. Atari lost $310.5 million in the second quarter, largely because of a sharp drop in video game sales*."

[54] "Hundreds of Atari Games Buried More than 30 Years Ago in New Mexico Landfill Sell for More than $105,000," *Daily Mail Online*, September 2, 2015, accessed January 2, 2022, https://www.dailymail.co.uk/news/article-3218962/Atari-games-New-Mexico-landfill-like-E-T-Centipede-sell-100-000.html. "*A cache of Atari game cartridges dug up in a New Mexico landfill last year has generated more than $100,000 in sales over the last several months. The April 2014 dig ended speculation surrounding an urban legend and proved it to be true that Atari discarded hundreds of games, including E.T. The Extraterrestrial, more than 30 years ago. In addition to the E.T. cartridges, Joseph Lewandowski found more than 60 other titles including Asteroids, Missile Command, Warlords, Star Raiders, Swordquest, Centipede and Super Breakout."*

[55] History.com, "Video Game History".

Kombat", encouraged the foundation of the "Entertainment Software Rating Board", for rating video games regarding age thresholds and disturbing content.[56] During the 1990's, video games changed places with the movie industry in terms of adaptations, and movies based on video games gained popularity. "*Super Mario Bros.*" getting a live-action adaptation in 1993, as well as franchises like "*Street Fighter*" and "*Mortal Kombat*" in the following years is proof that video game industry never lost its potential for new ideas.[57]

The modern digital era came with online services for video games. The physical form of video games evolved from game cartridges to disks. Eventually the internet removed the necessity of hardcopies and primary distribution form became digital copies for video games. In 2003, Valve Corporation created a digital gaming platform named "*Steam*" for personal computers ("PC"), which allows PC players to obtain digital copies of video games and organize them in a dedicated digital library. Other video game platforms such as Microsoft's "*Xbox*" and Sony's "*PlayStation*" also adapted to digitalization and provided similar digital services for gamers.

Entering the 21st century, Microsoft's "*Xbox 360*", Sony's "*PlayStation 3*", and Nintendo's "*Wii*" defined a new era for video game industry by presenting high-definition graphics in the gaming culture.[58] Beyond the modern game consoles, PC gaming never stopped and games like "*World of Warcraft*"[59] harbored thousands of gamers in a digital world that never sleeps.[60] While gaming consoles and PCs blossomed even more for video games and gave birth to their own cultures, video games also started to appear on

[56] "Defining Moments in Video Game History: A Timeline," Stash Learn, May 2, 2018, accessed January 2, 2022, https://www.stash.com/learn/defining-moments-in-video-game-history-a-timeline.

[57] History.com, "Video Game History".

[58] History.com, "Video Game History".

[59] "World of Warcraft", otherwise known as "WoW", is a massively multiplayer online role-playing game (MMORPG) developed and published by Blizzard Entertainment on November 23, 2004.

[60] Stash Learn, "Defining Moments in Video Game History: A Timeline".

online social media platforms like Facebook where people played "*FarmVille*"[61] non-stop and mobile games like "*Angry Birds*"[62] and "*Candy Crush*"[63] entered into our pockets introducing new addictions.[64] The kick-off point for e-sports goes way back to 1990's, however, its sensational growth came with video games of 2000's like "*Dota 2*"[65], "*Counter-Strike*"[66], "*League of Legends*"[67] and the one of the most recent games with an incredible popularity among gamers of all ages, "*Valorant*".[68]

Video games we see everywhere today have evolved from plain dots on screens to fully engageable digital environments. The simple tradition of casual video games never ceased to exist even today, however, modern video games mostly have immersive worlds whether for single player adventures or multiplayer races for achieving higher scores. Massive million-dollar tournaments that are watched by millions of people host various competitive video games and are safely accepted as a new type of sports, namely e-sports. We can see video games in our daily lives, within dedicated video game consoles, computers we have at our homes or even mobile phones which have become a part of our very being.

[61] "FarmVille" is a series of agriculture-simulation social network games developed and published by Zynga on June 19, 2009.

[62] "Angry Birds" is a puzzle slingshot game developed by Rovio Entertainment and released on December 11, 2009.

[63] "Candy Crush Saga" is a match-three puzzle game released by King on April 12, 2012.

[64] History.com, "Video Game History".

[65] "Dota 2" is a multiplayer online battle arena (MOBA) game developed and published by Valve on July 9, 2013.

[66] "Counter-Strike" is a series of multiplayer first-person shooter games developed by Valve, first one released on November 9, 2000.

[67] "League of Legends" is a multiplayer online battle arena (MOBA) game developed and published by Riot Games on October 27, 2009.

[68] "Valorant" is a first-person hero shooter game developed and published by Riot Games on June 2, 2020.

III. TYPES OF VIDEO GAMES

Classifying video games is not easy considering how they constantly evolve into new creations. We will try to briefly explain the types of video games in terms of the most inclusive fundamental video game genres and the physical platforms and machines that video games are played on.

A. Video Game Genres

Video games have a good number of genres and sub-genres. Some of these evolved into hybrid genres or even became so prominent, they are not considered sub-genres anymore. Most video games are now created by blending multiple genres within the framework that the developers' imagination allows.[69]

Our study aims to give a brief explanation for the most popular and prominent video game genres for the sake of clarifying the video game elements to be evaluated under legal classification of video games as copyrighted works in the third chapter of this study. It should be also noted that the ten video game genres listed under this section are not definite; video game genres stated hereunder only aim to give a sense of gameplay styles and mechanic designs as to the video game traits.[70]

1. Action

The name of the genre speaks for itself and covers a great portion of all the sub-genres of video games. Action games generally involve fighting against multiple enemies

[69] Brent Rabowsky, *Interactive Entertainment: A Videogame Industry Guide* (Oxnard, CA: Radiosity Press, 2009), 11-12.

[70] Bossom and Dunning, *Video Games: An Introduction to the Industry*, 38.

and can sometimes be called "shooters". The perspective of the player usually gives the styles of first-person shooters ("FPS") where the players see directly through the eyes of the character they control, or third-person shooters ("TPS") where the players see their character from behind and can have environmental perspective.[71] The distinctive element for action games is that it requires a physical skill as well as hand and eye coordination and sharp reflexes from the players.[72] FPS video games like "*Half-Life*"[73] and "*Call of Duty*"[74] involve a great amount of combat and shooting, whereas "*Counter-Strike*" and "*Valorant*" are great examples for where teamwork and strategical decisions come into play.

Action genre can be seen hand in hand with a lot of other video game genres naturally. TPS games like "*Assassin's Creed*"[75] series and "*Metal Gear Solid*"[76] are great examples for the addition of action genre to stealth mechanics along with great storytelling. Another sub-genre mechanic that can be widely seen within the action genre which will be explained in the following sections is the survival-horror dominated action games. These types of games with the examples of the famous titles "*Resident Evil*"[77] or "*Silent Hill*"[78], generally include a resource management mechanic such as limited

[71] Thomas H. Apperley, "Genre and Game Studies: Toward a Critical Approach to Video Game Genres," *Simulation & Gaming* 37, no. 1 (March 2006): 15.

[72] Juan J. Vargas-Iglesias, "Making Sense of Genre: The Logic of Video Game Genre Organization," *Games and Culture* 15, no. 2 (March 2020): 165.

[73] "Half-Life" is an FPS game developed by Valve and published by Sierra Studios on November 19, 1998.

[74] "Call of Duty" is an FPS game developed by Infinity Ward and published by Activision on October 29, 2003.

[75] "Assassin's Creed" is an open-world action-adventure stealth game franchise developed and published by Ubisoft, first one released on November 13, 2007.

[76] "Metal Gear Solid" is an action-stealth game created by the genius Hideo Kojima and developed and published by Konami on September 3, 1998.

[77] "Resident Evil" or as in the Japanese region title "Biohazard", is a Japanese horror action video game series and media franchise created by Capcom, the first game released on March 22, 1996.

[78] "Silent Hill" is a series of survival horror video games and a media franchise created by Keiichiro Toyama and developed and published by Konami. The first Silent Hill game was released on February 23, 1999.

medical supplies and ammo along with surviving a disastrous environment while fighting monsters and other hostile creatures.[79]

2. Role-Playing

Role-playing games ("RPG") are associative with traditional tabletop role-playing games and fantasy fiction literature.[80] The players usually become the protagonist that leads the game.[81] The non-linear game progress is based on a rich storyline that unfolds as the player makes decisions and completes various "quests", and the stories may lead to multiple different endings.

RPG genre tends to consist of very long gameplay times, sometimes extending to hundreds of hours for the dedicated completionist players, and a great amount of cinematic "cutscenes"[82] enriching for the narrative.[83] Aside from the rich content, the main characters in RPGs, as well as the accompanying "party" members, in short "companions", which are under the control of the player can have default appearances and identities as in "*BioShock Infinite*"[84] with the main character named "Booker DeWitt", or in "*The Witcher 3: Wild Hunt*"[85] with the protagonist "Geralt of Rivia". RPGs can provide flexible customization options for the players and allow them to alter the names,

[79] Rabowsky, *Interactive Entertainment: A Videogame Industry Guide,* 12.

[80] Apperley, "Genre and Game Studies: Toward a Critical Approach to Video Game Genres," 17.

[81] Bossom and Dunning, *Video Games: An Introduction to the Industry,* 44.

[82] Cutscenes are pre-recorded sequences within video games, in the form of short movie segments; Andrew Glassner, *Interactive Storytelling: Techniques for 21st Century Fiction* (Boca Raton, FL: CRC Press, 2017), 285.

[83] Rabowsky, *Interactive Entertainment: A Videogame Industry Guide,* 14.

[84] "BioShock Infinite" is an FPS role-playing game developed by Irrational Games and published by 2K Games on March 26, 2013.

[85] "The Witcher 3: Wild Hunt" is an action role-playing game developed and released by CD Projekt Red on May 19, 2015.

appearances and voices of the main characters and their companions, as could be seen in the game series "*Baldur's Gate*"[86] and "*Mass Effect*"[87].

RPG genre expands to various sub-genres such as massively multiplayer online role-playing games ("MMORPG") or Japanese role-playing games ("JRPG"), each having their own unique mechanics. "*Final Fantasy*"[88] series for example, emerged as JRPGs focused on the "single player" experience, also includes one of the most popular MMORPG's of today in the collection where millions of players dive into an online massive world and can interact with other players in real-time while cooperating to complete various quests. The popular Japanese MMORPG "*Final Fantasy XIV*" currently has the highest number of active players in the MMORPG market. The game has been suspended from all sales for the base game and its expansions for new players as of December 2021, the reason being an overload in the game servers due to the excessive number of active players beyond the server capacities, causing long waiting times even during the attempts to log in the game.[89]

[86] "Baldur's Gate" is a series of role-playing games taking place in the Forgotten Realms - Dungeons & Dragons campaign setting. The first Baldur's Gate game was developed by BioWare and published by Black Isle Studios and Interplay Entertainment on December 21, 1998.

[87] "Mass Effect" is an action role-playing game series developed by BioWare. The first game's Xbox version was published by Microsoft Game Studios on November 20, 2007, and PC version was published by Electronic Arts on May 28, 2008.

[88] "Final Fantasy" is a Japanese anthology science fantasy media franchise currently consisting of 15 main video games, initially created by Hironobu Sakaguchi, and developed by Square Enix. The first Final Fantasy game was released on December 18, 1987.

[89] Jon Porter, "Final Fantasy XIV Sales Suspended to Try to Help Server Congestion," The Verge, December 16, 2021, accessed January 13, 2022, https://www.theverge.com/2021/12/16/22839415/final-fantasy-14-sales-suspended-servers-over-capacity-digital-physical. "*Square Enix has temporarily halted sales of Final Fantasy XIV's Starter and Complete editions, in an attempt to ease the server congestion that's been plaguing the game since the release of its Endwalker expansion. Writing in a blog post, the game's producer and director Naoki Yoshida said the company is halting deliveries of the physical version of the game, digital sales, and is also suspending registrations for the game's free trial. Endwalker released in early access on December 3rd and got an official release days later on December 7th. But limited server capacity has meant that players have often found themselves having to wait hours just to log into the game and have been stuck in queues of upward of 4,000-8,000 other players. As recently as last night, the game's servers appeared to collapse completely under the load.*"

Figure 3. "Final Fantasy XIV" (2013) gameplay still. Screenshot taken by the author, with permission of *Annan Annanke*.

3. Adventure

Adventure games also revolve around a well-written narrative and usually have casual gameplay mechanics such as point-and-click movement systems and puzzle solving, with the minimum amount of combat while exploring the game's digital environment.[90] "*Monkey Island*"[91] series and "*Grim Fandango*"[92] are considered among the best adventure games in the video game history with their great storylines, creative art styles and character designs, as well as emotional and funny dialogues. Interactive novels, interactive movies, visual novels, and other kinds of text-based games are also considered a sub-genre of adventure genre.[93]

[90] Rabowsky, *Interactive Entertainment: A Videogame Industry Guide*, 12.

[91] "Monkey Island" is a series of point-and-click adventure games developed and published by LucasArts. The first game in the series "The Secret of Monkey Island" was initially released in October 1990. The remastered version was released on July 15, 2009.

[92] "Grim Fandango" is an adventure game directed by Tim Schafer and developed and published by LucasArts on October 30, 1998.

[93] Vargas-Iglesias, "Making Sense of Genre: The Logic of Video Game Genre Organization," 166.

4. Strategy

Strategy games consist of several popular sub-genres such as real-time strategy ("RTS"), turn-based strategy ("TBS") and multiplayer online battle arena ("MOBA") games.[94] Strategy games usually have an isometric perspective on display. The distinctive mechanic that sets this genre apart is that it requires source management and tactical skills from the players.[95] Strategy genre, especially RTS and TBS types, involves a unit management mechanic, meaning the players are given the power to control units of soldiers instead of a single controllable character.[96] "*Age of Empires*"[97] is a classic RTS game series testing the players' tactical capabilities, and as mentioned in the previous sections, "*League of Legends*" and "*Dota 2*" are worldwide e-sports sensations in the MOBA genre.

5. Puzzle

Puzzle games are usually testing the players' logical thinking and memory skills, as well as time management skills with quick thinking.[98] Puzzle games can be as casual as "*Candy Crush*", or sometimes show themselves by becoming a significant element in other video game genres like action, RPG, and adventure. Puzzle genre is an essential gameplay mechanic that adds a challenge for the players who wish to progress in a game

[94] Apperley, "Genre and Game Studies: Toward a Critical Approach to Video Game Genres," 13; Bossom and Dunning, *Video Games: An Introduction to the Industry,* 40, 43.

[95] Alaa A. Qaffas, "An Operational Study of Video Games' Genres," *International Journal of Interactive Mobile Technologies (iJIM)* 14, no. 15 (September 2020): 177.

[96] Rabowsky, *Interactive Entertainment: A Videogame Industry Guide,* 14.

[97] "Age of Empires" is a series of historical real-time strategy games, originally developed by Ensemble Studios and published by Xbox Game Studios. The first game in the series was released on October 15, 1997.

[98] Bossom and Dunning, *Video Games: An Introduction to the Industry,* 41.

whether it is mandatory or simply an additional award given for the extra effort. While puzzle genre mainly focuses on the intellectual skills of the player, sometimes it may involve physical skills and good reflexes.[99]

6. Simulation

Simulation games present a virtual world reflecting the illusion of real-world elements and allow players to manipulate and interact with this virtual world.[100] Simulation games offer options such as operating vehicles for driving or flight, financial management, building construction, going through life cycles and even evolution.[101]

A very famous example for simulation games is "*The Sims*"[102] series, where players can find a world in which their characters can start families, make friends, improve their skills and financial conditions and live out their lives in a virtual setting, and can be described as a "digital dollhouse".[103] A sub-genre for simulations is known as "god games", such as "*Black & White*"[104] where the player can take over the role of a god-like being with limitless power to manipulate and influence the game's digital world setting.[105] There are also games like "*Dear Esther*"[106] and "*What Remains of Edith*

[99] Rabowsky, *Interactive Entertainment: A Videogame Industry Guide,* 14.

[100] Qaffas, "An Operational Study of Video Games' Genres," 177; Rabowsky, *Interactive Entertainment: A Videogame Industry Guide,* 15.

[101] Bossom and Dunning, *Video Games: An Introduction to the Industry,* 45.

[102] "The Sims" is a series of life simulation games developed by Maxis and published by Electronic Arts. The first game was released on February 4, 2000.

[103] Rabowsky, *Interactive Entertainment: A Videogame Industry Guide,* 15.

[104] "Black & White" is a god simulation game developed by Lionhead Studios and published by Electronic Arts on March 30, 2001.

[105] Rabowsky, *Interactive Entertainment: A Videogame Industry Guide,* 15.

[106] "Dear Esther" is a first-person exploration and adventure video game developed and published by The Chinese Room, initially released on February 14, 2012.

Finch"[107], which are "walking simulators" intersectional with the adventure genre, where players only wander around the game world with minimum interaction while discovering the narrative.

7. Sports - Racing

Sports and racing games are also somewhat a type of simulations games. Most popular examples are car racing games like "*Need for Speed*"[108] games, or football and basketball games series involving NBA teams competing with each other or countless football club teams which in fact exist in real life. Video games in this genre are not necessarily always take place in the real-world simulation and sometimes may involve entirely fantasy fiction world settings.[109]

8. Survival - Horror

Survival and horror games are also usually a mash-up of multiple video game genres like action, RPG, strategy, and simulation. This genre mostly requires players to use their skills of tactical planning and source management as well as fighting enemies to survive in dire situations. Being a flexible video game genre, survival games are not always horror games, but horror aspect adds a quite fun element for keeping the players on the edge of their seats. Two very different examples for this genre are "*Valheim*"[110] taking place in an open-world fantasy Viking setting where players constantly collect

[107] "What Remains of Edith Finch" is an adventure game developed by Giant Sparrow and published by Annapurna Interactive, initially released on April 25, 2017.

[108] "Need for Speed" is a racing game franchise published by Electronic Arts, the first game being released in 1994.

[109] Bossom and Dunning, *Video Games: An Introduction to the Industry*, 46.

[110] "Valheim" is an open-world survival game developed by Iron Gate Studio and published by Coffee Stain Studios on February 2, 2021.

sources to build a place to live and defeat ancient monsters; and "*Dead by Daylight*"[111] where four survivors drawn into the realm of a mysterious entity, trying to escape a closed map by repairing generators to power up the exit gates while avoiding a killer on the hunt.

9. Sandbox - Open-World

Sandbox or generally called as open-world genre offers players a non-linear gameplay experience where players can freely discover the virtual world environment and interact with various elements placed in that world.[112] Sandbox genre is growing into other video game genres with the help of technological progress. More and more games are implementing open-world maps instead of separate sections of the maps loading while switching areas. Most RPG games lean towards providing an open-world experience to the players to give the sense freedom. Some examples for the sandbox genre are "*Minecraft*"[113] where players are given freedom to progress in any way they like and prefer; and "*Grand Theft Auto V*"[114] with its massive world which can be freely explored while progressing through the story.

10. Side-Scrolling - Platformer

Platformer games are defined by their two-dimensional ("2D") display on screen and as clear as their other given name, players can progress with side-scrolling linear

[111] "Dead by Daylight" is an asymmetric survival horror game developed and published by Behaviour Interactive on June 14, 2016.

[112] Bossom and Dunning, *Video Games: An Introduction to the Industry*, 42.

[113] "Minecraft" is a sandbox survival game developed and published by Mojang Studios on November 18, 2011.

[114] "Grand Theft Auto V" is an action-adventure game developed by Rockstar North and published by Rockstar Games on September 17, 2013.

movements.[115] The term "platform" comes from the basic game mechanic where players are led to jump from one platform to another in order to progress in a level.[116] This genre is one of the first video game genres to emerge, before three-dimensional ("3D") graphics took over the gaming industry. However, it is still holding its place as an important game genre even today and many new video games are created, loyal to a platformer's simplistic mechanics of action and puzzle solving. A great example for this genre is "*Braid*"[117], a sensational "*indie*"[118] 2D video game with amazing artwork and story, where players are required to solve cleverly designed puzzles to reach and save the "princess", a well-recognized reference to *Mario* wandering castle to castle.

Figure 4. A chapter ending still from the indie puzzle-platformer video game "Braid" (2008). Screenshot taken by the author.

[115] Bossom and Dunning, *Video Games: An Introduction to the Industry*, 44.

[116] Rabowsky, *Interactive Entertainment: A Videogame Industry Guide,* 14.

[117] "Braid" is a puzzle-platformer game developed and published by Number None, first released on August 6, 2008, for Xbox 360.

[118] The term "indie" is derived from "independent", meaning the video game was created by independent game developers without the financial and technical support from the big industrial corporations; Christopher Lunsford, "Drawing a Line between Idea and Expression in Videogame Copyright: The Evolution of Substantial Similarity for Videogame Clones," *Intellectual Property Law Bulletin* 18, no. 1 (2013): 90. "*The term is loosely defined and usually refers to smaller developers that self-fund their projects.*"

B. Video Game Operating Platforms

Video games are played on different devices which require their own unique language of programming and mechanical design. We will briefly explain the most popular operating platforms and what kinds of equipment and operating systems are utilized to operate video games.

1. Personal Computer (PC)

PC gaming never loses its significance in the video game industry. Today, almost every single household has a PC setup as it is a must-have equipment in order to help with daily chores, academic studies or work-related responsibilities. Video games designed specifically to run on a PC covers a great portion of the industry.[119] While many people prefer consoles that are designed specifically for video games, PC Master Race[120] culture of the internet praises a PC's capabilities to run a video game with no limits to technical boundaries and the ease of control with a simple mouse and a keyboard. Conveniently, some video game genres are simply better suited for a PC setting with mouse and keyboard controls such as strategy games, simulations games, or arguably even FPS shooters and MMORPGs.[121] Video games designed for PC have to be programmed according to different operating systems, the most prominent ones being Microsoft's

[119] Rabowsky, *Interactive Entertainment: A Videogame Industry Guide*, 33.

[120] "The Glorious PC Gaming Master Race," Know Your Meme, accessed January 5, 2022, https://knowyourmeme.com/memes/the-glorious-pc-gaming-master-race. *"The Glorious PC Gaming Master Race is a facetious label used to attribute superiority to those who prefer to play video games on a personal computer (PC). On January 23rd, 2008, online video game magazine The Escapist published a review episode of the PC game The Witcher as part of their review series "Zero Punctuation." In the video, the narrator quips how The Witcher's complex structure makes the gaming experience optimized for PC users so that "those dirty console playing peasants don't ruin it for the glorious PC gaming master race.""*

[121] Rabowsky, *Interactive Entertainment: A Videogame Industry Guide*, 33.

"*Windows*" along with Apple's "*MacOS*", and widely used by many people, open-sourced operating system "*Linux*".[122] The controlling equipment can be the essential parts of mouse and keyboard, however, as a personal preference, it is also possible to attach different controllers and equipment designed for PC gameplay. With the technological advancements regarding video game graphics looking almost like a slice from real life, PC setups are required to have great computing power to be able to run the complex technologies of these amazing graphics.[123]

2. Consoles

Video game consoles are dedicated hardware for gaming, and they come in different shapes and varieties. Just as the early generation home gaming consoles like "*Magnavox Odyssey*" and "*NES*", new generation consoles like Sony's "*PlayStation*", Microsoft's "*Xbox*" and Nintendo's "*Wii*" require a monitor or television for display.[124] Despite being designed for sole gaming, these devices also now have other functions as browsing the internet or playing videos. Each has their own controller equipment for players to interact with the video game.[125] There are also handheld gaming consoles like Nintendo's "*Switch*" or Valve's "*Steam Deck*".[126] Each console creates a need for specific programming according to their operating systems and mechanics same as the line of PCs with different operating systems. Video games have to be optimized in accordance with

[122] David Greenspan et al., *Mastering the Game: Business and Legal Issues for Video Game Developers* (Geneva: WIPO, World Intellectual Property Organization, 2014), 18.

[123] Meg Marquardt, *Inside Video Games* (Minneapolis, MN: Core Library, an imprint of Abdo Publishing, 2019), 13-14.

[124] Rabowsky, *Interactive Entertainment: A Videogame Industry Guide*, 19; Greenspan et al., *Mastering the Game: Business and Legal Issues for Video Game Developers*, 18; Evan Amos, *The Game Console 2.0: A Photographic History from Atari to Xbox*, 2nd ed., (San Francisco, CA: No Starch Press, 2021), 14, 92.

[125] Marquardt, *Inside Video Games*, 15-20.

[126] Greenspan et al., *Mastering the Game: Business and Legal Issues for Video Game Developers*, 18.

their intended console platforms and their technical capabilities to run in the smoothest way possible in order to provide a seamless gameplay experience for the players.[127]

3. Mobile Platforms

The term "mobile" is meant for mobile phones and tablets that have become an essential part of our daily lives.[128] The portion of video game industry regarding mobile devices has its own significance and industry giants are racing for the most profitable releases, breaking their own records constantly. Mobile platforms basically circle around Google's "*Android*" and Apple's "*iOS*", both of which have their own application stores with specific terms of use. Mobile games are released as "applications" and millions of people can reach them through "Play Store" or "App Store".[129]

4. Arcades

Arcades are the old-school gaming machines of today, however, they are not erased from the earth entirely. The very first commercial video games were programmed and emerged as arcade games and arcade gaming still has its own culture.[130] Before the home consoles, people were looking for arcades for the video game entertainment.[131] These machines were designed for specific video games and still can be seen around pubs and cafés or even their dedicated arcade gaming venues.[132]

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[127] Rabowsky, *Interactive Entertainment: A Videogame Industry Guide,* 19-20.

[128] Greenspan et al., *Mastering the Game: Business and Legal Issues for Video Game Developers*, 18.

[129] Greenspan et al., *Mastering the Game: Business and Legal Issues for Video Game Developers*, 21.

[130] Amos, *The Game Console 2.0: A Photographic History from Atari to Xbox*, 13.

[131] Marquardt, *Inside Video Games*, 10.

[132] Gillian McDonald, "Specialist Cafes Are Introducing Arcade Games to a New Generation," inews.co.uk, July 16, 2020, accessed February 2, 2022, https://inews.co.uk/culture/gaming/specialist-cafes-introducing-arcade-games-new-generation-69316.

IV. VIDEO GAME ELEMENTS

Video games may be singular digital products; however, they have a complex structure and are formed with various elements brought together. Before the third chapter of this study, in which we will assess video games and their elements as copyrighted works, we should first resolve and explain the different elements which serve as crucial parts existing in a video game.

A. Computer Code

Video games are considered by many as computer programs before anything else.[133] The underlying computer code which allows all other elements of a video game to function seamlessly is the most important part of a video game as a digital product. However, video games are too complex just to blatantly be called sole computer programs, considering all the effort and planning that goes into literary, visual, auditory, and other elements that bring the finalization of a complete product. Computer programs, sometimes referred to as "software"[134], consist of the algorithm, flowchart, source code, object code and interface elements.[135] Each of these elements play an important role for a fully functional and executable computer program.

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[133] Andy Ramos, "Video Games: Computer Programs or Creative Works?" WIPO Magazine, August 2014, accessed February 2, 2022, https://www.wipo.int/wipo_magazine/en/2014/04/article_0006.html.

[134] The terms "computer program" and "software" are often used interchangeably, however, it should be noted that they are not exactly synonyms in a technical sense. Software is a wider technical term that covers computer programs. In this study, both terms will be used interchangeably according to the context. For more detail on the technical differences, see Sarah Leins-Zurmuehle, "Ideation, Conceptualization, Realization - Discovering the Creative Scope in Software Engineering from the Perspective of Copyright and Patent Law" (PhD diss., University of Zurich, 2021), 49; Selin Özden, "Karşılaştırmalı Hukukta Bilgisayar Programlarının Korunması" (Master's thesis, Ankara University, 2007), 5-6.

[135] Raymond T. Nimmer, *The Law of Computer Technology*, 3rd ed. (St. Paul, MN: West Group, 1997), 1-2, quoted in E. Sena Yazıcı, *Bilgisayar Programlarının Fikri Mülkiyet Hukuku Çerçevesinde*

Video game development is based on the flawless programming where all the elements which have been worked on are put into the game and become the final product as a whole. According to *Lipson and Brain*, the components of the computer code element within video games are listed as the "game engine, ancillary code, plug-ins and comments".[136] These elements are the basic parts for most computer programs; however, video games have the distinctive element of game engine which set them apart from other computer programs. Game engines can be defined as versatile software kits that help game developers to work within a certain framework in a time and work efficient way.[137] Some popular game engines are "Unity" and "Unreal Engine".[138] Game engines are the basis of computer codes in video games for integrating the graphic and audio content, physics simulations and overall component behavior. The video game becomes a complete product with the integration of ancillary codes and plug-ins, along with developer comments with surprises to be discovered by the players.[139]

No matter how complicated and unique each computer code element in a video game is, it is an absolute fact that the computer code or the computer program aspect of video games were essential from the moment the first video games were created to the present time; nicely packing up every single thing made with love for the video game.

Korunması (İstanbul: On İki Levha, 2019), 14; Şener Dalyan, *Bilgisayar Programlarının Fikrî Hukukta Korunması* (Ankara: Seçkin, 2009), 28-29; Mustafa Aksu, *Bilgisayar Programlarının Fikrî Mülkiyet Hukukunda Korunması* (İstanbul: Beta, 2006), 43-48; Özden, "Karşılaştırmalı Hukukta Bilgisayar Programlarının Korunması," 6-9.

[136] Ashley S. Lipson and Robert D. Brain, *Computer and Video Game Law: Cases, Statutes, Forms, Problems & Materials* (Durham, N. C.: Carolina Academic Press, 2009), 54, quoted in Andy Ramos et al., *The Legal Status of Video Games: Comparative Analysis in National Approaches* (Geneva, Switzerland: World Intellectual Property Organization, 2013), 8.

[137] Karzan Hussein Sharif and Siddeeq Yousif Ameen, "Game Engines Evaluation for Serious Game Development in Education," *2021 International Conference on Software, Telecommunications and Computer Networks (SoftCOM)*, September 23, 2021, 2.

[138] Güney Yılmaz, "FSEK Bakımından Video Oyunlarının Eser Niteliği" (Master's thesis, Yaşar University, 2020), 32.

[139] Abdullah Harun Ataşlar and İlkim Ülgen, *Türk Hukukunda Dijital Oyunların Korunması* (İstanbul: On İki Levha, 2021), 33-34.

B. Visuals and Graphics

Another outstanding element in video games is of course the visual content. Everything perceivable with the eye falls under the visual elements and graphical components in a video game, whether in photographic or animated form.[140] These could be the characters and their designs, the outfits and cosmetics, weapons, items, collectibles, buildings, furniture, plants and trees, animals and monsters, roads, closed and open spaces, basically everything visible in the video game's "world". Other than the basic fixed content in the video game, the overall game heads-up display ("HUD") designs, menu items, selectable options, arrows and pointers in the interface and overlays also fall under visual elements.

Visual and graphic elements in video games are highly important in terms of player experience regarding the sense of reality.[141] The players tend to internalize the overall virtual reality as their own while immersed in the game. Seeing the game world directly through the eyes of the character they control also adds to the experience being somewhat real, of course not to the extent of delusion because the fact that it is "just a game" is hard to look over. However, in the moment of gameplay, the virtual reality with its depth makes the experience unforgettable. 3D graphics taking over the video game production led to even more realistic gaming experiences.

One thing that should not be left out is the "cutscenes" in video games. Cutscenes are pre-recorded cinematic video sequences mostly used in modern video games.[142]

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[140] Yılmaz, "FSEK Bakımından Video Oyunlarının Eser Niteliği," 18-21; Hakan Yetiş, "Video Oyunlarının Fikir ve Sanat Eserleri Hukuku Kapsamında Değerlendirilmesi" (Master's thesis, İzmir University of Economics, 2021), 30.

[141] Taylan Kılıç, *Bilgisayar Oyunlarının Eser Niteliği* (İstanbul: On İki Levha, 2021), 12.

[142] Glassner, *Interactive Storytelling: Techniques for 21st Century Fiction*, 285.

Video games are interactive experiences, and progress comes through to actions of the players. Especially in video games with rich stories, cutscenes play an important role in terms of storytelling and narrative.[143] They could be seen at the beginning or the ending of the video game, and mostly in between the game flow. Cutscenes may be created with pure in-game graphics or with advanced computer-generated imagery ("CGI") for a better quality, and sometimes could be real cinematographic pieces recorded with real people and places, just like a scene clipped from a movie, sometimes possibly with CGI elements.[144] A trending technology called "motion capture" involves real actors and stunt experts who perform with special equipment of suits and cameras in special studios in which the cameras record their physical movements and even facial expressions to transfer them digitally into a video game to create a more realistic experience and outcome.[145]

The visual and graphic elements in video games are not always created as fictional images and artwork and it may be possible to see actual photographs, paintings and films that exist in real life and outside the video game's world. These are of course engraved into the video game with the help of computer code. However, the implementation of these pieces into the digital medium of a video game does not change the fact that these visual works originally exist in another medium.

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[143] Barry Ip, "Narrative Structures in Computer and Video Games: Part 1: Context, Definitions, and Initial Findings," *Games and Culture* 6, no. 2 (March 2011): 108.

[144] Glassner, *Interactive Storytelling: Techniques for 21st Century Fiction*, 285; Yılmaz, "FSEK Bakımından Video Oyunlarının Eser Niteliği," 19-21.

[145] Alberto Menache, *Understanding Motion Capture for Computer Animation*, 2nd ed. (Morgan Kaufmann, 2011), 1. *"Motion capture is the process of recording a live motion event and translating it into usable mathematical terms by tracking a number of key points in space over time and combining them to obtain a single three-dimensional (3D) representation of the performance."*; Yılmaz, "FSEK Bakımından Video Oyunlarının Eser Niteliği," 25-26; Muhammed Afif Kaya, "Video Oyunlarının Fikir ve Sanat Eserleri Hukukunda Korunması" (Master's thesis, Istanbul University, 2018), 11.

C. Audio and Music

Even though there might be exceptional examples of video games without any music or sound, most of the video games today are always perceived as masterpieces with their original soundtracks, sound effects, and sound designs. Music pieces are complementary works for a whole range of performance works like movies and theatricals, and video games are not left out from the line of works where music makes it memorable.

Video games consist of their own original soundtracks which add more to the realistic experience offered to the players.[146] These may be the main theme compositions, menu themes, character themes, battle themes, locational themes for cities, towns, forests or indoor places like taverns or courts. The distinction of original soundtracks from any other music piece is that these music pieces are created and performed solely for the video game, just like the music pieces created specifically for cinematographic works and movies.[147] Original soundtracks for video games are not always instrumental pieces. The main menu theme for the game "*Dragon Age: Origins*"[148] is a song with lyrics in the fictional elven language, composed and written by composer Inon Zur. Also, an emotional tavern cutscene in "*The Witcher 3: Wild Hunt*" shows the captivating performance of the song "*The Wolven Storm*" sung by a non-playable character ("NPC") named Priscilla, telling the heartbreaking love story of our protagonist Geralt of Rivia and the sorceress Yennefer of Vengerberg.

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[146] Ataşlar and Ülgen, *Türk Hukukunda Dijital Oyunların Korunması*, 32; Kaya, "Video Oyunlarının Fikir ve Sanat Eserleri Hukukunda Korunması," 12; According to *Kaya*, musical choices in horror games to escalate the tension, or epic song choices for battle sequences in action games are some examples to be mentioned.

[147] Kılıç, *Bilgisayar Oyunlarının Eser Niteliği,* 12.

[148] "Dragon Age: Origins" is a role-playing game developed by BioWare and published by Electronic Arts on November 3, 2009.

Figure 5. A cinematic cutscene still from "The Witcher 3: Wild Hunt" (2015) where Priscilla performs "*The Wolven Storm*". Screenshot taken by the author.

Other than the original soundtracks, some video games license songs that are commercially available to the public and integrate them into the game experience.[149] In games like "*Grand Theft Auto V*" and "*Watch Dogs*"[150] players have the option to listen to actual radio stations with a variety of licensed songs, and the racing game series "*Need for Speed*" also included popular songs in multiple games, enhancing the driving experience.

Audio element in video games is not only comprised of licensed music and original soundtracks. Dialogues, ambient sounds, sounds of nature or any kind of sound effects are also a significant part of video games. The sound of walking and running steps of the characters, sounds of animals, howling of the wind, crackles of a campfire, rain

[149] Karen Collins, "Grand Theft Audio? Popular Music and Intellectual Property in Video Games," *Music and the Moving Image* 1, no. 1 (2008): 36-40.

[150] "Watch Dogs" is an action-adventure game series created and published by Ubisoft, the first game being released on May 27, 2014.

falling down on earth, creaking of an opening door; they are all essential for the video game to be a realistic experience.[151]

D. Story and Lore

It is safe to say that the driving element in modern video games is the story and lore behind the gameplay. The experience comes with the promise of witnessing a story unfolding by the actions of the players and possibly different closures resulting from the decisions made by the players.

The story, or in other words the "scenario" or the "plot" of a video game is by no means too distant from a scenario that is the basis of a movie.[152] The well-written plot along with different dialogue options are meticulously blended into the video game, leading the players to a final resolution of the story. The story of the game is not always in the foreground however, sometimes it only aims to add a different color to a casual gameplay experience through occasional cutscenes that are reminding the players of a story progression in the background.

Video games sometimes offer even more than a story. The history of the world in which the game takes place, the letters exchanged between people we never meet, dusty archives holding ancient secrets of magic, fictional yet still scientific encyclopedias of herbs, plants, beasts, and monsters; they are all a part of the lore in the video game. Video games sometimes have fictional languages, religions, and a very long and rich world history. The bits and pieces of information regarding everything that has happened behind the players' seeing eyes can be discovered by looking for and reading into the inscriptions

[151] Ataşlar and Ülgen, *Türk Hukukunda Dijital Oyunların Korunması*, 32.

[152] Kılıç, *Bilgisayar Oyunlarının Eser Niteliği,* 11; Ataşlar and Ülgen, *Türk Hukukunda Dijital Oyunların Korunması*, 33.

of lore in the video game, generally by interacting with items such as books, codex pages, letters, and other types of written items, and sometimes even by starting conversations with NPCs in the game.[153]

The dialogues written for a video game is essential for story progression and lore exploration.[154] Especially in the RPG genre of video games, the players may be given restrictive dialogue options that eliminate other possible options when chosen. They may also define a certain moral alignment regarding the personality of the character that is controlled by the player. This way, role-playing comes even closer to reality and the players can reflect their own personalities into the game. The story or "scenario" of a video game may be flexible compared to a movie scenario since each player creates their own unique journey and visual representation of a story. However, it should not be disregarded that the player is always making choices and creating variations in the story only to the extent of what is allowed by the developers. This limitation clears the similarity between a video game scenario and a movie scenario when compared to each other and shows that they are not entirely strangers from a creative perspective.[155]

E. Game Mechanics and Rules

The final element of a video game that should be mentioned is the "game" itself. Apart from everything else in a video game, the rules of the game define the experience. The rules of a game are simply an idea, what matters is how they are materialized in a video game. The rules, and the mechanics based on these rules, determine the interactivity

[153] Ataşlar and Ülgen, *Türk Hukukunda Dijital Oyunların Korunması*, 33.

[154] Ataşlar and Ülgen, *Türk Hukukunda Dijital Oyunların Korunması*, 33.

[155] Kılıç, *Bilgisayar Oyunlarının Eser Niteliği,* 11; Yetiş, "Video Oyunlarının Fikir ve Sanat Eserleri Hukuku Kapsamında Değerlendirilmesi," 33.

aspect of a video game, which is the main distinction from a plain video or a movie or any other cinematographic creation.[156]

An endless number of games can be created by the application of the same rules and game mechanics. Each video game with its totality of computer code, visual and graphic representations, audio and music pieces, story and lore brought together along with game settings, rules and mechanics becomes a unique product on their own.

It has been mentioned multiple times that video games are "interactive" experiences. How this interactivity aspect affects the video game is only defined by the mechanics and rules set for that certain game. The items, NPCs, and the game world itself has its own limitations on how much they allow players to interact with any component in the video game.[157] The idea of a game with cleverly thought rules and mechanics simply remains an abstract concept until it is dissolved in the video game along with all the other elements and offers a complete interactive gameplay experience.

V. INTELLECTUAL PROPERTY PROTECTION FOR VIDEO GAMES IN GENERAL

Until this final section in the first chapter of this study, we have explained what a video game is, the history of how video games came to be what they are today, what kind of video games are created based on genre and platforms, and what are the separate elements that make a video game as a whole when brought together. It is clear that in this digital era where the video game industry only keeps growing, video games are massively

[156] Kılıç, *Bilgisayar Oyunlarının Eser Niteliği,* 157.

[157] Kaya, "Video Oyunlarının Fikir ve Sanat Eserleri Hukukunda Korunması," 15.

complex products involving groundbreaking technologies, huge marketing budgets and creative efforts of all kinds.

Video games are almost entirely singular products of various forms of intellectual property and can be subject to different types of intellectual property protection that is patents, designs, trademarks, trade secrets and most importantly copyrights.[158] We will briefly explain each type of these intellectual property rights and where video games become relevant within the legal scope before going in depth towards copyrights.

A. Patent for Video Games

Patent protects the invention. A brief definition that could be given for a patent is "a technical solution to a technical problem".[159] There are generally accepted three eligibility criteria for a patent protection: the invention must be "novel", it must include an "inventive step" and it must be "industrially applicable".[160]

Video game industry is not often subject to patent protection except for the obvious unique and inventive hardware creations.[161] For video games themselves the underlying component is the computer program, and computer programs are not eligible for patents in most countries.[162] In the European Union ("EU") and Turkish jurisdictions,

[158] S. Gregory Boyd, Brian Pyne, and Sean F. Kane, *Video Game Law: Everything You Need to Know about Legal and Business Issues in the Game Industry* (Boca Raton, FL: CRC Press, 2019), 20.

[159] Annette Kur, Thomas Dreier, and Stefan Luginbuehl, *European Intellectual Property Law: Text, Cases and Materials*, 2nd ed. (Cheltenham, UK: Edward Elgar Publishing, 2019), 78.

[160] TRIPS Article 27(1) "*... patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application.*"; İlhami Güneş, *Sınai Mülkiyet Kanunu Işığında Uygulamalı Patent ve Faydalı Model Hukuku: Uygulamada Patent ve Faydalı Model Davaları: Açıklamalı-İçtihatlı* (Ankara: Seçkin, 2021), 81.

[161] Boyd, Pyne, and Kane, *Video Game Law: Everything You Need to Know about Legal and Business Issues in the Game Industry*, 39.

[162] Dalyan, *Bilgisayar Programlarının Fikrî Hukukta Korunması*, 47-51.

computer programs are excluded from patent protection.[163] Even so, the exception of software patents opens a way for video games to benefit from patent protection in the US for example, and there are very interesting examples in the industry for this matter, such as BioWare's "*Mass Effect*" which has a unique interactive dialogue wheel system which has been granted patent protection in 2011.[164]

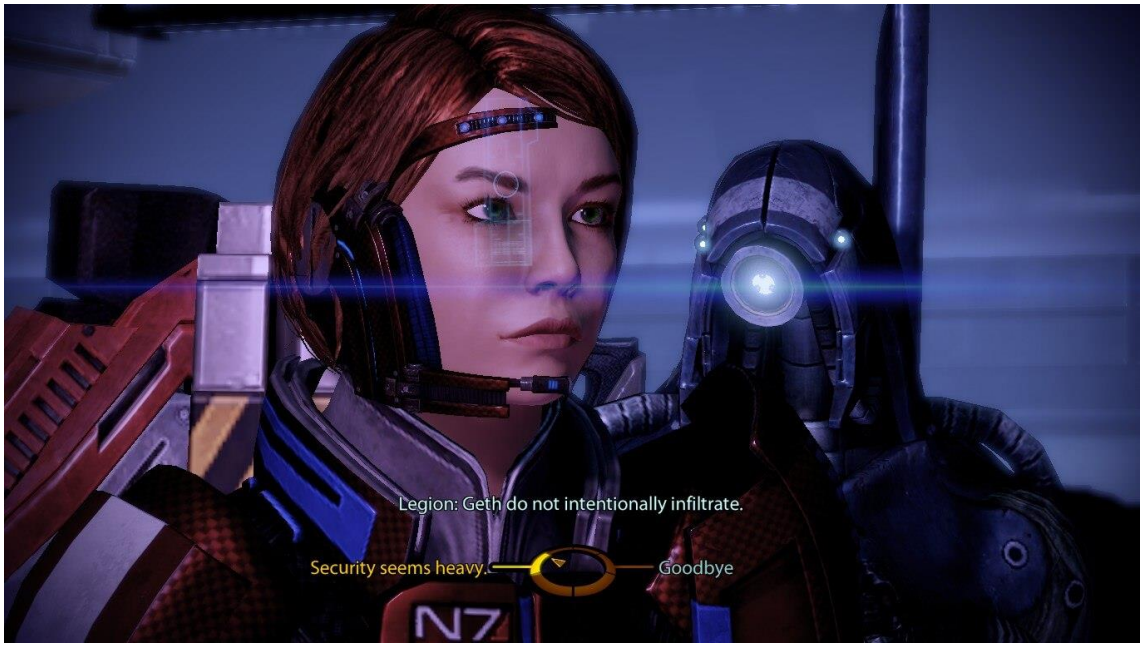

Figure 6. Mass Effect's unique in-game interactive dialogue wheel interface which was granted patent protection in 2011. Screenshot from "Mass Effect 2" (2010), taken by the author.

It should also be noted that in the EU, software may be considered eligible for patent protection only if the software is a crucial part of an invention with actual physical

[163] European Patent Convention Article 52(2)(c) "*The following in particular shall not be regarded as inventions within the meaning of paragraph 1: …(c) schemes, rules and methods for performing mental acts, playing games or doing business, and programs for computers.*"; Turkish Law No. 6769 of December 22, 2016, on Industrial Property Article 82(2)(c) "*Below mentioned shall not be considered as inventions. In case the application for a patent or the patent itself are involved in the subjects or activities mentioned below, this subject only or the activity itself shall stay out of patentability: … c) computer programs.*"

[164] Casey Hudson et al., Graphical Interface for Interactive Dialog, US Patent US20070226648A1, filed March 15, 2007, and issued December 20, 2011. The abstract is as follows: "*A system and method for creating conversation in a computer program such as a videogame. A plurality of classes of dialog is provided and a conversation segment is assigned to each class. A graphical interface is displayed during operation of the program that provides a choice indicator, wherein the choice indicator has a plurality of selectable slots, each associated with a dialog class. The graphical interface is consistent as to the position of dialog classes throughout at least a segment of the program.*"

components and not solely a software. In other words, patentability for software is only possible if there is a "computer-implemented invention".[165] The Turkish doctrine also supports the application of this approach from the EU for a harmonized patent protection within the Turkish jurisdiction as well.[166] Overall, considering the nature of patents generally and commonly accepted worldwide, despite the different approaches regarding software or business method elements, it is possible for video games to be subject to patent protection in terms of technical hardware inventions and innovative gameplay components.[167]

B. Design for Video Games

Design protection covers the look of the product and looks of the parts of the product. Design is the overall appearance of a product or its parts in terms of lines, contouring, color range and shape, as well as the qualities and textures of the materials that were used in the product or its external surface.[168] While patent protection is mainly in regard to functionality and technical qualities, design protection is all about the form

[165] Kur, Dreier, and Luginbuehl, *European Intellectual Property Law: Text, Cases and Materials*, 176; Mireille Hildebrandt, "Copyright in Cyberspace," in *Law for Computer Scientists and Other Folk* (Oxford, United Kingdom: Oxford University Press, 2020), 195.

[166] Dalyan, *Bilgisayar Programlarının Fikrî Hukukta Korunması*, 49; Tuğba Akdemir Kamalı, *Fikrî Hukuk Kapsamında Bilgisayar Programlarındaki Değişikliklerin Sonuçları* (Ankara: Seçkin, 2019), 101.

[167] Boyd, Pyne, and Kane, *Video Game Law: Everything You Need to Know about Legal and Business Issues in the Game Industry*, 20.

[168] Bernard Volken, "Requirements for Design Protection: Global Commonalities," in *Research Handbook on Design Law*, ed. Henning Hartwig (Cheltenham, UK: Edward Elgar Publishing, 2021), 2; Turkish Law No. 6769 of December 22, 2016, on Industrial Property Article 55(1) "*Design shall be the appearance of the whole or a part of a product resulting from the features of, the line, contour, color, shape, material or texture of the product itself or its ornamentation.*"; Council Regulation (EC) No 6/2002 of 12 December 2001 on Community designs Article 3(a) "*"design" means the appearance of the whole or a part of a product resulting from the features of, in particular, the lines, contours, colours, shape, texture and/or materials of the product itself and/or its ornamentation.*"; The US law does not provide a *sui generis* branch of law for designs, instead it covers designs under "utility patent law". 35 U.S. Code § 171 - Patents for designs "*(a) Whoever invents any new, original and ornamental design for an article of manufacture may obtain a patent therefor, subject to the conditions and requirements of this title.*"

that is external aspects outside the functionality and everything else considered technical.[169]

The definition of "product" strictly excludes computer programs from design protection.[170] The "product" covered by legal protection is not an abstract concept or the computer code according to legal regulations. Another thing to be noted is that design protection can overlap with copyright protection if the product is eligible for copyright as a work, and they are not mutually exclusive.[171] Also on many occasions, design protection falls short in comparison to copyright protection, in terms of longevity.[172]

Looking at video games within this scope, it may not seem like there are many things that can be subject to a design protection. It is obvious that the hardware used for video games can be subject to design protection with their unique aspects which set them apart from their similar rivals such as the gaming consoles and their controllers. Also, the hardcopy packaging for video games as a solid product can also be protected through designs, however, at the same time it is possible to put them under copyright protection for a more advantageous standing. Other elements that can find a place under design laws are graphical user interface designs, character or item designs and designs for various

[169] David Stone, *European Union Design Law: A Practitioner's Guide*, 2nd ed. (Oxford: Oxford University Press, 2016), 86; Cahit Suluk (Karasu/Nal), *Fikri Mülkiyet Hukuku*, ed. Cahit Suluk, Rauf Karasu, and Temel Nal, 5th ed. (Ankara: Seçkin, 2021), 305-306.

[170] Council Regulation (EC) No 6/2002 of 12 December 2001 on Community designs Article 3(b) "*"product" means any industrial or handicraft item, including inter alia parts intended to be assembled into a complex product, packaging, get-up, graphic symbols and typographic typefaces, but excluding computer programs.*"; Turkish Law No. 6769 of December 22, 2016, on Industrial Property Article 55(2) "*Product means any industrial or handicraft item, including parts intended to be assembled into a complex product, products like packaging, presentations of more than one object perceived together, graphic symbols and typographic typefaces, but excluding computer programs.*"

[171] Stone, *European Union Design Law: A Practitioner's Guide*, 81; Suluk (Karasu/Nal), *Fikri Mülkiyet Hukuku*, 305. "*The right owner can benefit from both design and copyright protection (cumulative protection principle).*"

[172] Suluk (Karasu/Nal), *Fikri Mülkiyet Hukuku*, 306. "*While according to the design legislations, a design is given the duration of 25 years at maximum for protection, however, the same design within the copyright legislations is protected as a work for the duration of the lifetime of the designer, plus 70 years."*

game devices.[173] Again, it should not be disregarded that design protection mostly overlaps with copyright protection and these elements will also be subject to copyright protection so long as they meet the set requirements for each type of intellectual property right.

C. Trademark for Video Games

Trademarks can be briefly defined as signs and symbols with the purpose of identifying certain goods and services and distinguishing them from others in the market as to their quality and origin.[174] Anything can be a trademark as long as it falls under the criteria set by the respective legislations.[175] Trademarks are nearly the most important intellectual property rights in video game industry right after copyrights.[176] In the eyes of the players, or consumers in this context, the company that makes and promotes the video

[173] Monika A. Górska, "Protection of Video Games: Industrial Design, Patent, or Trade Secret?" newtech.law, September 24, 2020, accessed April 24, 2022, https://newtech.law/en/protection-of-video-games-industrial-design-patent-or-trade-secret.

[174] Tom Blackett, *Trademarks* (London: Palgrave Macmillan, 1998), 1; Tobias Cohen Jehoram, Constant van Nispen, and Tony Huydecoper, *European Trademark Law: Community Trademark Law and Harmonized National Trademark Law* (Alphen aan den Rijn: Kluwer Law International B.V., 2010), 5; İlhami Güneş, *6769 Sayılı Sınai Mülkiyet Kanunu Işığı İle: Uygulamalı Marka Hukuku* (Ankara: Adalet, 2020), 39.

[175] Turkish Law No. 6769 of December 22, 2016, on Industrial Property Article 4(1) "*Trademarks may consist of any signs like words, including personal names, figures, colors, letters, numbers, sounds and the shape of goods or their packaging, provided that such signs are capable of distinguishing the goods or services of one undertaking from those of other undertakings and being represented on the register in a manner to determine the clear and precise subject matter of the protection afforded to its proprietor.*"; Regulation (EU) 2017/1001 of the European Parliament and of the Council of 14 June 2017 on the European Union trade mark Article 4 "*An EU trade mark may consist of any signs, in particular words, including personal names, or designs, letters, numerals, colours, the shape of goods or of the packaging of goods, or sounds, provided that such signs are capable of: (a) distinguishing the goods or services of one undertaking from those of other undertakings; and (b) being represented on the Register of European Union trade marks ('the Register'), in a manner which enables the competent authorities and the public to determine the clear and precise subject matter of the protection afforded to its proprietor.*"; 15 U.S. Code § 1127 "*The term "trademark" includes any word, name, symbol, or device, or any combination thereof— (1) used by a person, or (2) which a person has a bona fide intention to use in commerce and applies to register on the principal register established by this chapter, to identify and distinguish his or her goods, including a unique product, from those manufactured or sold by others and to indicate the source of the goods, even if that source is unknown.*"

[176] W. Ronald Gard and Elizabeth Townsend Gard, "Chapter 3: Legal Issues Beyond Copyright," in *Video Games and the Law* (New York, NY: Routledge, 2017), 25; Boyd, Pyne, and Kane, *Video Game Law: Everything You Need to Know about Legal and Business Issues in the Game Industry*, 34.

game, the franchise of a video game with multiple releases, or the studio that is behind the development of a video game will tell more than anything else about what to expect for a great gaming experience.

The subject matter for trademark protection in regard to the video game industry can be the names and logos of the developing and publishing companies, the names, logos and titles of video games and video game franchises, the subtitles of video games, or memorable slogans related to the video game or the companies where they come from.[177] Previously mentioned video game companies such as Sony, Microsoft, Nintendo and their gaming console products such as "*PlayStation*", "*Xbox*" and "*Switch*" are all well-protected trademarks. The video game development companies like CD Projekt Red or Electronic Arts and their video game franchises like "*The Witcher*"[178] or "*Mass Effect*"[179] are also trademarked commercial signs with immeasurable reputations before the gamers. Original characters like "*Mario*" and "*Princess Peach*"[180] and catchphrases in video games can also be protected as trademarks.[181]

D. Trade Secret for Video Games

Probably the oldest form of intellectual property protection is keeping them as valuable trade secrets. Trade secrets are business related confidential information which

[177] Boyd, Pyne, and Kane, *Video Game Law: Everything You Need to Know about Legal and Business Issues in the Game Industry*, 20.

[178] WIPO International (Madrid System) Trademark No. 1173364 "THE WITCHER".

[179] U.S. Trademark Reg. No. 76978645 "MASS EFFECT".

[180] U.S. Trademark Reg. No. 5478239; U.S. Trademark Reg. No. 3434335.

[181] Karl Murphy, "Video Games and the Law: Copyright, Trademark, and Intellectual Property," Legal Reader, November 25, 2020, accessed April 27, 2022, https://www.legalreader.com/video-games-and-the-law; William Vitka, "It's on like Donkey Kong... Now Being Trademarked by Nintendo," New York Post, November 10, 2010, accessed April 27, 2022, https://nypost.com/2010/11/10/its-on-like-donkey-kong-now-being-trademarked-by-nintendo; Andrew Siuta and Lauren Matturri, "Trademark Rights Have Entered the Game," Medium, April 6, 2020, accessed April 27, 2022, https://medium.com/whipgroup/trademark-rights-have-entered-the-game-236ff9b637b9.

give a commercial and financial advantage over other competitors in the market.[182] The legal definition for trade secrets differs in various jurisdictions, however, a general description could be given for trade secret criteria as "absolute confidentiality" and "business advantage".[183] Direct examples on how trade secrets work could be given as the famous *Coca-Cola* formula that has been kept confidential for ages, or the search engine algorithm of *Google*.[184]

From the video games perspective, trade secrets can be quite beneficial in the competitive and ever-growing video game industry. Trade secrets could cover the customer mailing lists which consist of player profiling data regarding certain types of video games; pricing information related to the market status; contact lists for developers and publishers; middleware and development tools which were created within the in-house environment; and even the details regarding the licensing and publishing contracts for a video game.[185]

[182] Brian T. Yeh, "Protection of Trade Secrets: Overview of Current Law and Legislation," in *Trade Secrets: Theft Issues, Legal Protections, and Industry Perspectives*, ed. Wilfred Clarkson (New York: Nova Publishers, 2015), 4; The US Uniform Trade Secrets Act defines a trade secret as follows: "*"Trade secret" means information, including a formula, pattern, compilation, program, device, method, technique, or process, that: (i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.*" On the other hand, in the Turkish jurisdiction, the decision of the 23rd Civil Chamber of the Turkish Court of Cassation dated 21.10.2019 and numbered E. 2016/6958, K. 2019/4349 defines a trade secret as "*the information that provides economic benefits to the real or legal person trader and its competitors, is kept secret, and that the necessary measures are taken by the owner to keep it confidential. Again, taking into account the principles of unfair competition, another definition for trade secret is any formula, layout, model, etc., the entirety of information that the trader uses during his commercial activities, which creates an advantage for him against his competitors who do not have the same opportunity or cannot use it.*"

[183] Boyd, Pyne, and Kane, *Video Game Law: Everything You Need to Know about Legal and Business Issues in the Game Industry*, 30.

[184] Yeh, "Protection of Trade Secrets: Overview of Current Law and Legislation," 1; Suluk (Karasu/Nal), *Fikri Mülkiyet Hukuku*, 36; Boyd, Pyne, and Kane, *Video Game Law: Everything You Need to Know about Legal and Business Issues in the Game Industry*, 30.

[185] Boyd, Pyne, and Kane, *Video Game Law: Everything You Need to Know about Legal and Business Issues in the Game Industry*, 31-32.

E. Copyright for Video Games: An Introduction

A variety of aforementioned intellectual property rights have an undeniable importance in the video game industry. The video game industry on its own has many complex commercial relationships in need of intellectual property protection of all kinds. However, the subject matter at hand is the video game itself and video games are complex "works" of multiple intellectual and artistic creations altogether before anything else, which brings in the most important branch of intellectual property rights regarding video games: Copyright.[186]

We have explained video games through a breakdown of crucial elements, which are the computer code, visuals and graphics, audio and music, story and lore, and finally the game itself with its rules and mechanics. All these elements eventually fall under the evaluation scope of copyright whether as stand-alone works or tight-knit works that meticulously became one. The questions in our study focus on copyright protection of video games and the separate video game elements that make a sole video game as a copyrighted work, and how they can find a place in the varying classifications of copyrighted works. In the second chapter of this study, we will take a closer look on copyright and copyrighted works; and later on, in the third and final chapter, we will try to find out how video games could fit within the copyright framework in the Turkish legal system along with the relevant juridical approaches from the European Union and the United States.

[186] Ramos et al., *The Legal Status of Video Games: Comparative Analysis in National Approaches*, 7. A definition for video games from the legal perspective rather than a technical approach is given as follows: "*Video games are complex works of authorship - containing multiple art forms, such as music, scripts, plots, video, paintings and characters - that involve human interaction while executing the game with a computer program on specific hardware. Therefore, video games are not created as single, simple works, but are an amalgamation of individual elements that can each individually be copyrighted (i.e., the characters in a given video game, its soundtrack, settings, audiovisual parts, etc.) if they achieve a certain level of originality and creativity.*"

§ CHAPTER II

FRAMEWORK OF COPYRIGHT AND WORK

I. SCOPE OF COPYRIGHT LAW

Intellectual and artistic works exist all thanks to human mind's creativity without boundaries and the inspiration sourced by all the accumulated knowledge and unique ways of expressions that predate each newly emerging creation. The legal protection for certain forms of intellectual creativity is provided through what we refer to as "copyrights".

In this section we will explain what a "copyright" is and what kind of "intellectual creations" exactly the copyright is able to provide protection for, in accordance with various legal regulations.

The term "copyright" speaks for itself. Simply, it is an exclusive legal right for the authors of original works regarding the "act of copying" directed towards those original works created by the author.[187] In other words, it is a "*right to stop others from making copies of a given work without one's permission*".[188] Before we get into the broader definition of copyright, including the specifications regarding what kind of exclusivities are provided for copyright holders, meaning the "authors", we should first explain the status of copyright regarding how it differs from other intellectual property

[187] World Intellectual Property Organization, *Understanding Copyrights and Related Rights*, 2nd ed. (Geneva, Switzerland: World Intellectual Property Organization, 2016), 4.

[188] Paul Goldstein, *Copyright's Highway: From the Printing Press to the Cloud, Second Edition*, 2nd ed. (Stanford, CA: Stanford University Press, 2019), 1.

rights within the broadscale intellectual property rights cluster and the notion of copyright in its distinctive traditional backgrounds in history.

"Intellectual property rights" refer to a wide selection of rights in which copyright can be found as a certain type of intellectual property right.[189] Intellectual property rights as we know are mainly divided into two groups. One group is industrial property rights such as patents, designs, integrated circuit topographies, plants breeder's rights for products; and trademarks, geographical indications, trade names, commercial titles and domain names for signs are one group under the umbrella. The other group is copyrights regarding literary and artistic creations.[190]

Both industrial property rights and copyrights are referred to as "intellectual rights" in the doctrine in a broad sense. However, within the narrow meaning, the term "intellectual rights" is mostly attributed to copyright for "intellectual and artistic works". The reasoning behind this distinction is explained, by a number of scholars, as a result of the long and noncontemporary historical progression as to the "form" that comes with separate legislations and legal regulations rather than the prominent qualities of these types of rights.[191]

The basic difference between industrial property rights and copyright lies within the utilization of legal protection. While industrial property rights give a monopolistic

[189] Ünal Tekinalp, *Fikrî Mülkiyet Hukuku: Temel Bilgiler, Milletlerarası Özel Hukuk, Milletlerarası Sözleşmeler, Fikir ve Sanat Eserleri Hukuku, Markalar, Patentler, Endüstriyel Tasarımlar, Faydalı Modeller, Coğrafi İşaretler, Yeni Bitki Çeşitlerine İlişkin Islahçı Hakları, Entegre Devre Topografyaları, Biyoteknolojik Buluşların Korunması Sistemi*, 5th ed. (İstanbul: Vedat Kitapçılık, 2012), 4; World Intellectual Property Organization, *Understanding Copyrights and Related Rights*, 3.

[190] Ahmet M. Kılıçoğlu, *Sınai Haklarla Karşılaştırmalı Fikri Haklar* (Ankara: Turhan Kitabevi, 2006), 5-11; World Intellectual Property Organization, *Understanding Copyrights and Related Rights*, 4.

[191] Ernst E. Hirsch, *Hukukî Bakımdan Fikrî Sây: İkinci Cilt: Fikrî Haklar (Telif Hukuku)* (İstanbul: İktisadî Yürüyüş Matbaası ve Neşriyat Yurdu, 1943), 5; Halil Arslanlı, *Fikrî Hukuk Dersleri II: Fikir ve Sanat Eserleri* (İstanbul: İstanbul Üniversitesi Hukuk Fakültesi Sulhi Garan Matbaası, 1954), 1-2; Mustafa Tüysüz, *Fikir ve Sanat Eserleri Kanunu Çerçevesinde Fikri Haklar Üzerindeki Sözleşmeler (İlgili Mevzuat Ekli)* (Ankara: Yetkin, 2007), 24; Şafak N. Erel, *Türk Fikir ve Sanat Hukuku* (Ankara: Yetkin, 2009), 27.

privilege to the right owners regarding the use and exploitation of an invention, a design or a commercial mark in this case, the subject matter for industrial property rights require a registration and public disclosure to a certain extent. On the other hand, copyright for intellectual and artistic creations aims to prevent any "unauthorized use of the expressions of ideas" and the work created by the author is granted protection from the moment of its creation without any formalities.[192]

According to *Tekinalp*, there are three main differences between intellectual and artistic work rights and industrial property rights: First of all, the requirement of registration to obtain enforceability does not apply to intellectual and artistic works while it is a principle for industrial property rights. Secondly, moral rights are mainly applicable to intellectual and artistic works while they can be only partially seen in patents, utility models and designs, and are not present for trademarks at all. And finally, despite the possible limitations and exceptions regarding the author's rights for the sake of public and social welfare, the inevitable forced legal sanctions concerning industrial property rights such as compulsory licensing and impoundment for the public interest are not applicable for intellectual and artistic works.[193]

Copyright has been defined in various ways in different jurisdictions. This is simply because there is no such thing as an "international intellectual property right" or an "international copyright" protection that covers every aspect of the legal scope regarding an intellectual creation across the globe.[194] Just as the other intellectual

[192] World Intellectual Property Organization, *Understanding Copyrights and Related Rights*, 6.

[193] Tekinalp, *Fikrî Mülkiyet Hukuku*, 4.

[194] Jane Secker, *Electronic Resources in the Virtual Learning Environment: A Guide for Librarians* (Oxford: Chandos Publishing, 2004), 77; Orna Ross, "International Copyright," in *Copyright Bill of Rights: Eight Fundamental Rights for the Global Author in a Digital World*, ed. Boni Wagner-Stafford (Publishdrive, 2019).

property rights, copyrights are domestic or territorial by nature and dependent on the legislations of specific countries or regions where the protection is sought.[195]

Copyright is a legal term that is now universally accepted; however, it was brought into life and is referred to as "copyright" mostly in common law jurisdictions while generally is perceived as "author's rights" in civil law jurisdictions.[196] While the two terms may be used interchangeably, they are not exactly synonyms. The distinction comes from different approaches regarding the nature of the right itself. "Author's rights" as referred to in civil law tradition comes from the principle of "natural rights" where the author itself is under the focus, while "copyright" in common law tradition points to the principle of "utilitarianism" with the focus on the economic value of the work created as a property.[197] Author's rights prioritize the very being of creators and their "claims to ensure the authenticity of their works", and copyright is all about the benefit of the public domain and the audience.[198]

Author's rights in civil law tradition also contain two separate approaches regarding "alienability" and "duration" of rights in different civil law countries; "dualist" approach as in France separates time-limited transferable economic rights and inalienable perpetual moral rights, while "monist" approach as in Germany considers economic and

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[195] Benedict Atkinson and Brian Fitzgerald, *A Short History of Copyright: The Genie of Information* (Cham, Switzerland: Springer International Publishing, 2014), 3; Secker, *Electronic Resources in the Virtual Learning Environment: A Guide for Librarians*, 77-78.

[196] Paul Goldstein and P. Bernt Hugenholtz, *International Copyright: Principles, Law, and Practice*, 2nd ed. (New York: Oxford University Press, 2010), 6, 14; Hildebrandt, "Copyright in Cyberspace," 195.

[197] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 6. "*Where common law jurisdictions more evidently espouse utilitarian rationales, as exemplified in the U.S. Constitution's provision "to promote the progress of science and the useful arts," civil law countries, where the authors' rights tradition dominates, attend more closely to notions of natural rights, as is illustrated by the first sentence of the French Intellectual Property Code: "The author of a work of the mind shall enjoy in that work, by the mere fact of its creation, an exclusive incorporeal property right which shall be enforceable against all persons.*""

[198] Peter Baldwin, "The Battle between Anglo-American Copyright and European Authors' Rights," in *The Copyright Wars: Three Centuries of Trans-Atlantic Battle* (Princeton University Press, 2014), 15.

moral rights intertwined as a single fused right in terms of at least conceptual inalienability and limited duration.[199]

The terms indicate the distinction on the focus: Copyright is literally a right for "copy" of the work itself; and author's rights are giving the spotlight to the author itself rather than the work that is subject to protection, what is protected is author first. Despite the diversity of perspective on copyright protection, the scope of legally given protection remains close and alike no matter the adopted tradition. The slight differences can be seen in the concepts of "fair use" and "moral rights". As an example, the US jurisdiction of copyright tradition allows the use of a work to a certain extent without the permission of the author as long as it falls within the tight frame of "utilitarian doctrine of fair use" and any damage against the economic standing of the work is avoided, while France as an author's right or "*droit d'auteur*"[200] tradition country tends to keep the fair use frame strictly narrower and only allows unauthorized uses within "statutory limitations" for public, social and cultural welfare as rare "exceptions".[201] Another example is that the protection of moral rights is tremendously strict in civil law countries in comparison to common law countries. The option to waiver any moral right is usually permitted in the common law tradition since the concentration is on the economic rights, however, civil law countries may only allow such renunciation "under the strictest of conditions", or simply not allow at all.[202]

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[199] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 12, 20; Fırat Öztan, *Fikir ve Sanat Eserleri Hukuku* (Ankara: Turhan Kitabevi, 2008), 32-36; Tekinalp, *Fikrî Mülkiyet Hukuku*, 91-93.

[200] Rudolf Monta, "The Concept of Copyright versus the Droit D'Auteur," *Southern California Law Review* 32, no. 2 (1959): 177. "*The French concept of droit d'auteur, which, however, is the basis not only of the French statute but also of the Swiss law and the German project, and to some greater extent the concept of nearly all the copyright statutes except the Anglo-Saxon ones*." The term "droit d'auteur" is a direct translation of "author's rights" in French.

[201] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 6.

[202] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 7.

While many other distinctions are present in various national legislations with different traditional backgrounds, over the decades, the purpose and scope of copyright protection progressed through a global harmonization with the help of international treaties. However, it is still primarily maintained on the basis of national laws.[203]

Regardless of the different approaches that come from the previously mentioned legal traditions that set the basis for copyrights or author's rights, the subject matter for protection within the copyright law remains the same; an author's "work". From a universal perspective that reflected on national regulations regarding copyright, it can be said that copyright protects, through the grant of exclusive rights, the "original" works of expression holding a literary and artistic value.[204] Copyright, by principal, does not protect ideas but the expressions. An idea may take form through endless ways of unique expressions. What matters is that a certain idea finds its way into the perceivable world as an expression with an original and creative touch of its creator.

The "author" that has been mentioned multiple times is the "creator" of the copyrighted work. Just as the intellectual creations that can be subject to legal intellectual property protection must be creations of the mind; the author, or creator in this context, of a copyrighted work should be a real person since a work within the copyright protection scope can only be created through human intellect and creativity.[205] Copyright protection is a legal mechanism to reward the intellectual and creative labor and to further encourage the continuous intellectual creations to come alive which expand and enrich the cultural and scientific knowledge accumulation of human society. This mechanism works through

[203] Ivana Katsarova, "The Challenges of Copyright in the EU," *European Parliamentary Research Service - EPRS*, June 2015, 2; Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 10.

[204] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 4.

[205] Tekinalp, *Fikrî Mülkiyet Hukuku*, 113; Suluk/Nal (Karasu), *Fikri Mülkiyet Hukuku*, 74; Kılıçoğlu, *Sınai Haklarla Karşılaştırmalı Fikri Haklar*, 162.

the exclusive and personal rights granted to the author of the work. These rights are mainly divided into two groups: economic rights to harvest the "financial reward" that is generated from the authorized use of the author's work; and moral rights to secure and protect the author's connection to their work and the reputation of both the author and the work.[206]

From a universal and harmonized approach, the economic rights can be listed as the right of reproduction, the right of distribution, the right of translation and adaptation, the right of communication to public and the right of public performance.[207] On the other hand, the moral rights are strictly tied to the author itself and consist of the right of paternity also sometimes worded as "attribution", the right of integrity, the right of divulgation and the right of withdrawal.[208]

The economic rights are transferable and assignable to other persons or entities, however, the moral rights in most countries, especially civil law systems, do not hold this quality and it is not possible to transfer, assign or even waiver these rights as they are only for the author to enforce and strictly remain with the author.[209]

Copyright also protects certain "intellectual efforts" that are not directly considered as original creations of an author, but instead creations of performers and producers, such as broadcasts or sound recordings.[210] These are known as "neighboring rights" and "related rights" and are usually given less protection than copyrighted works

[206] Atkinson and Fitzgerald, *A Short History of Copyright: The Genie of Information*, 3-4; World Intellectual Property Organization, *Understanding Copyrights and Related Rights*, 9.

[207] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 300-330; World Intellectual Property Organization, *Understanding Copyrights and Related Rights*, 10.

[208] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 349-355; World Intellectual Property Organization, *Understanding Copyrights and Related Rights*, 14.

[209] Hildebrandt, "Copyright in Cyberspace," 194.

[210] Morten Rosenmeier, Kacper Szkalej, and Sanna Wolk, *EU Copyright Law: Subsistence, Exploitation and Protection of Rights* (Alphen aan den Rijn: Kluwer Law International B.V., 2019), 16.

in terms of duration. While some countries protect neighboring rights and related rights separately, in some countries, these rights are fused with the general copyrighted work protection scope.[211]

Copyright law revolves around the subject matter that is "work". Since the focus in our study is the notion of "copyrighted work" and its intersections with video games and their unique elements, defining what a copyrighted work is and its framework as to the criteria of eligibility for protection becomes crucial.

II. SCOPE OF A COPYRIGHTED WORK

Drawing the precise lines to define a "work" within the copyright framework is a long and never-ending debate, still ongoing today. The concept of "copyright eligible work" on a legal act first happened with the British "*Statute of Anne*" back in 1710, which only protected books as an author's legitimate works.[212] Over the course of history, the list of protected works expanded non-stop, covering works such as music, paintings, sculptures, photography, cinematic pieces, and even software and databases. One of the main actors that makes it difficult to provide an exhaustive and definite list for copyright eligible works is the technological advancement of course, but certainly not the only reason.

The necessity for protecting intellectual creations collides with third persons' freedom to an extent, so it is quite important to draw the lines and determine what kind

[211] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 231. "*As a rule, common law countries bring into copyright at least some of the subject matter that civil law countries usually protect under the rubric of neighboring rights. The United States, for example, extends copyright to sound recordings, broadcasts, and recorded performances.*"

[212] The long title of the "Statute of Anne" also referred to as the "Copyright Act 1710" is "*An Act for the Encouragement of Learning, by Vesting the Copies of Printed Books in the Authors or Purchasers of such Copies, during the Times therein mentioned*."; Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 16.

of works should be protected. The protection framework could be defined through a "*numerus clausus*" list or through exemplification.[213] Over time, there happened multiple international treaties with the attempts to harmonize the copyright regulations within national borders, each having their unique standards for copyright protection.

Defining the scope of a copyrighted work is a complicated task, often re-determined by the courts of law on a case-by-case basis, adding up to already existing standards with a new perspective that becomes an unavoidable necessity. In this section, we will explore the modern relevant international, regional, and national approaches to determine the notion of a copyrighted work, while addressing the criteria set from each perspective.

A. International Agreements

There are a number of international unifying attempts to make standards for copyright protection, at least trying to set the minimum standards that will ensure close to equal protection beyond borders. Before the "big" international treaties, there were countless bilateral treaties signed between nations but for many obvious reasons, they were just not enough.[214] In this section, we will look at four crucial international agreements and examine how they defined a "copyrighted work" and its significant criteria.

[213] Suluk/Nal (Karasu), *Fikri Mülkiyet Hukuku*, 38.

[214] A. Gökçen Karasioğlu Gürbüz, *Türk Hukukunda Telif Eserlerin Korunması* (Ankara: Yetkin, 2021), 29; Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 33.

1. Berne Convention for the Protection of Literary and Artistic Works

Signed on September 9, 1886, and coming into force on December 5, 1887, "*Berne Convention for the Protection of Literary and Artistic Works*", in short "Berne Convention" is the first international agreement regarding copyright protection of intellectual and artistic works.[215] Berne Convention was signed by ten countries when it first came into existence,[216] and has been revised and amended multiple times until it reached its final state still in force today.[217]

Berne Convention was brought to life with the purpose of setting the minimum protection standards regarding literary and artistic works and providing harmonized and effective rights for the authors, both nationally and internationally.[218] With the creation of Berne Convention, also a union of signatory countries took place.[219] Foundation of this union is in line with Berne Convention's aims and purposes. The union is based in Geneva and now administered by the International Bureau of the World Intellectual Property

[215] Claude Masouyé, *Guide to the Berne Convention for the Protection of Literary and Artistic Works: (Paris Act, 1971)* (Geneva: World Intellectual Property Organization, 1978), 5.

[216] Berne Convention was initially signed between ten countries that are Belgium, France, Germany, Haiti, Italy, Liberia, Spain, Switzerland, Tunisia, and the United Kingdom.; Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 34. "*Of these ten countries, only Liberia failed to ratify the treaty. Two other countries, Japan and the United States, sent representatives to the final conference. Japan adhered to the Convention 12 years later, the United States 103 years later.*"

[217] Berne Convention has been completed at Paris on May 4, 1896, revised at Berlin on November 13, 1908, completed at Berne on March 20, 1914, revised at Rome on June 2, 1928, at Brussels on June 26, 1948, at Stockholm on July 14, 1967, and at Paris on July 24, 1971, and amended at Paris on September 28, 1979.

[218] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 31; Salih Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları* (İstanbul: On İki Levha, 2021), 5; Karasioğlu Gürbüz, *Türk Hukukunda Telif Eserlerin Korunması*, 30; Erel, *Türk Fikir ve Sanat Hukuku*, 39.

[219] Berne Convention Article 1 - *Establishment of a Union* "*The countries to which this Convention applies constitute a Union for the protection of the rights of authors in their literary and artistic works.*"

Organization ("WIPO").[220] Currently there are a total of 181[221] contracting parties to the Berne Convention, including Turkey.[222]

Berne Convention did not give a straight up definition of "work", but instead provided a list of examples as to the intellectual creations that could be covered by "literary and artistic works". Article 2(1) of the Berne Convention leads the signatory countries for them to determine what works should be within the scope of copyright protection. Article 2(1) gathered the copyrighted works under the category of "literary and artistic works".[223] According to Article 2(1), no matter the form of expression, any literary, scientific, or artistic creation is included in the scope of protection. The exact wording of "every production" in Article 2(1) indicates that as long as a creation is of literary, scientific or artistic nature, protection is provided, and the examples given under with the wording of "such as" indicates that it is not an exhaustive *numerus clausus* list.[224] While providing protection for translations and adaptations as well as musical arrangements and any kind of altered outcome of literary and artistic works[225], Berne

[220] Tekinalp, *Fikrî Mülkiyet Hukuku*, 68; Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 6; Savaş Bozbel, *Fikri Mülkiyet Hukuku* (İstanbul: On İki Levha, 2015), 20.

[221] "Berne Convention for the Protection of Literary and Artistic Works," WIPO, accessed March 7, 2022, https://www.wipo.int/treaties/en/ip/berne.

[222] R.G.-12/07/1995-22341.

[223] Berne Convention Article 2(1) "*The expression "literary and artistic works" shall include every production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression, such as books, pamphlets and other writings; lectures, addresses, sermons and other works of the same nature; dramatic or dramatico-musical works; choreographic works and entertainments in dumb show; musical compositions with or without words; cinematographic works to which are assimilated works expressed by a process analogous to cinematography; works of drawing, painting, architecture, sculpture, engraving and lithography; photographic works to which are assimilated works expressed by a process analogous to photography; works of applied art; illustrations, maps, plans, sketches and three-dimensional works relative to geography, topography, architecture or science.*"

[224] Masouyé, *Guide to the Berne Convention for the Protection of Literary and Artistic Works: (Paris Act, 1971)*, 13; Mustafa Ateş, *Fikrî Hukukta Eser* (Ankara: Turhan Kitabevi, 2007), 47.

[225] Berne Convention Article 2(3) "*Translations, adaptations, arrangements of music and other alterations of a literary or artistic work shall be protected as original works without prejudice to the copyright in the original work.*"

Convention explicitly excludes ideas and incidents by leaving daily news or press information out of the protection framework.[226]

Whether the protected works should be "fixed in some material form" is left for the national legislations of the contracting states in Article 2(2).[227] According to this provision, members are free to decide if a material fixation is a fundamental criterion for a work to be protected in their respective jurisdictions.[228] Same as the fixation requirement, contracting countries are also given freedom regarding the protection of "works of applied art and industrial designs and models"[229], as well as "official texts of a legislative, administrative and legal nature" and "official translations of such texts"[230], and "political speeches and speeches delivered in the course of legal proceedings"[231] in Articles 2(7), 2(4) and 2bis(1).

Berne Convention Article 2 provides a general idea of what can be protected as a copyrighted work through categorization and exemplification, however, it does not give any indications as to a work's qualities on whether it should bear the characteristics of its

[226] Berne Convention Article 2(8) "*The protection of this Convention shall not apply to news of the day or to miscellaneous facts having the character of mere items of press information.*"

[227] Berne Convention Article 2(2) "*It shall, however, be a matter for legislation in the countries of the Union to prescribe that works in general or any specified categories of works shall not be protected unless they have been fixed in some material form.*"

[228] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 39-40; Ateş, *Fikrî Hukukta Eser*, 39.

[229] Berne Convention Article 2(7) "*Subject to the provisions of Article 7(4) of this Convention, it shall be a matter for legislation in the countries of the Union to determine the extent of the application of their laws to works of applied art and industrial designs and models, as well as the conditions under which such works, designs and models shall be protected. Works protected in the country of origin solely as designs and models shall be entitled in another country of the Union only to such special protection as is granted in that country to designs and models; however, if no such special protection is granted in that country, such works shall be protected as artistic works.*"

[230] Berne Convention Article 2(4) "*It shall be a matter for legislation in the countries of the Union to determine the protection to be granted to official texts of a legislative, administrative and legal nature, and to official translations of such texts.*"

[231] Berne Convention Article 2bis(1) "*It shall be a matter for legislation in the countries of the Union to exclude, wholly or in part, from the protection provided by the preceding Article political speeches and speeches delivered in the course of legal proceedings.*"

creator, a certain degree of individuality, aesthetic quality, creativity, or originality.[232] Any regulations regarding these criteria are left to the contracting states. Whether the definition of work should consist of originality, creativity and author's characteristics was discussed in Brussels revisions and one opinion was put forward claiming that the definition of work only stated as a "production" would be insufficient to determine the scope of protection as works, and could result in every single product to be covered by "literary and artistic" works. This concern eventually was found unnecessary on the grounds that a literary and artistic work bears qualities of creativity and individuality by their nature and the definition of the work does not necessarily have to include these qualities explicitly.[233] Accordingly, Berne Convention does not state any criteria regarding the originality, creativity, aesthetics, or any similar qualities for a copyright eligible work definition in its text.

Within Berne Convention Article 2(5) regarding collections of literary and artistic works, it is clearly stated that works such as anthologies or encyclopedias[234] are eligible for protection so long as they are intellectual creations of selection and arrangement efforts. Collections stand on a very thin line for copyright protection in comparison to other kinds of original works and should bear a certain degree of "intellectual creativity".[235]

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[232] Masouyé, *Guide to the Berne Convention for the Protection of Literary and Artistic Works: (Paris Act, 1971)*, 13; Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 7.

[233] Eva-Marie König, *Der Werkbegriff in Europa. Eine rechtsvergleichende Untersuchung des britischen, französischen und deutschen Urheberrechts* (Tübingen: Mohr Siebeck, 2015), 12, quoted in Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 7.

[234] Berne Convention Article 2(5) "*Collections of literary or artistic works such as encyclopaedias and anthologies which, by reason of the selection and arrangement of their contents, constitute intellectual creations shall be protected as such, without prejudice to the copyright in each of the works forming part of such collections.*"

[235] Masouyé, *Guide to the Berne Convention for the Protection of Literary and Artistic Works: (Paris Act, 1971)*, 20; Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 7-8.

Provisions of Berne Convention do not have any clear regulations regarding the protection of video games. However, Article 2(1) consists of a very significant expression regarding cinematographic works; "*cinematographic works to which are assimilated works expressed by a process analogous to cinematography*". This provision indicates that creations that are produced through cinematography techniques and are similar to cinematographic works are also within the scope of protection. Video games, in this context, may be deemed eligible for protection from the perspective of Berne Convention if they are considered similar works to cinematographic works.[236]

The minimum protection term set by Berne Convention Article 7 is the lifetime of the author and 50 years after the author's death.[237] The various exceptions to this minimum duration are also stated in the provisions in the same article. It should be noted that these durations are the absolute minimum that should be provided by contracting states. Each contracting state is free to grant a longer duration according to their local legislations.[238]

2. Universal Copyright Convention

In order to minimize the differences between American continental states and European countries, accommodate the copyright systems, and effectively harmonize the intellectual and artistic works protection across the continents, with the lead of the "*United Nations Educational, Scientific and Cultural Organization*" known as "UNESCO", "*The Universal Copyright Convention*" ("UCC") was signed as the result of

[236] Kılıç, *Bilgisayar Oyunlarının Eser Niteliği,* 50.

[237] Berne Convention Article 7(1) "*The term of protection granted by this Convention shall be the life of the author and fifty years after his death.*"

[238] Masouyé, *Guide to the Berne Convention for the Protection of Literary and Artistic Works: (Paris Act, 1971)*, 45-46; Öztan, *Fikir ve Sanat Eserleri Hukuku*, 40.

a conference held in Geneva on September 6, 1952.[239] Turkey is not a signatory member of UCC.[240]

The protection provided by UCC is not as strong as Berne Convention. The duration of protection is 25 years following the death of the author while Berne Convention sets the minimum as 50 years.[241]

Just as Berne Convention, UCC also did not give a definition of "work".[242] Compared to Berne Convention, Article 1 of UCC gives a very short list of examples under the literary, scientific, and artistic works.[243] UCC only counts "*writings, musical, dramatic and cinematographic works, and paintings, engravings and sculpture*" within the scope of work categories mentioned, however, this should not be construed as an exhaustive list. According to different arguments in the doctrine, the reason for avoiding many examples is to avoid the agreement being construed as restrictive, or the reluctance that some countries may deter from signing up to the treaty.[244] For example, works of architecture are not stated in the provisions, yet this does not mean that architectural works cannot be protected as works. Member countries are given the freedom to decide which works they include within the scope of protection.[245]

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[239] Joseph S. Dubin, "The Universal Copyright Convention," *California Law Review* 42, no. 1 (1954): 89-90; Erel, *Türk Fikir ve Sanat Hukuku*, 41; Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 8-9.

[240] Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 9.

[241] Berne Convention Article 7(1); UCC Article 4(2).

[242] Dubin, "The Universal Copyright Convention," 101; Ateş, *Fikrî Hukukta Eser*, 48; Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 9.

[243] UCC Article 1 "*Each Contracting State undertakes to provide for the adequate and effective, protection of the rights of authors and other copyright proprietors in literary, scientific and artistic works, including writings, musical, dramatic and cinematographic works, and paintings, engravings and sculpture.*"

[244] Dubin, "The Universal Copyright Convention," 101-102; Ateş, *Fikrî Hukukta Eser*, 49.

[245] Dubin, "The Universal Copyright Convention," 101; Ateş, *Fikrî Hukukta Eser*, 49.

Article 4(3) of UCC places works of photography and applied art differently from the works listed in the first respective article.[246] According to this provision, Member States are not obliged to protect photographic works and applied art works, but if they decide to do so, they have a different minimum protection term threshold of 10 years instead of 25.[247]

Regarding the requirements of a protected work, UCC also does not include a provision regarding a material "fixation" requirement. However, UCC includes the expression "*published work*" multiple times in its text. A published work, through the meaning of this expression, falls in line with some kind of fixation. Since UCC was affected by the United States which is a common law system jurisdiction that considers fixation a fundamental element of a protected work, including a fixation requirement in UCC becomes a significant issue for other signatory countries. The wording of UCC generously leaves the members free to determine a fixation requirement, through the very absence of it.[248]

3. Agreement on Trade-Related Aspects of Intellectual Property Rights

The "*Agreement on Trade-Related Aspects of Intellectual Property Rights*" ("TRIPS") was signed on April 15, 1994, in Marrakesh, as an annex of the "*Marrakesh Agreement Establishing the World Trade Organization*" which is the foundation

[246] UCC Article 4(3) "*The provisions of paragraph 2 of this article shall not apply to photographic works or to works of applied art; provided, however, that the term of protection in those Contracting States which protect photographic works, or works of applied art in so far as they are protected as artistic works, shall not be less than ten years for each of said classes of works.*"

[247] Dubin, "The Universal Copyright Convention," 105-106; Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 10.

[248] Ateş, *Fikrî Hukukta Eser*, 40.

agreement for "*World Trade Organization*" ("WTO"). Through the enforcement of TRIPS, the aim was to balance the international trade activities, set the minimum standards and provide sufficient protection for intellectual property while ensuring no intellectual property related setbacks impeded the flow of international trade.[249] All members of WTO are also a member of TRIPS, and Turkey is one of the founding signatory countries.[250] TRIPS is a comprehensive intellectual property rights agreement consisting of provisions regarding not only copyright protection, but also industrial property rights.[251]

The definition of work is not present in TRIPS either. Instead, TRIPS refers to Berne Convention regarding copyrighted works. Article 2(2) of TRIPS states that Member States are bound by their responsibilities arising from Berne Convention.[252] Further, Article 9(1) of TRIPS clarifies the requirement of Member States to comply with Berne Convention's first 21 Articles.[253] These provisions indicate that TRIPS adopts the scope of copyrighted work definition provided in Berne Convention.[254] Article 9(2) of

[249] TRIPS Preamble states the purpose behind as "*Desiring to reduce distortions and impediments to international trade, and taking into account the need to promote effective and adequate protection of intellectual property rights, and to ensure that measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade.*"; Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 12; Kılıç, *Bilgisayar Oyunlarının Eser Niteliği,* 52; Bozbel, *Fikri Mülkiyet Hukuku*, 24.

[250] Decision of the Council of Ministers dated 3/2/1995 and numbered 95/6525 and approved by Law No. 4067 of 26/1/1995.

[251] Antony Taubman, Hannu Wager, and Jayashree Watal, *A Handbook on the WTO TRIPS Agreement* (Cambridge: Cambridge University Press, 2012), 10; Tekinalp, *Fikrî Mülkiyet Hukuku*, 82; Karasioğlu Gürbüz, *Türk Hukukunda Telif Eserlerin Korunması*, 31.

[252] TRIPS Article 2(2) "*Nothing in Parts I to IV of this Agreement shall derogate from existing obligations that Members may have to each other under the Paris Convention, the Berne Convention, the Rome Convention and the Treaty on Intellectual Property in Respect of Integrated Circuits.*"

[253] TRIPS Article 9(1) "*Members shall comply with Articles 1 through 21 of the Berne Convention (1971) and the Appendix thereto. However, Members shall not have rights or obligations under this Agreement in respect of the rights conferred under Article 6bis of that Convention or of the rights derived therefrom.*"

[254] Taubman, Wager, and Watal, *A Handbook on the WTO TRIPS Agreement*, 39; Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 12-13.

TRIPS draws the line for copyright protection extending to only expressions and not ideas.[255]

TRIPS clarified and extended the copyright protection for computer programs and databases, which were not explicitly included in the protected works listed in Berne Convention. An interesting expansion regarding the protection of computer programs shows itself in Article 10(1) of TRIPS. Regardless of the nature of the code, whether it is a "source code" or "object code", computer programs are protected as they are literary works under Berne Convention.[256] Also, regarding databases, Article 10(2) of TRIPS clarifies the form of protectable compilations of data. According to this provision copyright eligible databases could be "in machine readable or other form", so long as they are products of intellectual creation.[257]

Same as the other international agreements, TRIPS has no specific provisions regarding the protection of video games as copyrighted works. However, considering the purpose and nature of TRIPS, this agreement only strengthens the applicability of other international agreements it takes its power from. Especially, the references made to Berne Convention lights up the way for video games to be protected as copyrighted works one way or another.[258]

The importance of TRIPS comes from the ultimate difference it has from the other international agreements. While TRIPS expands the application of already existing international agreements, it is the first international agreement that sets forth sanctions

[255] TRIPS Article 9(2) "*Copyright protection shall extend to expressions and not to ideas, procedures, methods of operation or mathematical concepts as such.*"

[256] TRIPS Article 10(1) "*Computer programs, whether in source or object code, shall be protected as literary works under the Berne Convention (1971).*"

[257] TRIPS Article 10(2) "*Compilations of data or other material, whether in machine readable or other form, which by reason of the selection or arrangement of their contents constitute intellectual creations shall be protected as such. Such protection, which shall not extend to the data or material itself, shall be without prejudice to any copyright subsisting in the data or material itself.*"

[258] Kılıç, *Bilgisayar Oyunlarının Eser Niteliği,* 53.

for members that fail to provide sufficient protection and precautions for intellectual property.[259]

4. WIPO Copyright Treaty

"*WIPO Copyright Treaty*" ("WCT") is a special treaty that was based on Article 20[260] of Berne Convention.[261] WCT is an international agreement, signed on December 20, 1996, in Geneva, created with the lead of WIPO, which is an organization founded through the "*Convention Establishing the World Intellectual Property Organization*" signed in Stockholm on July 14, 1967, with the purpose of improving intellectual property protection both on national and international levels.[262]

WCT is the result of the efforts regarding providing the protection overlooked in Berne Convention and to fill the gaps Berne Convention remained insufficient.[263] WCT does not include any conflicting provisions with Berne Convention on the basis of Article 20 of Berne Convention, however, it consists of special provisions regarding the protection of intellectual and artistic works.[264] Being a special agreement, WCT does not

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[259] Tekinalp, *Fikrî Mülkiyet Hukuku*, 82; Kılıç, *Bilgisayar Oyunlarının Eser Niteliği,* 52; Karasioğlu Gürbüz, *Türk Hukukunda Telif Eserlerin Korunması*, 31.

[260] Berne Convention Article 20 "*The Governments of the countries of the Union reserve the right to enter into special agreements among themselves, in so far as such agreements grant to authors more extensive rights than those granted by the Convention, or contain other provisions not contrary to this Convention. The provisions of existing agreements which satisfy these conditions shall remain applicable.*"

[261] WCT Article 1(1) "*This Treaty is a special agreement within the meaning of Article 20 of the Berne Convention for the Protection of Literary and Artistic Works, as regards Contracting Parties that are countries of the Union established by that Convention. This Treaty shall not have any connection with treaties other than the Berne Convention, nor shall it prejudice any rights and obligations under any other treaties.*"

[262] Julie S. Sheinblatt, "The WIPO Copyright Treaty," *Berkeley Technology Law Journal* 13, no. 1 (1998): 535; Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 46; Tekinalp, *Fikrî Mülkiyet Hukuku*, 81; Erel, *Türk Fikir ve Sanat Hukuku*, 40; Karasioğlu Gürbüz, *Türk Hukukunda Telif Eserlerin Korunması*, 32.

[263] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*,46; Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 10.

[264] WCT Article 1(1).

rule out any of the responsibilities of signatory states which were set by Berne Convention.[265] Turkey is a signatory member of WCT.[266]

The main purpose behind WCT is stated in the "preamble" of the treaty.[267] The need for finding new solutions regarding the problems related to intellectual and artistic works, arising from "*new economic, social, cultural and technological developments*" called for new regulations and a set of standards.

WCT did not introduce a definition of work, rather defined the scope of protection regarding intellectual and artistic works. Same as Article 9(2) of TRIPS, Article 2 of WCT explicitly states that copyright protection is for expressions and not ideas.[268] Another critical effect of WCT, same as TRIPS, is that it also extended the copyright protection to computer programs and databases, which were not included in the protected works listed in Berne Convention. Article 4 of WCT states that computer programs are eligible for copyright protection as literary works in line with Article 2 of Berne Convention, regardless of the form of expression.[269] Following that, Article 5 welcomes databases as copyright eligible works so long as they are created holding the nature of "intellectual creations".[270] Another significant change WCT brought is concerning the photographic

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[265] WCT Article 1(2) "*Nothing in this Treaty shall derogate from existing obligations that Contracting Parties have to each other under the Berne Convention for the Protection of Literary and Artistic Works.*"

[266] R.G.-14/5/2008-26876.

[267] WCT Preamble states the purpose behind as "*Recognizing the need to introduce new international rules and clarify the interpretation of certain existing rules in order to provide adequate solutions to the questions raised by new economic, social, cultural and technological developments,"* and *"Recognizing the profound impact of the development and convergence of information and communication technologies on the creation and use of literary and artistic works*."

[268] WCT Article 2 "*Copyright protection extends to expressions and not to ideas, procedures, methods of operation or mathematical concepts as such.*"

[269] WCT Article 4 "*Computer programs are protected as literary works within the meaning of Article 2 of the Berne Convention. Such protection applies to computer programs, whatever may be the mode or form of their expression.*"

[270] WCT Article 5 "*Compilations of data or other material, in any form, which by reason of the selection or arrangement of their contents constitute intellectual creations, are protected as such. This protection does not extend to the data or the material itself and is without prejudice to any copyright subsisting in the data or material contained in the compilation.*"

works. Article 9[271] of WCT changed the lesser minimum protection term for photographic works that was set in Berne Convention Article 7(4)[272] and brought the protection period minimum up to the standard term set for all other literary and artistic works, eliminating the discrimination.[273]

It is clear that one of the ideas behind WCT is to provide protection for digital creations that are newly surfaced with the help of technological advancements. Although video games are not directly considered as works in the text, with the flexibility given by Berne Convention regarding the types of protectable works, WCT's clear connection to Berne Convention, and the extended protection given to digital creations such as computer programs and databases; it is safe to say that video games are in fact one of the subjects of protection by their complex and fairly digital nature. An agreement with the aim of protecting works of pure digital nature could not be interpreted in a way that excludes video games.[274]

B. The United States Law

The US copyright laws are rooted in the US Constitution.[275] The US Congress was directed to create a "federal law that provides an incentive to create and distribute

[271] WCT Article 9 "*In respect of photographic works, the Contracting Parties shall not apply the provisions of Article 7(4) of the Berne Convention.*"

[272] Berne Convention Article 7(4) "*It shall be a matter for legislation in the countries of the Union to determine the term of protection of photographic works and that of works of applied art in so far as they are protected as artistic works; however, this term shall last at least until the end of a period of twenty-five years from the making of such a work.*"

[273] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 46-47.

[274] Kılıç, *Bilgisayar Oyunlarının Eser Niteliği,* 51-52.

[275] The US Constitution Article I Section 8 "*The Congress shall have Power [...] To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.*"

new works" to provide a comprehensive copyright protection for authors.[276] Copyright laws are on a federal level in the US, although some states make their own state laws on their level as well.[277]

The definition of work in the current legislation of the US which is the Title 17 of the United States Code is as clear as it could reflect.[278] According to the provision, copyrighted works within the scope of protection are defined briefly as "*original works of authorship fixed in any tangible medium of expression*". The criteria of work, understood from the provision, brings out the concepts of "originality", "fixation" and "expression".

The definition "original works of authorship" is not further explained, and this is intentional according to the House Report No. 94-1476, stating that determination of "originality" is left for the courts of law to decide.[279] Furthermore, it is clarified that the originality standard of copyright is not defined by extensive qualities of "*novelty, ingenuity, or esthetic merit*" under no circumstances. The Supreme Court made a landmark comment on the concept of originality in its decision for "*Feist Publications,*

[276] Siva Vaidhyanathan, *Copyrights and Copywrongs: The Rise of Intellectual Property and How It Threatens Creativity* (New York: New York University Press, 2001), 20.

[277] Marketa Trimble, "U.S. State Copyright Laws: Challenge and Potential," *Stanford Technology Law Review* 20, no. 2 (Fall 2017): 67.

[278] 17 U.S. Code § 102 - Subject matter of copyright: In general. "*(a) Copyright protection subsists, in accordance with this title, in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. Works of authorship include the following categories: (1) literary works; (2) musical works, including any accompanying words; (3) dramatic works, including any accompanying music; (4) pantomimes and choreographic works; (5) pictorial, graphic, and sculptural works; (6) motion pictures and other audiovisual works; (7) sound recordings; and (8) architectural works. (b) In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.*"

[279] House Report No. 94-1476 on 17 U.S. Code § 102. "*The phrase "original works or authorship," which is purposely left undefined, is intended to incorporate without change the standard of originality established by the courts under the present copyright statute. This standard does not include requirements of novelty, ingenuity, or esthetic merit, and there is no intention to enlarge the standard of copyright protection to require them.*"

Inc. v. Rural Telephone Service Co." which was about a telephone directory.[280] The Court stated that "*Original, as the term is used in copyright, means only that the work was independently created by the author (as opposed to copied from other works), and that it possesses at least some minimal degree of creativity.*"[281] This interpretation made by the Supreme Court defined the importance of at least a "modicum of creativity" in a copyright eligible work.[282] The small amount of creativity manifested in an original work is also brought forward by the practices of Copyright Office, as stated in "Electronic Code of Federal Regulations".[283] Generic and short phrases that lack even the minimum amount of creativity fails to be original, thus, are excluded from copyright protection as works of original authorship.

The text clearly distinguishes between the idea and expression and leaves the ideas underlying the expression outside the copyright framework, protecting only the expression itself.[284] The form of expression also remained flexible to provide protection for works that came to life in new ways of expressions the law would not possibly foresee, as copyright changes as quick as the scientific and cultural progression.[285] Fixation in the

[280] Feist Publications, Inc. v. Rural Telephone Service Co., Inc., 499 U.S. 340 (1991).

[281] 499 U.S. 340, 341 (1991). "*To be sure, the requisite level of creativity is extremely low; even a slight amount will suffice. The vast majority of works make the grade quite easily, as they possess some creative spark, "no matter how crude, humble or obvious" it might be.*"

[282] Jane Ginsburg and Robert Gorman, *Ginsburg and Gorman's Copyright Law (Concepts and Insights Series)* (New York, NY: Foundation Press, 2012), 20.

[283] 37 CFR § 202.1 - Material not subject to copyright. "*The following are examples of works not subject to copyright and applications for registration of such works cannot be entertained: (a) Words and short phrases such as names, titles, and slogans; familiar symbols or designs; mere variations of typographic ornamentation, lettering or coloring; mere listing of ingredients or contents.*"

[284] Vaidhyanathan, *Copyrights and Copywrongs: The Rise of Intellectual Property and How It Threatens Creativity*, 25.

[285] House Report No. 94-1476 on 17 U.S. Code § 102. "*The history of copyright law has been one of gradual expansion in the types of works accorded protection, and the subject matter affected by this expansion has fallen into two general categories. In the first, scientific discoveries and technological developments have made possible new forms of creative expression that never existed before. In some of these cases the new expressive forms—electronic music, filmstrips, and computer programs, for example—could be regarded as an extension of copyrightable subject matter Congress had already intended to protect, and were thus considered copyrightable from the outset without the need of new legislation. In other cases, such as photographs, sound recordings, and motion pictures, statutory enactment was deemed necessary to give them full recognition as copyrightable works. Authors are*

sense the US Code defined is either through copying or phonorecords.[286] The fixed work does not need to be in a medium that is absolutely permanent, a "sufficiently permanent" or "stable" state allowing to be "*perceived, reproduced, or otherwise communicated for a period of more than transitory duration*" is enough as declared in Section 101 of the Code.[287]

The US courts had a complicated approach towards video games regarding the fixation requirement in the 1980's. Many cases were handling the question of "fixed in a tangible medium" when it comes to video games, mostly on arcade machines or home gaming consoles.[288] In the several lawsuits filed for copyright infringement, the courts in fact found video games as fixed works of authorship within the scope of copyright protection. Defendants mostly argued that video games have an ever-changing nature of displayed images impacted by the player's actions and choices that resulted in an "unfixed" state, therefore they are subject to copying freely under the laws.[289] However, the courts did not accept this defense and ruled for copyright infringement. In "*Williams Electronics, Inc. v. Artic International, Inc.*" the court ruled that the constantly changing visual and audio output does not change the fact that overall "substantial portion of the sights and sounds" remain the same in their repetitive nature regardless of player's manipulations.[290]

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continually finding new ways of expressing themselves, but it is impossible to foresee the forms that these new expressive methods will take. The bill does not intend either to freeze the scope of copyrightable subject matter at the present stage of communications technology or to allow unlimited expansion into areas completely outside the present congressional intent."

[286] Ginsburg and Gorman, *Ginsburg and Gorman's Copyright Law (Concepts and Insights Series)*, 23.

[287] 17 U.S. Code § 101 - Definitions "*A work is "fixed" in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration. A work consisting of sounds, images, or both, that are being transmitted, is "fixed" for purposes of this title if a fixation of the work is being made simultaneously with its transmission."*

[288] Ginsburg and Gorman, *Ginsburg and Gorman's Copyright Law (Concepts and Insights Series)*, 25.

[289] Ginsburg and Gorman, *Ginsburg and Gorman's Copyright Law (Concepts and Insights Series)*, 25.

[290] Williams Electronics, Inc. v. Artic International, Inc., Appellant, 685 F.2d 870, 874 (3d Cir. 1982). "*Although there is player interaction with the machine during the play mode which causes the audiovisual presentation to change in some respects from one game to the next in response to the player's varying participation, there is always a repetitive sequence of a substantial portion of the sights and*

Another argument which was widely dismissed was that programs that operated computers are not fixed because they are not directly perceived and deciphered by human subjects.[291] The decision in "*Midway Mfg. Co. v. Dirkschneider*" clarified that material mediums as circuit boards are "tangible objects" on which audiovisual works, in this case a video game, may be fixed; and audiovisual works that cannot be perceived without a fully expressive machine does not mean that these works are not fixed as required by law.[292] Since computer programs are considered "literary works" according to the US copyright laws, the fixation requirement is fulfilled by simply fixation on any suitable computer hardware.[293]

The US copyright law provides eight categories of copyrighted works that are "literary works, musical works, dramatic works, pantomimes and choreographic works, pictorial, graphic, and sculptural works, motion pictures and other audiovisual works, sound recordings" and with the 1990 addition of "architectural works".[294] The wording in the provision points to a non-exhaustive list through the use of the expression "include". This comment is also supported by the House Report No. 94-1476 with the clarification of the list being "illustrative and not limitative".[295] Even though the listed categories are

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sounds of the game, and many aspects of the display remain constant from game to game regardless of how the player operates the controls."; See also Stern Electronics Inc. v. Kaufman, 669 F.2d 852 (2d Cir. 1982).

[291] Ginsburg and Gorman, *Ginsburg and Gorman's Copyright Law (Concepts and Insights Series)*, 26.

[292] Midway Mfg. Co. v. Dirkschneider, 543 F. Supp. 466, 480 (D. Neb. 1981). "*The printed circuit boards are tangible objects from which the audiovisual works may be perceived for a period of time more than transitory. The fact that the audiovisual works cannot be viewed without a machine does not mean the works are not fixed.*"

[293] Ginsburg and Gorman, *Ginsburg and Gorman's Copyright Law (Concepts and Insights Series)*, 26.

[294] 17 U.S. Code § 102; Ginsburg and Gorman, *Ginsburg and Gorman's Copyright Law (Concepts and Insights Series)*, 26.

[295] House Report No. 94-1476 on 17 U.S. Code § 102. "*The second sentence of section 102 lists seven broad categories which the concept of "works of authorship" is said to "include". The use of the word "include," as defined in section 101, makes clear that the listing is "illustrative and not limitative," and that the seven categories do not necessarily exhaust the scope of "original works of authorship" that the bill is intended to protect. Rather, the list sets out the general area of copyrightable subject matter, but with sufficient flexibility to free the courts from rigid or outmoded concepts of the scope of particular categories.*"

not exhaustive, copyright claims for any type of work are found within this framework since almost every original, creative, and fixed copyrighted work falls under these categories.[296]

Compilations and derivative works are also covered by the US legislation in Section 103, in line with signed international treaties.[297] The protection of these types of works is dependent on the qualities of an "original work of authorship" on their own since they are formed on the basis of pre-existing original works either by collection, adaptation or a similar practice.[298] The necessity for the "minimal amount of creativity" is a lot more prominent and significant for compilations and derivative works to determine whether they are eligible for copyright protection apart from the original works they were based on.[299]

C. The European Union Law

The EU jurisdiction does not have a sole and conclusive list of protected works within its respective legislations, however, the minimum standards of copyright protection regarding special types of works, especially the ones that emerged from new

[296] Ginsburg and Gorman, *Ginsburg and Gorman's Copyright Law (Concepts and Insights Series)*, 27.

[297] 17 U.S. Code § 103 - Subject matter of copyright: Compilations and derivative works. "*(a)The subject matter of copyright as specified by section 102 includes compilations and derivative works, but protection for a work employing preexisting material in which copyright subsists does not extend to any part of the work in which such material has been used unlawfully. (b)The copyright in a compilation or derivative work extends only to the material contributed by the author of such work, as distinguished from the preexisting material employed in the work, and does not imply any exclusive right in the preexisting material. The copyright in such work is independent of, and does not affect or enlarge the scope, duration, ownership, or subsistence of, any copyright protection in the preexisting material.*"

[298] House Report No. 94-1476 on 17 U.S. Code § 103. "*A "compilation" results from a process of selecting, bringing together, organizing, and arranging previously existing material of all kinds, regardless of whether the individual items in the material have been or ever could have been subject to copyright. A "derivative work," on the other hand, requires a process of recasting, transforming, or adapting "one or more preexisting works"; the "preexisting work" must come within the general subject matter of copyright set forth in section 102, regardless of whether it is or was ever copyrighted.*"

[299] Ginsburg and Gorman, *Ginsburg and Gorman's Copyright Law (Concepts and Insights Series)*, 35-37.

technologies, have been attempted to put under a regulation through various directives. The EU being a signatory member of TRIPS, which refers to Berne Convention regarding the scope and definition of a copyrighted work, binds the EU with the requirements set by these international agreements.[300] The national courts in the Member States of the EU are required to operate within the EU regulations and directives, and ensure proper copyright protection.[301] A number of directives provide a framework for certain copyrighted works, along with the standards set by international agreements. An important guide for the scope of a copyrighted work is the "*Court of Justice of the European Union*" ("CJEU"), which determines the definition and criteria of a work through its landmark decisions. The rulings made by the CJEU attempts to clarify any ambiguities which leave national courts initially in the dark.[302]

One of the very first directives from the EU regarding the scope of a copyrighted work was the "Council Directive 91/250/EEC" dated May 14, 1991, regarding the protection of computer programs.[303] This directive was repealed by "Directive 2009/24/EC" dated April 23, 2009, which again deals with the legal protection of computer programs.[304] Article 1 of Directive 2009/24/EC places computer programs within the copyright framework by defining the subject and setting the standards for protection. According to the first paragraph of the provision, computer programs, along with the preparation materials, are protected as literary works in line with the Berne

[300] Rosenmeier, Szkalej, and Wolk, *EU Copyright Law: Subsistence, Exploitation and Protection of Rights*, 20-22.

[301] Rosenmeier, Szkalej, and Wolk, *EU Copyright Law: Subsistence, Exploitation and Protection of Rights*, 27.

[302] Rosenmeier, Szkalej, and Wolk, *EU Copyright Law: Subsistence, Exploitation and Protection of Rights*, 27; Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 18.

[303] Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs.

[304] Directive 2009/24/EC of the European Parliament and of the Council of 23 April 2009 on the legal protection of computer programs.

Convention.[305] The second paragraph of Article 1 is in regard to the form of expression of the computer programs and it is stated that no matter the form, computer programs are eligible for copyright protection. Following this clarification, any idea and principle behind the computer program, as well as the ideas behind the interface elements are left outside the scope of protection.[306] Lastly, third paragraph brings forward the sole criterion of "originality", and states that a computer program is eligible for protection if it is the creation of original intellectual efforts from its author.[307] Besides originality, the outstanding quality or aesthetics are in no case applicable criteria for the protection of computer programs as literary works.[308]

Another directive from the EU that clarifies the scope of work is the "Directive 96/9/EC" dated March 11, 1996, regarding the legal protection of databases.[309] This directive handles the protection of two kinds of databases; copyright protection for databases with the nature of original copyrighted works, and "*sui generis*" protection for databases created with a substantial investment whether qualitatively or quantitatively.[310] Article 1(2) of Directive 96/9/EC defines databases as "*a collection of independent works,*

[305] Directive 2009/24/EC Article 1(1) "*In accordance with the provisions of this Directive, Member States shall protect computer programs, by copyright, as literary works within the meaning of the Berne Convention for the Protection of Literary and Artistic Works. For the purposes of this Directive, the term 'computer programs' shall include their preparatory design material.*"

[306] Directive 2009/24/EC Article 1(2) "*Protection in accordance with this Directive shall apply to the expression in any form of a computer program. Ideas and principles which underlie any element of a computer program, including those which underlie its interfaces, are not protected by copyright under this Directive.*"

[307] Directive 2009/24/EC Article 1(3) "*A computer program shall be protected if it is original in the sense that it is the author's own intellectual creation. No other criteria shall be applied to determine its eligibility for protection.*"

[308] Directive 2009/24/EC Recital 8 "*In respect of the criteria to be applied in determining whether or not a computer program is an original work, no tests as to the qualitative or aesthetic merits of the program should be applied.*"; Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 16.

[309] Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases.

[310] P. Bernt Hugenholtz, "Directive 96/9/EC - on the Legal Protection of Databases (Database Directive)," in *Concise European Copyright Law*, ed. Thomas Dreier and P. Bernt Hugenholtz, 2nd ed. (Alphen aan den Rijn: Kluwer Law International B.V., 2016), 379.

data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means". According to this provision, databases can be in any form, including electronic collections of any kind of content. Furthermore, the computer programs utilized in the creation, arrangement or operation of databases are not covered and subject to protection under this directive.[311] Similar to Directive 2009/24/EC for computer programs, Directive 96/9/EC Article 3(1) sets the standard for copyright protection of databases as being the original intellectual creation of its author by means of selection or arrangement of contents while restricting the application of any other criteria.[312] Also, the second paragraph clarifies that copyright protection for databases themselves covered by Directive 96/9/EC does not extend to the contents within the databases.[313]

Regarding photographic works, "Directive 2006/116/EC"[314] dated December 12, 2006, regarding the protection term of copyright and certain related rights, set the criteria for copyright protection of photographs in Article 6 and opening Recital 16 as being original works of authorship without any other criteria, such as the quality of the work or the purpose, to be applied.[315]

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[311] Directive 96/9/EC Article 1(3) "*Protection under this Directive shall not apply to computer programs used in the making or operation of databases accessible by electronic means.*"

[312] Directive 96/9/EC Article 3(1) "*In accordance with this Directive, databases which, by reason of the selection or arrangement of their contents, constitute the author's own intellectual creation shall be protected as such by copyright. No other criteria shall be applied to determine their eligibility for that protection.*"; Directive 96/9/EC Recital 16 "*Whereas no criterion other than originality in the sense of the author's intellectual creation should be applied to determine the eligibility of the database for copyright protection, and in particular no aesthetic or qualitative criteria should be applied*."

[313] Directive 96/9/EC Article 3(2) "*The copyright protection of databases provided for by this Directive shall not extend to their contents and shall be without prejudice to any rights subsisting in those contents themselves.*"

[314] Directive 2006/116/EC of the European Parliament and of the Council of 12 December 2006 on the term of protection of copyright and certain related rights.

[315] Directive 2006/116/EC Article 6 "*Photographs which are original in the sense that they are the author's own intellectual creation shall be protected in accordance with Article 1. No other criteria shall be applied to determine their eligibility for protection. Member States may provide for the protection of other photographs.*"; Directive 2006/116/EC Recital 16 "*The protection of photographs in the Member States is the subject of varying regimes. A photographic work within the meaning of the Berne Convention*

The criteria for copyright eligible works in the EU are evidently in line with the standards of Berne Convention. Over the years, the CJEU commented on various legal cases, clarifying the scope of a copyrighted work for a better harmonized approach from national practices EU-wide.[316] The requirement for copyright protection was explained in the previously mentioned directives, regarding computer programs, databases, and photographic works, as "author's own intellectual creation".[317] However, other than these specific types of works, there is not a given explanatory definition in the comprehensive "InfoSoc Directive", that is "Directive 2001/29/EC", for all the other works that are copyright eligible.[318]

A very significant landmark ruling from the CJEU is the "*Infopaq*" case.[319] In the *Infopaq* case and several cases that followed, the CJEU considered the criterion of being an "author's intellectual creation" applicable for all works in terms of originality assessment, despite it was not explicitly stated in Directive 2001/29/EC, unlike in Directive 2009/24/EC for computer programs, Directive 96/9/EC for original databases and Directive 2006/116/EC for original photographs.[320] Another turning point defined in the *Infopaq* decision was that even the small extracted parts that are reproduced from an original work of expression in the sense of "Infosoc Directive", if they still hold an

is to be considered original if it is the author's own intellectual creation reflecting his personality, no other criteria such as merit or purpose being taken into account. The protection of other photographs should be left to national law."

[316] Irini A. Stamatoudi, "Originality Under EU Copyright Law," in *Research Handbook on Copyright Law*, ed. Paul Torremans, 2nd ed. (Cheltenham, UK: Edward Elgar Publishing, 2017), 62; Kur, Dreier, and Luginbuehl, *European Intellectual Property Law: Text, Cases and Materials*, 338.

[317] Stamatoudi, "Originality Under EU Copyright Law," 59.

[318] Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society.

[319] Infopaq International A/S v Danske Dagblades Forening, CJEU, Case C-5/08, July 16, 2009, ECLI:EU:C:2009:465.

[320] Eleonora Rosati, *Originality in EU Copyright: Full Harmonization through Case Law* (Cheltenham, UK: Edward Elgar Publishing, 2013), 106; Stamatoudi, "Originality Under EU Copyright Law," 65; Kur, Dreier, and Luginbuehl, *European Intellectual Property Law: Text, Cases and Materials*, 338-339, 342-343.

original expression quality, could lead to copyright infringement.[321] The author may express a unique and creative work through how they choose to play with words, even if the end product is very short or small.[322]

The CJEU further gave explanations regarding the scope of a copyrighted work and its conditions in many of their later rulings. In "*Bezpečnostní softwarová asociace - Svaz softwarové ochrany v Ministerstvo kultury*" [323], the court distinguished the components of a computer program as copyrighted works and stated that "graphic user interface" ("GUI") elements are not within the scope of "form of expression" of a computer program as covered by the relevant directive regarding computer programs. Instead, GUI elements are put subject to copyright protection under the general scope of "InfoSoc Directive". [324] Furthermore, any technical necessities for GUI's are not considered while determining fulfillment of the originality criterion since they will be extremely limiting for the ways of expression.[325]

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[321] Caterina Sganga, "The Notion of 'Work' in EU Copyright Law After Levola Hengelo: One Answer Given, Three Question Marks Ahead," *European Intellectual Property Review, Forthcoming*, December 15, 2018, https://ssrn.com/abstract=3323011, 4-5; Stamatoudi, "Originality Under EU Copyright Law," 64-65; Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 18-20.

[322] Infopaq International A/S v Danske Dagblades Forening, CJEU, Case C-5/08, paragraph 45. "*Regarding the elements of such works covered by the protection, it should be observed that they consist of words which, considered in isolation, are not as such an intellectual creation of the author who employs them. It is only through the choice, sequence and combination of those words that the author may express his creativity in an original manner and achieve a result which is an intellectual creation.*"; Stamatoudi, "Originality Under EU Copyright Law," 66. "*…the EU originality criterion is a qualitative rather than a quantitative…*"

[323] Bezpečnostní softwarová asociace - Svaz softwarové ochrany v Ministerstvo kultury, CJEU, Case C-393/09, December 22, 2010, ECLI:EU:C:2010:816.

[324] Bezpečnostní softwarová asociace - Svaz softwarové ochrany v Ministerstvo kultury, CJEU, Case C-393/09. "*A graphic user interface is not a form of expression of a computer program within the meaning of Article 1(2) of Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs and cannot be protected by copyright as a computer program under that directive. Nevertheless, such an interface can be protected by copyright as a work by Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society if that interface is its author's own intellectual creation.*"

[325] Rosati, *Originality in EU Copyright: Full Harmonization through Case Law*, 122; Stamatoudi, "Originality Under EU Copyright Law," 77; Sganga, "The Notion of 'Work' in EU Copyright Law After Levola Hengelo: One Answer Given, Three Question Marks Ahead," 5; Bezpečnostní softwarová

A significant case regarding video games that should be mentioned is "*Nintendo v PC Box*"[326], in which the same principle was applied, and video games were excluded from the scope of protection in the directive regarding computer programs, rather, they were put subject to the "InfoSoc Directive". This decision pointed out that video games are in fact complex works with creative elements that are more than just "software".[327]

In the decision of "*Football Association Premier League*"[328], it was clarified that sporting events such as football matches cannot be protected as copyrighted works simply because the fixed rules of the game take away any space for creativity and originality a work must fundamentally have.[329] This landmark case sheds a light on a certain aspect of the originality criterion for copyrighted works which is the "author's creative freedom".[330]

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asociace - Svaz softwarové ochrany v Ministerstvo kultury, CJEU, Case C-393/09, paragraph 48. "*When making that assessment, the national court must take account, inter alia, of the specific arrangement or configuration of all the components which form part of the graphic user interface in order to determine which meet the criterion of originality. In that regard, that criterion cannot be met by components of the graphic user interface which are differentiated only by their technical function.*"

[326] Nintendo Co. Ltd and Others v PC Box Srl and 9Net Srl, CJEU, Case C-355/12, January 23, 2014, ECLI:EU:C:2014:25.

[327] Eleonora Rosati, "Relevance of EU Copyright Law to (Future) Non-EU Member States," in *Copyright and the Court of Justice of the European Union* (Oxford: Oxford University Press, 2019), 184; Sganga, "The Notion of 'Work' in EU Copyright Law After Levola Hengelo: One Answer Given, Three Question Marks Ahead," 5; Nintendo Co. Ltd and Others v PC Box Srl and 9Net Srl, CJEU, Case C-355/12, paragraph 23. "*That finding is not weakened by the fact that Directive 2009/24 constitutes a lex specialis in relation to Directive 2001/29 (see Case C-128/11 UsedSoft [2012] ECR, paragraph 56). In accordance with Article 1(1) thereof, the protection offered by Directive 2009/24 is limited to computer programs. As is apparent from the order for reference, videogames, such as those at issue in the main proceedings, constitute complex matter comprising not only a computer program but also graphic and sound elements, which, although encrypted in computer language, have a unique creative value which cannot be reduced to that encryption. In so far as the parts of a videogame, in this case, the graphic and sound elements, are part of its originality, they are protected, together with the entire work, by copyright in the context of the system established by Directive 2001/29.*"

[328] Football Association Premier League Ltd and Others v QC Leisure and Others, CJEU, Joined Cases C-403/08 and C-429/08, October 4, 2011, ECLI:EU:C:2011:631.

[329] Football Association Premier League Ltd and Others v QC Leisure and Others, CJEU, Joined Cases C-403/08 and C-429/08, paragraph 98. "*However, sporting events cannot be regarded as intellectual creations classifiable as works within the meaning of the Copyright Directive. That applies in particular to football matches, which are subject to rules of the game, leaving no room for creative freedom for the purposes of copyright.*"

[330] Stamatoudi, "Originality Under EU Copyright Law," 67.

In "*Painer*"[331], the copyright eligibility of a photograph was left for national courts to determine, noted with that a work as an intellectual creation, as well as portrait photographs, is only protectable as a copyrighted work if it is the "*intellectual creation of the author reflecting his personality and expressing his free and creative choices in the production*".[332] This decision emphasizes two significant aspects of originality: first one is the "personal touch" of the author with "free and creative choices", and the second one is that all works are equal when the originality evaluation is made on the "degree of creative freedom".[333]

In "*Levola*"[334], the court brought a new definition to the originality criterion, stating that an original work also must be "*identifiable with sufficient precision and objectivity, even though that expression is not necessarily in permanent form*", leaving the "taste" of a product outside the copyright protection because it lacks the possibility of a clear and precise form of expression and identification resulting from subjective human senses.[335]

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[331] Eva-Maria Painer v Standard VerlagsGmbH and Others, CJEU, Case C-145/10, December 1, 2011, ECLI:EU:C:2011:798.

[332] Eva-Maria Painer v Standard VerlagsGmbH and Others, CJEU, Case C-145/10. "*Article 6 of Council Directive 93/98/EEC of 29 October 1993 harmonising the term of protection of copyright and certain related rights must be interpreted as meaning that a portrait photograph can, under that provision, be protected by copyright if, which it is for the national court to determine in each case, such photograph is an intellectual creation of the author reflecting his personality and expressing his free and creative choices in the production of that photograph. Since it has been determined that the portrait photograph in question is a work, its protection is not inferior to that enjoyed by any other work, including other photographic works.*" See also Funke Medien NRW GmbH v Bundesrepublik Deutschland, CJEU, Case C-469/17, July 29, 2019, ECLI:EU:C:2019:623.

[333] Stamatoudi, "Originality Under EU Copyright Law," 70; Rosati, *Originality in EU Copyright: Full Harmonization through Case Law*, 152-153.

[334] Levola Hengelo BV v Smilde Foods BV, CJEU, Case C-310/17, November 13, 2018, ECLI:EU:C:2018:899.

[335] Levola Hengelo BV v Smilde Foods BV, CJEU, Case C-310/17, paragraph 40 & 43. "*Accordingly, for there to be a 'work' as referred to in Directive 2001/29, the subject matter protected by copyright must be expressed in a manner which makes it identifiable with sufficient precision and objectivity, even though that expression is not necessarily in permanent form. …The taste of a food product cannot, however, be pinned down with precision and objectivity. Unlike, for example, a literary, pictorial, cinematographic or musical work, which is a precise and objective form of expression, the taste of a food product will be identified essentially on the basis of taste sensations and experiences, which are subjective and variable since they depend, inter alia, on factors particular to the person tasting the product concerned, such as*

In "*Cofemel*"[336], the "aesthetic" value was again dismissed from the criteria for copyright protection for intellectual creations of authors since it is subjective for each person and contradicts with the "objective and precise" originality requirement.[337] In this case, the CJEU handled the objectivity and precision in both the identification of the subject matter that is work and the originality criterion, in line with *Levola* decision. Aesthetic value, through its subjective nature, remains simply unapplicable for copyrightability assessment.[338]

Overall, the EU sets the standards for copyright protection of works as two fundamental criteria: "originality" and "expression". The original expression that is the intellectual creation of an author must reflect the personality of the author, with free and creative choices embodied in the expression, and also must be identifiable precisely and objectively, without any further standards applied such as quality, aesthetic merit or purpose.

D. Turkish Law

The scope of a copyrighted work in Turkish law is determined through the legislations, mainly in the "*Turkish Law No. 5846 of December 5, 1951, on Intellectual and Artistic Works*" ("Law No. 5846"). The definition of work is provided in Article 1/B of Law No. 5846 as "*Any intellectual or artistic product bearing the characteristic of its*

age, food preferences and consumption habits, as well as on the environment or context in which the product is consumed."

[336] Cofemel - Sociedade de Vestuário SA v G-Star Raw CV, CJEU, Case C-683/17, September 12, 2019, ECLI:EU:C:2019:721.

[337] Koray Güven, "Eliminating 'Aesthetics' from Copyright Law: The Aftermath of *Cofemel*," *GRUR International* 71, no. 3 (August 30, 2021): 221; Kur, Dreier, and Luginbuehl, *European Intellectual Property Law: Text, Cases and Materials*, 343; Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 28.

[338] Güven, "Eliminating 'Aesthetics' from Copyright Law: The Aftermath of *Cofemel*," 222.

author, which is deemed a scientific and literary or musical work or work of fine arts or cinematographic work". According to the definition given in this provision, the criteria of a copyrighted work could be interpreted and dissected into two basic elements. First, it must be an original intellectual and artistic creation, and second, it must fall under the categories listed in the law.

Regarding the conditions for a copyrighted work, there are multiple approaches from the doctrine with slight differences, however, all approaches eventually overlap with each other.[339] One of the widely accepted standpoints in the doctrine that is also adopted by the Turkish Court of Cassation[340] is that a work has two fundamental requirements; the "objective requirement" of expression taking form under the categories listed in Law No. 5846, and the "subjective requirement" of originality in a way that holds the author's characteristics.[341] Another approach from *Suluk/Nal* divides the criteria into three; the form requirement of falling under the categories in Law No. 5846, the subjective requirement of originality, and the objective requirement of expression convenient for disposition and perceivable by third parties.[342] A more detailed approach made by *Öztan* gives a total of six conditions for a copyrighted work; the work must be created by a human, must have an intellectual and artistic composition, must be perceivable by third parties, must be one of the literary and scientific, musical, fine arts or cinematographic works, must bear the characteristics of its creator, and must be over a certain threshold of

[339] Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 30.

[340] Decision of the 4th Civil Chamber of the Turkish Court of Cassation dated 01.07.1977 and numbered E. 1976/5913, K. 1977/7617; Decision of the General Assembly of Civil Chambers of the Turkish Court of Cassation dated 20.02.2020 and numbered E. 2017/7, K. 2020/185.

[341] Ernst E. Hirsch, *Fikrî ve Sınaî Haklar* (Ankara: Ankara Basımevi, 1948), 130-131; Arslanlı, *Fikrî Hukuk Dersleri II: Fikir ve Sanat Eserleri*, 4-5; Ateş, *Fikrî Hukukta Eser*, 28-29; Erel, *Türk Fikir ve Sanat Hukuku*, 52-56; Levent Yavuz, *Fikir ve Sanat Eserleri Kanunu Yorumu*, ed. Levent Yavuz, Türkay Alıca, and Fethi Merdivan, 2nd ed., vol. 1 (Ankara: Seçkin, 2014), 63; Ramazan Uslu, *Türk Fikir ve Sanat Hukuku'nda "Eser" Kavramı* (Ankara: Seçkin, 2003), 34; Kılıçoğlu, *Sınai Haklarla Karşılaştırmalı Fikri Haklar*, 114-122.

[342] Suluk/Nal (Karasu), *Fikri Mülkiyet Hukuku*, 38.

completion.[343] Finally, the approach from *Tekinalp* and *Bozbel* enlightens a copyrighted work with four comprehensive conditions; the work should bear the characteristics of its creator, must be an expression that could reflect those characteristic and be perceived by the outside world in any way, must be within the scope of work categories listed in Law No. 5846, and last of all, must be essentially the product of intellectual efforts.[344] Despite the different approaches, the main elements regarding the criteria for a copyrighted work remain as the notions of originality and expression in Turkish law, in line with Berne Convention.

The four copyrighted work categories listed in Law No. 5846 are stated in the definition of work and explained with more depth in the following provisions. Article 2 of Law No. 5846 handles "literary and scientific" works, such as works that are expressed through writing or any language, including computer programs with their preparation stages so long as they are one step away from being a complete computer program; dramatic or theatrical works without dialogues such as dances, choreographies, or pantomimes; works with technical and scientific nature and without aesthetic merits such as photographs, maps, plans, projects, sketches, drawings, architectural projects and similar works.[345] The underlying ideas and principles for computer programs and their interface elements under this category are left outside the scope of protection in line with the EU practices.[346] Article 3 of Law No. 5846 handles the "musical works" regardless

[343] Öztan, *Fikir ve Sanat Eserleri Hukuku*, 82.

[344] Tekinalp, *Fikrî Mülkiyet Hukuku*, 103; Bozbel, *Fikri Mülkiyet Hukuku*, 27.

[345] Law No. 5846 Article 2(1) "*The following are literary and scientific works: 1. Works that are expressed by language and writing in any form, and computer programs expressed in any form together with their preparatory designs, provided that the same leads to a computer program at the next stage. 2. All kinds of dances, written choreographic works, pandomime and similar theatrical works without dialogue; 3. All kinds of technical and scientific photographic works, all kinds of maps, plans, projects, sketches, drawings, geographical or topographical models and similar works, all kinds of architectural and urban designs and projects, architectural models, industrial, environmental and theatrical designs and projects, lacking in aesthetic quality.*"

[346] Law No. 5846 Article 2(2) "*Ideas and principles on which any element of a computer program is based, including those on which its interfaces are based, are not deemed works.*"

of lyric component.[347] Article 4 is in regard to "works of fine arts" with clear examples provided such as paintings, sculptures and all kind of graphical works, while emphasizing the aesthetic value.[348] Article 5 defines the scope of "cinematographic works".[349] Following the main categories, lastly, Article 6 covers "adaptations" and "collections", which are created through previously existing original works and can take form as translations, databases or any type of compilations or derivative works.[350] While all these categories may look limitative, just as jurisdictions of the US and some states in the EU which adopt a categorization of works, all kinds of intellectual and artistic works somehow find their place within these categories.

One significance of these categories stated in Law No. 5846 is that these work categories are of *numerus clausus* nature, and every work looking for copyright protection must fall under this classification. While there are opinions in the doctrine which counts

[347] Law No. 5846 Article 3 "*Musical works are all types of musical compositions, with or without lyrics.*"

[348] Law No. 5846 Article 4 "*Works of fine arts are the following works, which have aesthetic value: 1. Oil paintings or water colors, all types of drawings, patterns, pastels, engravings, artistic scripts and gildings, works drawn or fixed on metal, stone, wood or other material by engraving, carving, ornamental inlay or similar methods, calligraphy, silk screen printing; 2. Sculptures, reliefs and carvings; 3. Architectural works; 4. Handicraft and minor works of art, miniatures and works of ornamentation, textiles, fashion designs; 5. Photographic works and slides; 6. Graphic works; 7. Cartoons; 8. All kinds of personifications. The use of sketches, drawings, models, designs and similar works as industrial designs does not affect their status as intellectual and artistic works.*"

[349] Law No. 5846 Article 5 "*Cinematographic works are works such as films of an artistic, scientific, educational or technical nature or films recording daily events or movies, that consist of a series of related moving images with or without sound and which, regardless of the material in which they are fixed, can be shown by the use of electronic or mechanical or similar devices.*"

[350] Law No. 5846 Article 6 "*Intellectual and artistic products created by benefiting from another work but that are not independent of such work are adaptations, of which the main types are listed below: 1. Translations; 2. Converting a work like novel, story, poem or play, from said types to another type; 3. Converting musical works, literary and scientific works or works of fine arts into films, or converting them into a form which is suitable for filming or for broadcasting by radio and television; 4. Musical arrangements and compositions; 5. Transforming works of fine arts from one form to another; 6. Making a collection of all or the same type of works of one author; 7. Making a collection of selected works according to a specific purpose and in accordance with a specific plan; 8. Making an unpublished work ready for publication as a result of scientific research and study (ordinary transcriptions and facsimiles that are not the result of scientific research and study are excluded); 9. Annotating, commenting or abridging the work of another person; 10. Adaptation, editing or any modification of a computer program; 11. Databases obtained by the selection and compilation of data and materials according to a specific purpose and a specific plan, which are in a form that can be read by a device or in any other form (This protection can not be extended to the data and materials contained in the database). Adaptations bearing the characteristic of the person making the adaptation, which are created without prejudice to the rights of the author of the original work, shall be deemed works under this Law.*"

the types of works included within the categories are of *numerus clausus* nature as well[351], the generally accepted opinion is that only the categories are counted as *numerus clausus*, and not the works listed under these categories in the law, since the works stated under the fixed list of categories are provided as examples which could be understood from the language of the legal text, and new types of works are eligible for copyright protection as long as they can be placed under one of these categories.[352] A work can be under multiple categories as well. For example, novels or poems are literary works, yet they can also be "art works".[353]

Turkish law does not principally require "fixation" on a "tangible medium" for the intellectual and artistic expressions for copyright protection like the EU law, and unlike the US law. As long as the idea found its way to the world in some form of perceivable expression, whether permanent or transitory, copyright protection is possible.[354] The exception to the fixation requirement shows itself in the nature of some kind of works. Works of fine arts such as paintings or sculptures, or cinematographic works have to be fixed in some tangible form of expression not because of a legal requirement but because of the very nature of these works.[355]

The requirement of "originality" which is worded as "to reflect the author's characteristics" in Law No. 5846 is maybe the most important criterion for a copyrighted work. Law No. 5846 did not exactly define the "characteristics of an author". The notion

[351] Kılıçoğlu, *Sınai Haklarla Karşılaştırmalı Fikri Haklar*, 122.

[352] Tekinalp, *Fikrî Mülkiyet Hukuku*, 114; Ateş, *Fikrî Hukukta Eser*, 61; Erel, *Türk Fikir ve Sanat Hukuku*, 55; Hirsch, *Fikrî ve Sınaî Haklar*, 141; Arslanlı, *Fikrî Hukuk Dersleri II: Fikir ve Sanat Eserleri*, 11-13; Bozbel, *Fikri Mülkiyet Hukuku*, 31; Uslu, *Türk Fikir ve Sanat Hukuku'nda "Eser" Kavramı*, 53; Tüysüz, *Fikir ve Sanat Eserleri Kanunu Çerçevesinde Fikri Haklar Üzerindeki Sözleşmeler*, 38.

[353] Yavuz, *Fikir ve Sanat Eserleri Kanunu Yorumu*, 64.

[354] Ateş, *Fikrî Hukukta Eser*, 58.

[355] Ateş, *Fikrî Hukukta Eser*, 59.

of "originality", or "individuality"[356] in this context, is interpreted in various ways in the doctrine.

Hirsch states that originality is what sets apart an intellectual work from any other work, and a work is only subject to copyright protection only if it is a creation that could not be created by just any person, meaning, a work that could be created by simply everyone has no special qualities worthy of protection as to the characteristics of its author.[357]

Arslanlı criticizes this approach, stating that looking for a "masterpiece" that cannot be created by just anyone will restrict the application of copyright protection, because masterpieces, in fact, happen very rarely.[358] According to *Arslanlı*, a work can hold various degrees of originality, and providing protection to only master works with the ultimate level of originality would result in the exclusion of all other works. Instead, the standard for originality should be determined according to the "*relative independence*" of works. A work can take inspiration from other works. What matters is the degree of independence from previously existing works in terms of originality, and as long as the work is not an exact copy, elements of originality, intellectual and creative efforts can be found in works considered to be protected.[359]

According to *Erel*, originality shows itself in the reflection of creativity and an independent intellectual effort.[360] The independence and creativity level of a work cannot

[356] Tekinalp, *Fikrî Mülkiyet Hukuku*, 104; İlhami Güneş, *Uygulamada Fikir ve Sanat Eserleri Hukuku* (Ankara: Seçkin, 2021), 62. "*Contrary to the understanding of originality in the Anglo-Saxon countries, a different concept of originality has been adopted in the laws of many Continental European countries such as France and Germany, including us (Turkey). Accordingly, the work must reflect the "personality and individuality" or "creative contribution" of the author. If the work does not bear the individual stamp of the author, the mere presence of talent and labor is not sufficient for copyright protection.*"

[357] Hirsch, *Hukukî Bakımdan Fikrî Sây: İkinci Cilt: Fikrî Haklar (Telif Hukuku)*, 12.

[358] Arslanlı, *Fikrî Hukuk Dersleri II: Fikir ve Sanat Eserleri*, 6.

[359] Arslanlı, *Fikrî Hukuk Dersleri II: Fikir ve Sanat Eserleri*, 7.

[360] Erel, *Türk Fikir ve Sanat Hukuku*, 53.

be determined in an absolute sense. Regardless, the independence of a work does not mean that no inspiration can be taken from previously existing works, and the threshold is the avoidance of an exact copy or a substantial plagiarism level.[361]

Güneş states that an original work should be born out of the author's creative personality and show those creative qualities.[362] According to *Suluk/Nal*, in addition to creative style and relative independence, the author's area of freedom plays a significant role as well, meaning that the purpose, nature, or technical limitations regarding an expression must provide sufficient freedom for the author.[363] *Uslu* interprets the criteria of originality as a certain degree of intellectual effort, which is also novel and able to reflect its author, and more or less distinctive.[364] *Ateş* states that originality cannot be interpreted as being "novel", and the expression style of the author is the determining factor for originality, while every type of work should be evaluated separately for the "unordinary" qualities.[365]

Tekinalp states that originality is found in the very style and delivery of the author. The artistic style is personal and subjective. It reflects the personality, creativity, and intellectual efforts of the author; that is the actual stamp of the author.[366] Originality becomes present in both the form and contents of the expression.[367] The level of originality should be interpreted in a general sense, since each type of work can show different levels of originality. Whether a work is original enough for copyright protection should be determined by experts before a court of law.[368] Overall, originality is being

[361] Erel, *Türk Fikir ve Sanat Hukuku*, 52.

[362] Güneş, *Uygulamada Fikir ve Sanat Eserleri Hukuku*, 62.

[363] Suluk/Nal (Karasu), *Fikri Mülkiyet Hukuku*, 40-41.

[364] Uslu, *Türk Fikir ve Sanat Hukuku'nda "Eser" Kavramı*, 50.

[365] Ateş, *Fikrî Hukukta Eser*, 74-80.

[366] Tekinalp, *Fikrî Mülkiyet Hukuku*, 105.

[367] Tekinalp, *Fikrî Mülkiyet Hukuku*, 108.

[368] Tekinalp, *Fikrî Mülkiyet Hukuku*, 106.

"unordinary".[369] The Turkish Court of Cassation also adopts this approach in some of their rulings from time to time and looks for works past the point of ordinary which reflect a certain level of creativity.[370]

When it comes to video games, Turkish law falls short to provide a textbook protection for video games as entire works. Video games are not explicitly stated under any of the work categories within the scope of Law No. 5846. The closest category for video games to be put under is considered as the category of "cinematographic works" according to various opinions in the doctrine[371], while some consider them as "multimedia works"[372] despite the lack of such category within the Turkish law with the strict *numerus clausus* principle regarding classification. The courts of law had different opinions regarding the classification of video games over the years. At some point in the early years of recognition of computer programs as literary works, the Turkish Council of State ruled for video games to be classified as cinematographic works subject to "*Turkish Law No. 3257 of January 23, 1986, on Cinema, Video and Music Works*" ("Law No. 3257") which is no longer in force[373], in line with the generally accepted classification in the doctrine. However, a recent ruling from the Turkish Court of Cassation showed a different

[369] Tekinalp, *Fikrî Mülkiyet Hukuku*, 107.

[370] Decision of the 11th Civil Chamber of the Turkish Court of Cassation dated 13.03.2007 and numbered E. 2006/934, K. 2007/4555. "*However, "originality" necessitates being not ordinary and creativity, provided that it has a certain level.*"; See also Decision of the 11th Civil Chamber of the Turkish Court of Cassation dated 09.05.2017 and numbered E. 2015/12923, K. 2017/2724; Decision of the 11th Civil Chamber of the Turkish Court of Cassation dated 01.11.2017 and numbered E. 2016/3508, K. 2017/5950.

[371] Tekinalp, *Fikrî Mülkiyet Hukuku*, 127; Ateş, *Fikrî Hukukta Eser*, 163; Kılıç, *Bilgisayar Oyunlarının Eser Niteliği,* 161; Suluk/Nal (Karasu), *Fikri Mülkiyet Hukuku*, 67; Güneş, *Uygulamada Fikir ve Sanat Eserleri Hukuku*, 84.

[372] Tekinalp, *Fikrî Mülkiyet Hukuku*, 132; Ateş, *Fikrî Hukukta Eser*, 163; Kılıç, *Bilgisayar Oyunlarının Eser Niteliği,* 120; Aksu, *Bilgisayar Programlarının Fikrî Mülkiyet Hukukunda Korunması*, 134.

[373] Decision of the 10th Chamber of the Turkish Council of State dated 27.04.1994 and numbered E. 1992/4550, K. 1994/1856. "*As a result, from the computer programs in the nature of scientific and literary works within the scope of Article 2/1 of the Law No. 5846 on Intellectual and Artistic Works; computer games that contain a set of commands that enable the computer to reproduce moving and sound images within a certain mise-en-scène or scenario frame; are within the scope of Law No. 3257 on Cinema, Video and Music Works as expressions recorded on cassettes, discs and similar moving image and sound carriers or transmitters.*"

opinion that considers video games as computer programs[374], which in our opinion, is a questionable approach considering the complex nature of video games that puts them on a different level than mere computer programs. This matter will be examined in detail in the next chapter of our study under the holistic protection of video games as cinematographic and audiovisual works.

[374] Decision of the General Assembly of Criminal Chambers of the Turkish Court of Cassation dated 09.06.2018 and numbered E. 2017/642 K. 2018/295. "*It is necessary to accept that computer games, which have the characteristics of a mixed work in terms of many elements they contain, will be subject to the protection provisions regarding computer programs, since they are software-based, in other words, they are built on a computer software that has the characteristics of a computer program.*"

§ CHAPTER III

FINDING A PLACE FOR VIDEO GAMES IN COPYRIGHT LAW

I. VIDEO GAME ELEMENTS AS TYPES OF COPYRIGHTED WORKS

As mentioned before in the previous chapters, video games are complex works of authorship, consisting of complicated development stages with multiple independent works brought together. There are different methods of protection applied for video games depending on the legal perspectives of different jurisdictions. Some jurisdictions with a "unitary approach" provide protection to the entirety of video games as a single work as multimedia works, audiovisual works or, despite being an insufficient classification we do not support, sometimes as computer programs. Another approach widely seen in various jurisdictions is the "distributive approach" that covers the copyright protection of video games through the separation of significant standalone elements in accordance with their nature as works, such as literary, graphical, musical, or cinematographic works.[375]

In this section, we will examine the separate video game elements that could be placed under various copyrighted work categories based on their nature and qualities. Copyright protection is for "literary and artistic" works in a general sense, as inclusively categorized by Article 2 of Berne Convention. However, the categories for protected works can be determined differently for every jurisdiction. The EU directives do not

[375] Ramos et al., *The Legal Status of Video Games: Comparative Analysis in National Approaches*, 10-11; Tito Rendas, "*Lex Specialis(sima)*: Videogames and Technological Protection Measures in EU Copyright Law," *European Intellectual Property Review* 37, no. 1 (2015), https://ssrn.com/abstract=2456273, 5.

categorize works, but rather refer to "literary or artistic work within the meaning of Article 2" classification of Berne Convention.[376] The US legislation breaks down the subject matter of works into eight categories, while Turkish law does the same into four main categories. Since categorization of copyrighted works widely vary depending on the jurisdiction, we will take inspiration from the international copyright principles, the US law, the EU law, and Turkish law all together, and try to examine the relevant subjects in the most comprehensive way possible.

A. Video Game Elements as Literary and Scientific Works

One of the categories can be stated as literary and scientific works. The general meaning given for literary works usually include works that are expressed in some form of writing, such as the examples of "books, pamphlets and other writings" counted in Berne Convention[377], or simply "writings" in UCC.[378] The US copyright legislation defines literary works as works that are "*expressed in words, numbers, or other verbal or numerical symbols or indicia"* regardless of the form of expression, and with the exclusion of audiovisual works.[379] Turkish law, on the other hand, keeps the category's definition quite wide and includes all works in writing in any type of language along with computer programs, dramatic and theatrical works like dances and choreographies, and

[376] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 188; Rosenmeier, Szkalej, and Wolk, *EU Copyright Law: Subsistence, Exploitation and Protection of Rights*, 71.

[377] Berne Convention Article 2(1).

[378] UCC Article 1.

[379] 17 U.S. Code § 101 "*"Literary works" are works, other than audiovisual works, expressed in words, numbers, or other verbal or numerical symbols or indicia, regardless of the nature of the material objects, such as books, periodicals, manuscripts, phonorecords, film, tapes, disks, or cards, in which they are embodied.*"

works of scientific nature without aesthetic merits such as technical drawings of maps and projects.[380]

1. Computer Programs

Video games have multiple elements that fall under the category of literary and scientific works. The most important and prominent element is of course the "computer program" that makes a video game possible. The works that make the entirety of a video game are not dependent on the computer program element, however, there would not be a video game without the underlying computer code that brings every other element together.

One significant matter we should quickly address again is that computer programs are in fact protected as literary works in the US, the EU and Turkey, in line with international agreements. Copyright protection of computer programs as literary works is ensured within legal regulations.[381] The computer program element of the video game is subject to copyright protection as long as it fulfills the requirements of copyright eligibility as previously explained in detail in Chapter II regarding the scope of a copyrighted work of our study.

Computer programs are essentially written works of "codes" expressed with a certain programming language.[382] The general principle is that the underlying ideas and principles in a computer program are not protected in any way, only the expression itself is subject to copyright protection, including the preparation stages that would eventually

[380] Law No. 5846 Article 2.

[381] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 209.

[382] Dalyan, *Bilgisayar Programlarının Fikrî Hukukta Korunması*, 74.

lead to a "program" on the next stage of development. The protected expression for a computer program is the "source code" or "object code" in that matter.[383]

The computer program element in video games is protected through copyright without hesitation. This protection has reached the extent of classification of video games as a computer program altogether by the courts of law on certain cases[384], and most courts of law have recognized the computer program of a video game as one of the protectable elements along with other types of works such as audiovisual or cinematographic works.[385] Nevertheless, the computer program protection has always been accepted for video games.

An interesting issue regarding the computer code element of video games has surfaced with "reverse engineering". Reverse engineering is "*the reproduction of a copyrighted computer program as an intermediate step in discovering the program's unprotected interface specifications in order to achieve interoperability with other programs or computers*".[386] The process happens through the decompilation of the object code in order to access the source code.[387] Reverse engineering may in fact lead to copyright infringement, unless it is for research purposes.

The exceptions for reverse engineering are defined in Articles 5 and 6 of the EU Directive 2009/24/EC for computer programs, also adopted almost exactly in Article 38 of Turkish Law No. 5846. Studying the program with the purpose of understanding the

[383] TRIPS Article 10(1); WCT Article 4; Directive 2009/24/EC Article 1; Rosati, *Originality in EU Copyright: Full Harmonization through Case Law*, 121.

[384] Decision of the General Assembly of Criminal Chambers of the Turkish Court of Cassation dated 09.06.2018 and numbered E. 2017/642 K. 2018/295. This court decision is examined in detail in the following section of "Video Games as Cinematographic and Audiovisual Works" under "Turkish Law" sub-chapter.

[385] Nintendo Co. Ltd and Others v PC Box Srl and 9Net Srl, CJEU, Case C-355/12; Williams Electronics, Inc. v. Artic International, Inc., Appellant, 685 F.2d 870 (3d Cir. 1982).

[386] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 373.

[387] Dalyan, *Bilgisayar Programlarının Fikrî Hukukta Korunması*, 177.

underlying ideas and principles is allowed, since ideas and principles are not protected elements.[388] Also, if there are no available information that could be acquired by other means, testing the "*interoperability of an independently created computer program with other programs*" is an excused act for decompilation.[389]

The US jurisdiction does not include provisions regarding reverse engineering, however, covers it with its fair use practices, since limitations and exceptions are covered and examined under fair use in the US law.[390] An example case was "*Sega Enterprises Ltd. v. Accolade, Inc.*", where the court ruled for fair use exception regarding the defendant's act of reverse engineering of one of the plaintiff's video games in order to determine if their own video games were compatible with the plaintiff's consoles.[391]

Recently a team of developers and fans completely reversed engineered the code of one of Nintendo's classic video games, "*The Legend of Zelda: Ocarina of Time*"[392], into a human-readable form. Eventually a "PC port" of the game was created from scratch, using only publicly available sources, and allegedly avoiding any protected intellectual

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[388] Directive 2009/24/EC Article 5(3) "*The person having a right to use a copy of a computer program shall be entitled, without the authorisation of the rightholder, to observe, study or test the functioning of the program in order to determine the ideas and principles which underlie any element of the program if he does so while performing any of the acts of loading, displaying, running, transmitting or storing the program which he is entitled to do.*"

[389] Directive 2009/24/EC Article 6(1) "*The authorisation of the rightholder shall not be required where reproduction of the code and translation of its form within the meaning of points (a) and (b) of Article 4(1) are indispensable to obtain the information necessary to achieve the interoperability of an independently created computer program with other programs, provided that the following conditions are met: (a) those acts are performed by the licensee or by another person having a right to use a copy of a program, or on their behalf by a person authorised to do so; (b) the information necessary to achieve interoperability has not previously been readily available to the persons referred to in point (a); and (c) those acts are confined to the parts of the original program which are necessary in order to achieve interoperability.*"

[390] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 374.

[391] Sega Enterprises Ltd. v. Accolade, Inc., 977 F.2d 1510, 1527-1528 (9th Cir. 1992). "*We conclude that where disassembly is the only way to gain access to the ideas and functional elements embodied in a copyrighted computer program and where there is a legitimate reason for seeking such access, disassembly is a fair use of the copyrighted work, as a matter of law. Our conclusion does not, of course, insulate Accolade from a claim of copyright infringement with respect to its finished products. Sega has reserved the right to raise such a claim, and it may do so on remand.*"

[392] "The Legend of Zelda: Ocarina of Time" is an action-adventure game developed and published by Nintendo for the Nintendo 64 console, first released in Japan on November 21, 1998.

property assets of Nintendo.[393] The legal standing of this project is not very safe for a number of reasons. Deconstruction of the game was restricted on the license terms included in the physical copy of the game, and the developers not only decompiled the code but also made it public.[394]

Eventually, the act of reverse engineering being excused has to fall under the very limitations set by law. However, creating a different but at the same time an identical version of a video game, even if it is made from scratch, and distributing it, while also exceeding the purposes of research, would create problems because of the very basis of fundamental codes that should not have been decompiled in the first place.

2. Written Works in Any Language

Other than the computer program element of video games, there are many other elements as literary and scientific works that could be subject to protection. Another cluster of other types of literary works may be exemplified as books, poems, or any type of original writing as an intellectual work. The scenario or script of a video game, dialogues, subtitles, pieces of lore, letters, codex, and all kinds of original written pieces and inscriptions would be subject to copyright protection as long as they reflect the original work of authorship qualities.[395]

[393] Jacob W. Schneider, "Decompiling Zelda: An Introduction to Understanding Machine Code and Decompiling," Mondaq (Holland & Knight, March 17, 2022), accessed March 19, 2022, https://www.mondaq.com/unitedstates/copyright/1172978/decompiling-zelda-an-introduction-to-understanding-machine-code-and-decompiling.

[394] Schneider, "Decompiling Zelda: An Introduction to Understanding Machine Code and Decompiling."

[395] Julian Simon Stein, "The Legal Nature of Video Games - Adapting Copyright Law to Multimedia," *Press Start* 2, no. 1 (2015): 46; Ataşlar and Ülgen, *Türk Hukukunda Dijital Oyunların Korunması*, 32-33.

Many video games in the new digital era have extensive game worlds with immersive lore, ready to be discovered by players. The games in "*Dragon Age*"[396] series for example, are basically pieces of fantasy literature in the form of video games, offering the players literary pieces all over the game world to be found and read, explaining the historical setting, politics, races, religions, fantastical creatures, and the nature of science and magic in great detail.

Another clear example could be given from the classic adventure game "*Grim Fandango*". One of the puzzle sequences requires the player's character "Manuel 'Manny' Calavera" to recite a poem from the given dialogue options, while also showcasing a few performances of the NPC "Olivia Ofrenda" reciting some striking poems of her own.

Figure 7. Olivia Ofrenda reciting a poem on the stage of Blue Casket, in "Grim Fandango" Remastered (2015). Screenshot taken by the author.

"*With bony hands I hold my partner, on soulless feet we cross the floor, the music stops as if to answer, an empty knocking at the door. It seems his skin was sweet as mango, when last I held him to my breast, but now, we dance this grim fandango, and will four years until we rest.*"

[396] "Dragon Age" series is a media franchise centered on fantasy role-playing video games created and developed by BioWare. The stories in the games take place on the fictional continent of Thedas, while following the experiences in the lives of many characters. The first game in the series was "*Dragon Age: Origins*" (2009).

3. Literary Works of Scientific Nature

Literary works are also inclusive of scientific and technical creations such as maps, plans, sketches, drawings, and even architectural projects. The determining factor for the copyright eligibility of these types of works is the degree of originality and creativity present in the expression apart from the mechanical and utilitarian aspects.[397] These types of written literary works are mostly expressed "visually" beside a certain language.[398]

Berne Convention lists the examples for these works like "maps, plans, sketches" in the final section of Article 2, and some countries consider these works under different categories as "visual" works. The US, for example, counts maps, charts, technical and architectural drawings under "Pictorial, graphic, and sculptural works" which also covers works of fine arts.[399] In terms of such works with scientific and technical nature, similar elements found in video games are subject to copyright protection as well. In case these works have certain "artistic" qualities, it is even possible to provide protection as works of fine arts under Law No. 5846.[400]

Video games may also include maps or plans as literary works. Another significant point that must be mentioned is that the "architectural" designs or projects do not cover the actual physical architectural works, and the subject matter for protection is

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[397] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 197.

[398] Tekinalp, *Fikrî Mülkiyet Hukuku*, 123; Ateş, *Fikrî Hukukta Eser*, 186.

[399] 17 U.S. Code § 101 "*"Pictorial, graphic, and sculptural works" include two-dimensional and three-dimensional works of fine, graphic, and applied art, photographs, prints and art reproductions, maps, globes, charts, diagrams, models, and technical drawings, including architectural plans. Such works shall include works of artistic craftsmanship insofar as their form but not their mechanical or utilitarian aspects are concerned; the design of a useful article, as defined in this section, shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.*"

[400] Tekinalp, *Fikrî Mülkiyet Hukuku*, 123; Ateş, *Fikrî Hukukta Eser*, 186; Erel, *Türk Fikir ve Sanat Hukuku*, 61.

the written or drawn plans of architectural works.[401] These technical designs may very well take form within the video game as they are modeled in detail, and they could still be considered as architectural designs or projects provided in some form of expression.[402]

4. Dramatic or Theatrical Works

Another cluster of literary works is the dramatic or theatrical works without dialogues such as dances, choreographies, pantomimes. These works are protected in separate categories in some jurisdictions; however, the qualities of these works essentially remain the same no matter the literal classification made.[403] These works are in fact literary "written" works; the language used in the form of expression is the "body language".[404]

The protection is not regarding the performances of these works, but rather the systematic literary way of expressions.[405] *Tekinalp* defines the condition for dances to be protected works as the "systematically repeatable array" that is not improvisations.[406] These forms of expression may be found in video games as well. In fact, popular "*Just Dance*"[407] game series includes a vast number of animated choreographic works and dances that can be played and performed by players on repeating systematic movements.

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[401] Erel, *Türk Fikir ve Sanat Hukuku*, 71.

[402] Yılmaz, "FSEK Bakımından Video Oyunlarının Eser Niteliği," 82; *Yılmaz* gives the fine example of "Kaer Morhen", the old fortress where witchers of the School of the Wolf used to be trained in *The Witcher* game series, for an architectural project expressed in a video game.

[403] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 202.

[404] Ateş, *Fikrî Hukukta Eser*, 164; Yavuz, *Fikir ve Sanat Eserleri Kanunu Yorumu*, 111.

[405] Tekinalp, *Fikrî Mülkiyet Hukuku*, 120; Ateş, *Fikrî Hukukta Eser*, 170.

[406] Tekinalp, *Fikrî Mülkiyet Hukuku*, 120.

[407] "Just Dance" is a rhythm game series developed and published by Ubisoft. The first game was released on November 17, 2009.

B. Video Game Elements as Musical Works and Sound Recordings

Musical works are covered quite clearly with the description given in Berne Convention as "musical compositions with or without words".[408] Turkish Law No. 5846 also protects musical works in the similar scope as "*all types of musical compositions, with or without lyrics*".[409] The US law protection shows again the same approach by defining the scope as "*musical works, including any accompanying words*".[410] The protected expression is what can be heard by the ears as the music itself, and not the written notes or musical scores or the performance.[411] Musical works are comprised of all kinds of pieces such as songs, hymns, jingles, marches, or symphonies. An outdated approach was to protect musical works with identifiable elements of melody, harmony and rhythm, however modern legal approach is now to protect musical works regardless of "qualitative distinctions" and embracing "any expression of sound".[412]

Video games have their own musical work elements inside. There is no debate on the original soundtracks composed as character, location or battle themes, which are all musical works subject to copyright protection. The main theme songs are the signatures of video games, as well as the menu music, specially assigned character themes, battle themes when the action is about to start, locational themes setting the ambience in the moment the players set foot in different cities, towns, or entering forests or indoor places like taverns or houses, with or without a lyrical component. These musical pieces are eligible for protection as musical works, as long as they meet the criteria of copyright

[408] Berne Convention Article 2(1).

[409] Law No. 5846 Article 3.

[410] 17 U.S. Code § 102.

[411] Erel, *Türk Fikir ve Sanat Hukuku*, 63; Tekinalp, *Fikrî Mülkiyet Hukuku*, 123.

[412] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 198; Zehra Özkan, "Karşılaştırmalı Hukukta Müzik Eserlerinin Dijital İletimi" (Master's thesis, Ankara University, 2007), 21-22.

protection. The source of the sounds in the music is irrelevant; it could be sourced from human vocal cords, instruments or even be electronically produced.[413]

The element of certain sound effects, however, is on a different level when it comes to copyright protection. There are certainly unique sound effects in video games, such as the sounds from the weapons when they are equipped, fired, and reloaded; the sounds the players hear while interacting with certain items; achievement and completion announcements; or as a specific example, *Mario*'s signature jumping sounds. There are also very generic sound effects such as environmental sounds like rain, wind; animal sounds like singing birds; or footsteps. The copyright protection of these types of "natural" sounds depends on the creativity and originality of the expression itself, and how distinctive they are, which is very difficult to come by in most cases.[414] If they show originality and creativity sufficient to meet the criteria, it is of course possible to put them under copyright protection. If copyrighted work protection is not an option however, it would be possible to at least try to recognize them as "sound recordings". There is also the element of "dialogues" in video games where actual performers and voice actors give voices to characters with voice-overs and bring them to life.

Sound recordings are generally given protection under neighboring and related rights in the EU[415] and in Turkish jurisdiction.[416] The US jurisdiction has a different approach and sound recordings are listed as a type of copyrighted work under the

[413] Tekinalp, *Fikrî Mülkiyet Hukuku*, 124.

[414] Ataşlar and Ülgen, *Türk Hukukunda Dijital Oyunların Korunması*, 32.

[415] Directive 2001/29/EC Article 2 "*Member States shall provide for the exclusive right to authorise or prohibit direct or indirect, temporary or permanent reproduction by any means and in any form, in whole or in part: (a) for authors, of their works; (b) for performers, of fixations of their performances; (c) for phonogram producers, of their phonograms…*"

[416] Law No. 5846 Article 84 "*Any person who fixes signs, images or sounds on a device permitting the transmission of such elements or who lawfully reproduces or distributes the same for commercial purposes, may prohibit the reproduction or distribution of the same signs, images or sounds by another person using the same means.*"

categories of works of authorship.[417] WIPO Performances and Phonograms Treaty ("WPPT") provides a definition for phonogram as the fixation of sounds.[418] While WPPT states that the scope is for sound recordings "other than in the form of a fixation incorporated in a cinematographic or other audiovisual work", it later notes that rights regarding the phonogram's content is not affected by "their incorporation into a cinematographic or other audiovisual work."[419]

The issue of protection regarding sound effects or "sound recordings" in a video game is a matter of how the protection is granted in each jurisdiction. Even if they are not protectable as musical works, it is likely that they could be protected as sound recordings or not be protected with copyright at all.[420] The character voice-over performances seen in dialogues and narration also directly show themselves as sound recordings and are subject to performer's rights protection.

C. Video Game Elements as Works of Fine Arts and Visual Arts

Works of fine arts and visual arts consist of a wide selection of copyrighted works. These are the real "artistic" works of authorship. Berne Convention gives examples for works of fine arts like "works of drawing, painting, architecture, sculpture, engraving and lithography" along with photographic works, illustrations, applied art and even 3D

[417] 17 U.S. Code § 102; 17 U.S. Code § 101 "*"Sound recordings" are works that result from the fixation of a series of musical, spoken, or other sounds, but not including the sounds accompanying a motion picture or other audiovisual work, regardless of the nature of the material objects, such as disks, tapes, or other phonorecords, in which they are embodied.*"

[418] WPPT Article 2(b) "*"phonogram" means the fixation of the sounds of a performance or of other sounds, or of a representation of sounds, other than in the form of a fixation incorporated in a cinematographic or other audiovisual work.*"

[419] WPPT Annotation 2 "*It is understood that the definition of phonogram provided in Article 2(b) does not suggest that rights in the phonogram are in any way affected through their incorporation into a cinematographic or other audiovisual work.*"

[420] Ateş, *Fikrî Hukukta Eser*, 204.

applications of architectural nature.[421] Turkish legislation provides a comprehensive scope for works of fine arts in Law No. 5846 Article 4; from paintings, sculptures, handicraft works of art, ornamentations; to photographic and graphic works, cartoons, characters, architectural works and industrial designs.[422] The US law covers works of fine arts and visual arts under the category of "pictorial, graphic, and sculptural works" and gives "architectural works" a separate category.[423]

1. Aesthetic Value

An important distinction comes with the "aesthetic" quality regarding works of fine arts. Turkish Law No. 5846 explicitly states that works of fine arts are works "which have aesthetic value".[424] The EU approaches all literary and artistic works in a harmonized criteria to be applied, and "aesthetic" merit is not one of those criteria as recently stated in "*Cofemel*" decision.[425] According to this ruling, the Court stated that aesthetic effect in a design would not lead to copyright protection on its own.[426] As

[421] Berne Convention Article 2(1).

[422] Law No. 5846 Article 4 "*Works of fine arts are the following works, which have aesthetic value: 1. Oil paintings or water colors, all types of drawings, patterns, pastels, engravings, artistic scripts and gildings, works drawn or fixed on metal, stone, wood or other material by engraving, carving, ornamental inlay or similar methods, calligraphy, silk screen printing; 2. Sculptures, reliefs and carvings; 3. Architectural works; 4. Handicraft and minor works of art, miniatures and works of ornamentation, textiles, fashion designs; 5. Photographic works and slides; 6. Graphic works; 7. Cartoons; 8. All kinds of personifications. The use of sketches, drawings, models, designs and similar works as industrial designs does not affect their status as intellectual and artistic works.*"

[423] 17 U.S. Code § 102.

[424] Law No. 5846 Article 4.

[425] Cofemel - Sociedade de Vestuário SA v G-Star Raw CV, CJEU, Case C-683/17, September 12, 2019, ECLI:EU:C:2019:721. "*Article 2(a) of Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society must be interpreted as precluding national legislation from conferring protection, under copyright, to designs such as the clothing designs at issue in the main proceedings, on the ground that, over and above their practical purpose, they generate a specific, aesthetically significant visual effect.*"

[426] Güven, "Eliminating 'Aesthetics' from Copyright Law: The Aftermath of *Cofemel*," 221-222; Kur, Dreier, and Luginbuehl, *European Intellectual Property Law: Text, Cases and Materials*, 408; Cofemel - Sociedade de Vestuário SA v G-Star Raw CV, CJEU, Case C-683/17, paragraph 55. "*It follows that the circumstance that designs such as the clothing designs at issue in the main proceedings generate, over*

explained in the previous chapter regarding the scope of a copyrighted work in the EU; the EU framework protects the original expression as the intellectual creation of an author that reflects the personality of the author with their free creative choices, and the expression clearly must be identifiable precisely and objectively, without any further standards applied such as quality, "*aesthetic merit*" or purpose.[427]

The US law also does not specifically look for aesthetic value in works of authorship in general.[428] In "*Bleistein v. Donaldson Lithographing Co.*", the court indicated that definite "aesthetic" evaluation is not up to the courts of law.[429] In this legal case brought before the court of law, it was argued that the judges should avoid aesthetic judgments as to defining "what fine arts are" and the only task is to determine if illustrations as the subject matter of the related case are "pictorial works" within the meaning of law.[430] However, it must be also noted that *Bleistein* ruling does not indicate that judges should refrain from making aesthetic evaluations in an absolute sense; rather only "*outside of the narrowest and most obvious limits*".[431] Overall, the US courts approach aesthetic value as a subjective notion that should not be the determining factor for a work's copyright eligibility.

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and above their practical purpose, a specific and aesthetically significant visual effect is not such as to justify those designs being classified as 'works' within the meaning of Directive 2001/29."

[427] Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 116.

[428] House Report No. 94-1476 on 17 U.S. Code § 102. "*Correspondingly, the definition of "pictorial, graphic, and sculptural works" carries with it no implied criterion of artistic taste, aesthetic value, or intrinsic quality.*"

[429] Bleistein v. Donaldson Lithographing Co., 188 U.S. 239, 252 (1903). "*It would be a dangerous undertaking for persons trained only to the law to constitute themselves final judges of the worth of pictorial illustrations, outside of the narrowest and most obvious limits… Yet if they command the interest of any public, they have a commercial value - it would be bold to say that they have not an aesthetic and educational value - and the taste of any public is not to be treated with contempt.*"

[430] Robert Kirk Walker and Ben Depoorter, "Unavoidable Aesthetic Judgments in Copyright Law: A Community of Practice Standard," *Northwestern University Law Review* 109, no. 2 (2015): 352.

[431] 188 U.S. 239, 252 (1903).

Turkish law laying out the aesthetic merit requirement for works of fine arts is widely discussed by scholars. The term "aesthetic value" has different interpretations in the doctrine. *Tekinalp* provides the definition of aesthetic value from *Arseven* as "*unexampled, elegant, beautiful, conforming to the standards of rare beauty, eye-catching, admirable*".[432] This definition is criticized by *Ateş* and *Suluk/Nal* as they stated that perception of "beauty" is a subjective notion that changes from person to person, constantly evolves with time, and whether a work has aesthetic value should be evaluated on objective standards.[433] *Ateş* further explains that by "objective standards", the meaning given is the expertise on a specific type of work of fine arts that should be brought forward. For example, a photographer should not evaluate a painting or a graphical work as those are not by default their expert area.[434] Reducing aesthetic value to beauty would result in the exclusion of a great amount of works to be left without copyright protection.[435] According to *Yavuz* and *Suluk/Nal*, a work can be ugly and disgusting and can still have aesthetic value. Accordingly, works of fine arts should be "appealing to the eye in order to evoke aesthetic feelings".[436] *Ayiter* states that the context of aesthetic value should be understood as "aesthetic claim" rather than beauty.[437] According to *Erel*, aesthetic works of fine arts are distinguished with their "uniqueness".[438] *Kılıçoğlu* renders aesthetic beauty as "artistic value" in a work, which separates the aesthetic work from other unordinary and superficial works that could be created by anyone.[439] *Bozgeyik* points to

[432] Celâl Esad Arseven, *Sanat Ansiklopedisi* (İstanbul: Maarif Vekâleti, 1943), 202, quoted in Tekinalp, *Fikrî Mülkiyet Hukuku*, 126.

[433] Ateş, *Fikrî Hukukta Eser*, 219; Suluk/Nal (Karasu), *Fikri Mülkiyet Hukuku*, 62.

[434] Ateş, *Fikrî Hukukta Eser*, 220.

[435] Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 198.

[436] Yavuz, *Fikir ve Sanat Eserleri Kanunu Yorumu*, 137; Suluk/Nal (Karasu), *Fikri Mülkiyet Hukuku*, 62.

[437] Nûşin Ayiter, *Hukukta Fikir ve Sanat Ürünleri* (Ankara: Sevinç Matbaası, 1981), 55, quoted in Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 198.

[438] Erel, *Türk Fikir ve Sanat Hukuku*, 70.

[439] Kılıçoğlu, *Sınai Haklarla Karşılaştırmalı Fikri Haklar*, 131.

the author's own perception of beauty and states that "*a work that its author has specially shaped according to their own substantial beauty standards is a 'work of fine art' in the legal sense*".[440] *Öztan* states that "aesthetic value that is appealing to the eye" in works of fine arts is what brings those works past the point of ordinary, regardless of the balance between "aestethic aspect" and "creation purpose" of the author, and regardless of the level of aesthetic merit.[441] The general approach from the courts of law is that the determination of aesthetic value should be left to experts in the field for specific types of works of fine arts.[442]

2. Graphical Works and Characters

Next to the computer program element in video games, perhaps the visual elements are the most prominent works that should be considered for copyright protection. As mentioned above, photographic works, graphical works, characters, and cartoons are protected under works of fine arts or visual arts.[443] Ultimately, the video game experience is only complete through the display of graphics.

The protectable works of fine arts or visual arts that could be found in video games are the graphical interface designs such as the main menu and HUD overlays, the specific fonts used for texts, character designs, item designs, building designs, creatures, world and location specific maps that are fancy and artistic; basically, anything graphical that

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[440] Hayri Bozgeyik, "Fikir ve Sanat Eserlerinde Hususiyet," *Banka ve Ticaret Hukuku Dergisi* 25, no. 3 (September 2009): 208. "*Legal protection can only be provided with concrete and applicable measures.*"

[441] Öztan, *Fikir ve Sanat Eserleri Hukuku*, 134-135.

[442] Ateş, *Fikrî Hukukta Eser*, 220; Yavuz, *Fikir ve Sanat Eserleri Kanunu Yorumu*, 138; Decision of the 11th Civil Chamber of the Turkish Court of Cassation dated 13.11.2009 and numbered E. 2008/7336, K. 2009/11814.

[443] Law No. 5846 Article 4 "*Works of fine arts are the following works, which have aesthetic value: …5. Photographic works and slides; 6. Graphic works; 7. Cartoons; 8. All kinds of personifications…*"; 17 U.S. Code § 101 "*"Pictorial, graphic, and sculptural works" include two-dimensional and three-dimensional works of fine, graphic, and applied art…*"

meets the criteria of originality and creative expression as a work, with the addition of aesthetic quality for Turkish law of course.

It is also common to see video game characters created from the appearances of real people and celebrities, sometimes enhanced with motion capture performances. The video game characters based on real people should be created with the necessary permissions obtained from those people. If the portrayal is simply inspirational with no direct references to the real person, the character should be "sufficiently transformed" in order to avoid any right of publicity infringements.[444] As an example, the cast selection of "*Death Stranding*"[445] has gone beyond voice acting and the fictional characters in the game were modeled after the real-life appearances of famous actors and actresses who also gave their voices to their characters.

Figure 8. Danish actor Mads Mikkelsen portraying "Clifford 'Cliff' Unger" in "Death Stranding" (2019) developed by Kojima Productions.[446]

[444] Hart v. Electronic Arts, Inc., 717 F.3d 141, 165 (3rd Cir. 2013); Ross Dannenberg and Josh Davenport, "Top 10 Video Game Cases (US): How Video Game Litigation in the US Has Evolved since the Advent of Pong," *Interactive Entertainment Law Review* 1, no. 2 (2018): 98.

[445] "Death Stranding" is an action game developed by Kojima Productions and published by Sony Interactive Entertainment on November 8, 2019.

[446] "Clifford 'Cliff' Unger" (original), Julia Alexander, "Mads Mikkelsen Had No Idea What Death Stranding Was about after Kojima Described It," Polygon, February 28, 2017, https://www.polygon.com/2017/2/28/14761696/death-stranding-mads-mikkelsen-hideo-kojima.

The characters in a video game are protected as not only individual angles and poses they are presented in. Any type of representation the animated version allows and beyond is protected as well.[447] Copyright protection for characters has a greater extent "*against copies in postures, settings, and attitudes far removed from any of the author's original depictions*".[448] In "*DC Comics v. Towle*" case, the US court discussed whether "fictional characters" from comics or motion pictures are within the scope of copyright protection and to what extent.[449] Eventually, the real life replicas of "Batmobile" that was inspired from the *Batman* comics and motion pictures was found infringing the original "Batmobile" which was deemed eligible for copyright protection based on a three-step test used by the court regarding qualities, consistency and distinctiveness.[450] It is safe to say that the same approach will be applicable for fictional characters found in video games as well, since video games are considered under the same umbrella of audiovisual works by the US courts.[451]

The Turkish Court of Cassation also ruled for the copyright protection of a comic book character as a work of fine art. The said original character "*Kötü Kedi Şerafettin*" which is basically an evil "*Garfield*", was found eligible for copyright protection as a work of fine art, independent from the comic series as a graphical work on its own, since

[447] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 199-200.

[448] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 200.

[449] DC Comics v Mark Towle, 802 F.3d 1012 (9th Cir. 2015).

[450] Michael Deamer, "DC Comics v. Towle: Protecting Fictional Characters Through Stewardship," *Berkeley Technology Law Journal* 32, no. 4 (2017): 451-453; 802 F.3d 1012, 1022 (9th Cir. 2015). "We conclude that the Batmobile is a character that qualifies for copyright protection."

[451] Thomas M. S. Hemnes, "The Adaptation of Copyright Law to Video Games," *University of Pennsylvania Law Review* 131, no. 1 (1982): 179; Stern Electronics Inc. v. Kaufman, 669 F.2d 852, 856-857 (2d Cir. 1982); Atari, Inc. v. Amusement World, Inc., 547 F. Supp. 222, 226-227 (D. Md. 1981); Midway Mfg. Co. v. Dirkschneider, 543 F. Supp. 466, 479-480 (D. Neb. 1981).

he was a "prominent" character in the comic he was starring in.[452] In light of this decision, it is safe to say that an original, "prominent" and "aesthetic" character in a video game will qualify for copyright protection independent from the original work it exists within.[453]

Works of fine arts such as paintings, sculptures, handicraft works, or architectural works are not applicable for copyright protection in video games. These types of works are fixed on a tangible medium and physically materialized other than a digital expression by their nature. Only the types of works of fine arts and visual arts which could be expressed in some digitalized form can be considered as protected works that can be found in video games. A sculpture or an architectural building cannot be a subject matter spotted in a video game. Visual designs of a building or a sculpture in 2D or 3D, however, can be protected as graphical works expressed in a video game, or even as architectural plans within the meaning of a literary work of scientific nature as mentioned in the previous sections.[454] Same approach is applicable for works such as paintings and sculptures as well, since they can only take form as graphical works within video games.

It was confirmed by the CJEU in "*Bezpečnostní softwarová asociace*" decision that displayed graphical elements of a computer program are protected under the "InfoSoc Directive", subject to the general framework of copyrighted works and not under the directive specialized in computer programs.[455] This ruling may be interpreted as an open door for the protection of video game graphics to be protected as works of fine arts and visual arts. Same principles apply for the US jurisdiction[456] as well as the Turkish

[452] Decision of the 11th Civil Chamber of the Turkish Court of Cassation dated 18.11.2005 and numbered E. 2004/13221, K. 2005/11244; Yavuz, *Fikir ve Sanat Eserleri Kanunu Yorumu*, 143.

[453] Yavuz, *Fikir ve Sanat Eserleri Kanunu Yorumu*, 143; Öztan, *Fikir ve Sanat Eserleri Hukuku*,138.

[454] Yılmaz, "FSEK Bakımından Video Oyunlarının Eser Niteliği," 82.

[455] Bezpečnostní softwarová asociace - Svaz softwarové ochrany v Ministerstvo kultury, CJEU, Case C-393/09.

[456] Williams Electronics, Inc. v. Artic International, Inc., Appellant, 685 F.2d 870 (3d Cir. 1982).

jurisdiction[457] as they too separate the computer program protection from the visual and graphical display elements.

D. Video Game Elements as Cinematographic and Audiovisual Works

Before going into the details of cinematographic and audiovisual works, the terms "cinematographic" and "audiovisual" should be examined closely. While some countries use the term "cinematographic works" in their legislations preponderantly, such as Turkey; other countries prefer using the term "audiovisual works", like the US, or France and Belgium within the EU.[458] There is also the use of "films" instead of the former terms in some jurisdictions like the United Kingdom.[459] The terms cinematographic and audiovisual are not necessarily the same thing. However, they could be used interchangeably for the ease of evaluation of works falling under the relevant categories, and it could be seen in various national legislations that these terms are sometimes either used as one term including the others or simply used interchangeably.[460]

Cinematographic works are one of the clear examples for literary and artistic works defined in Berne Convention as "*cinematographic works to which are assimilated works expressed by a process analogous to cinematography*".[461] This definition is

[457] Decision of the 10th Chamber of the Turkish Council of State dated 27.04.1994 and numbered E. 1992/4550, K. 1994/1856.

[458] Irini A. Stamatoudi, *Copyright and Multimedia Products: A Comparative Analysis* (Cambridge: Cambridge University Press, 2001), 105. "*Both in the USA and in France, as well as in Belgium, 'audiovisual works' is a generic term within which certain subcategories are contained as species, i.e. cinematographic works, films and so on.*"

[459] Stamatoudi, *Copyright and Multimedia Products: A Comparative Analysis*, 108. "*The CDPA 1988 (UK) refers neither to audiovisual works nor to cinematographic works. It refers to films. According to section 5B, a film is 'a recording on any medium from which a moving image may by any means be produced'.*"

[460] Stamatoudi, *Copyright and Multimedia Products: A Comparative Analysis*, 110. For example, the United Kingdom's 1988 dated Copyright, Designs and Patents Act uses the term "film" in a context that covers audiovisual productions altogether.

[461] Berne Convention Article 2(1).

construed as to include all filmed content regardless of the technical process followed in creation.[462] From a technical standpoint, there can be audiovisual works which are not "*expressed by a process analogous to cinematography*".[463] So it is possible to say that "audiovisual" is actually a more "generic" term that covers both cinematographic works and films.[464]

Directive 2006/116/EC of the EU regarding the term of protection includes both terms with the exact phrasing as "cinematographic or audiovisual works" in Article 2.[465] Furthermore, in Article 3(3), the term "film" is defined as either a work of cinematography, an audiovisual work or "moving images", with or without a sound element.[466] This choice of wording indicates that Directive 2006/116/EC does not place cinematographic works under the umbrella of audiovisual works, however the purpose behind the wording should not be interpreted as separating these two works entirely.[467] Directive also defines "film" as the broadest term that could be within cinematographic works, audiovisual works or moving pictures.[468] The use of "cinematographic or

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[462] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 203. "*"Cinematographic works," to which Article 2(1) of the Berne Convention assimilates "works expressed by a process analogous to cinematography," include filmed or videotaped fixations of traditional dramatic works such as plays and musical comedies, but also, according to the WIPO Berne Convention Guide, encompass all possible forms of filmed content, from documentary films to cartoons, regardless of the technical process employed.*"

[463] Stamatoudi, *Copyright and Multimedia Products: A Comparative Analysis*, 106.

[464] Stamatoudi, *Copyright and Multimedia Products: A Comparative Analysis*, 109-110; Ateş, *Fikrî Hukukta Eser*, 263.

[465] Directive 2006/116/EC Article 2 "*(1) The principal director of a cinematographic or audiovisual work shall be considered as its author or one of its authors. Member States shall be free to designate other co-authors. (2) The term of protection of cinematographic or audiovisual works shall expire 70 years after the death of the last of the following persons to survive, whether or not these persons are designated as co-authors: the principal director, the author of the screenplay, the author of the dialogue and the composer of music specifically created for use in the cinematographic or audiovisual work.*"

[466] Directive 2006/116/EC Article 3(3) "*The term 'film' shall designate a cinematographic or audiovisual work or moving images, whether or not accompanied by sound.*"

[467] Yalçın Tosun, *Sinema Eserleri ve Eser Sahibinin Hakları*, 2nd ed. (İstanbul: On İki Levha, 2013), 106, 107.

[468] Stamatoudi, *Copyright and Multimedia Products: A Comparative Analysis*, 110.

audiovisual" is also seen in Directive 2019/790 known as the "Directive on Copyright in the Digital Single Market".[469]

The US legislation provides the category of these types of works as "motion pictures and other audiovisual works".[470] In Section 101 of the Code, separate definitions can also be found for motion pictures[471] and audiovisual works[472] which clarify that motion pictures are in fact within the scope of the wider term "audiovisual works". This inference is also supported by the House Report No. 94-1476.[473] In addition, the House Report also includes the term "cinematographic works" as a sub-type of work within the category while clarifying the conditions for audiovisual works, stating that:

> "*To be a 'motion picture,' as defined, requires three elements: (1) a series of images, (2) the capability of showing the images in certain successive order, and (3) an impression of motion when the images are thus shown. Coupled with the basic requirements of original authorship and fixation in tangible form, this definition encompasses a wide range of cinematographic works embodied in films, tapes, video disks, and other media.*"[474]

[469] Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC.

[470] 17 U.S. Code § 102.

[471] 17 U.S. Code § 101 "*"Motion pictures" are audiovisual works consisting of a series of related images which, when shown in succession, impart an impression of motion, together with accompanying sounds, if any.*"

[472] 17 U.S. Code § 101 "*"Audiovisual works" are works that consist of a series of related images which are intrinsically intended to be shown by the use of machines, or devices such as projectors, viewers, or electronic equipment, together with accompanying sounds, if any, regardless of the nature of the material objects, such as films or tapes, in which the works are embodied.*"

[473] House Report No. 94-1476 on 17 U.S. Code § 102 "*…the definition of "audiovisual works," which applies also to "motion pictures," embraces works consisting of a series of related images that are by their nature, intended for showing by means of projectors or other devices.*"

[474] House Report No. 94-1476 on 17 U.S. Code § 102.

The definition of audiovisual works in the US Code for copyrights keeps the form of expression flexible by giving freedom as to the embodiment of these works on any material object, and the "intention" to be shown on any kind of display whether a machine, device or electronic equipment is emphasized.

Turkish Law No. 5846 prefers the term "cinematographic works" for its categorization and defines these types of works as "*works such as films of an artistic, scientific, educational or technical nature or films recording daily events or movies, that consist of a series of related moving images with or without sound and which, regardless of the material in which they are fixed, can be shown by the use of electronic or mechanical or similar devices.*"[475] Although the term "audiovisual works" is not included and defined within the *numerus clausus* work categories listed in Articles 2 to 5 of Law No. 5846, the definition provided for "phonogram" in Article 1/B(f) hints to a connection between the terms "audiovisual" and "cinematographic" by wording the definition as "*audiovisual works such as cinematographic works*".[476] However, this connection does not actually establish a hypernym of a new "audiovisual works" category, since Turkish law is bound by *numerus clausus* classification for works. An audiovisual work may be evaluated under the requirements of a "cinematographic work" for copyright eligibility.[477]

The detailed definition in Article 5 of Law No. 5846 lays out the special criteria for a work to be considered as a cinematographic work. According to *Tekinalp*, the law sets 4 conditions for a cinematographic work; the work should be put together by authors

[475] Law No. 5846 Article 5.

[476] Law No. 5846 Article 1/B(f) "*Phonogram: The physical medium that carries sounds in which sounds of a performance or other sounds or representations of sounds are fixed, excluding fixation of sounds that are comprised in audiovisual works such as cinematographic works.*"

[477] Tosun, *Sinema Eserleri ve Eser Sahibinin Hakları*, 139.

as stated in Article 8(3) of Law No. 5846[478], namely the director, the music composer, the scriptwriter and the dialogue writer, additionally the animator when the work is produced as an "animation"; there must be a director and a scenario involved; the work must reflect originality of its authors; and the work must fall under the types listed in Article 5 regarding the category of cinematographic works. [479] Since there could be cinematographic works without music or dialogue, the second condition mentioned previously could be interpreted in a flexible manner. However, a cinematographic work without a director and a scenario is simply not possible.[480]

According to *Ateş*, the context and topic of a cinematographic work should not be limited by law, since a cinematographic may be beyond artistic, scientific, educational, or technical nature. Therefore, the subject matter listed in Article 5 should not be construed as limitative, but rather as an exemplification. [481] *Ateş* further states the conditions for a cinematographic work as related moving pictures with or without sound; which is fixed on a more or less permanent medium; suitable for display through a mechanic, electronic or similar device; produced with cinematography techniques; bearing the originality of its authors.[482]

When it comes to the generally applicable criterion of originality, there are different opinions in the doctrine regarding the originality of cinematographic works. While one opinion in the doctrine states that the standard should be the combination of

[478] Law No. 5846 Article 8(3) "*In the case of cinematographic works, the director, the composer of original music, the scriptwriter and the dialogue writer are joint authors of the work. For cinematographic works which are produced with the technique of animation, the animator is also among the joint authors of the work.*"

[479] Tekinalp, *Fikrî Mülkiyet Hukuku*, 127.

[480] Tekinalp, *Fikrî Mülkiyet Hukuku*, 127.

[481] Ateş, *Fikrî Hukukta Eser*, 262-263.

[482] Ateş, *Fikrî Hukukta Eser*, 265.

originality expressed by all the authors involved[483], another opinion is that the originality standard should cover every person's contribution into the work.[484] The latter approach would result in complications in authorship and cause problems by granting author's rights to everyone taking place in the production of the cinematographic work, even when they don't qualify to be authors from a legal perspective; such as the technical staff, camera operators or make-up artists on the filming set.[485]

The protection of certain visual elements in video games as cinematographic and audiovisual works can be applicable for the "cutscenes" placed within the video game which are pre-recorded video sequences in the form of short movie clips.[486] The nature of video games comes with "interactivity" which makes them unique in comparison to idle screen watching. Cutscene sequences in a video game are usually where players stop the interactivity input and simply observe.[487] These clips are usually used at the start of the game as an introduction to the story, in between the transitions of certain events and sequences to create a "lap-dissolve"[488] effect for the player, and in the ending sequences to conclude the narrative of the game.[489] Cutscenes take an important place within video games to maintain a smooth flow during the game play, they are quite "*useful as transitions between places or episodes, like the markers between chapters in a book*".[490] Cutscenes are generally animated with pure in-game graphics or enhanced CGI, and

[483] Tekinalp, *Fikrî Mülkiyet Hukuku*, 127; Ateş, *Fikrî Hukukta Eser*, 271; Tosun, *Sinema Eserleri ve Eser Sahibinin Hakları*, 74.

[484] Erel, *Türk Fikir ve Sanat Hukuku*, 73.

[485] Ateş, *Fikrî Hukukta Eser*, 271; Tosun, *Sinema Eserleri ve Eser Sahibinin Hakları*, 73-74.

[486] Glassner, *Interactive Storytelling: Techniques for 21st Century Fiction*, 285.

[487] Glassner, *Interactive Storytelling: Techniques for 21st Century Fiction*, 285. "*During playback, the player's opportunity for interaction is suspended, and he becomes a passive audience member for the duration of the scene.*"

[488] A scene transition technique in cinematography where one scene fades into the next.

[489] Glassner, *Interactive Storytelling: Techniques for 21st Century Fiction*, 285. "*Cut-scenes typically have three functions during a game: to show expository information, to provide transitions, or to show the results of a player's action.*"

[490] Glassner, *Interactive Storytelling: Techniques for 21st Century Fiction*, 286.

sometimes even actual videos filmed in real life just like a scene clipped from a traditionally produced movie are incorporated into the game.[491] Cutscenes are no different than a cinematographic or an audiovisual work in the animation form, meeting all special criteria set for cinematographic and audiovisual works as to originality, creativity, cinematography techniques, production, and display. It is clear that they can be protected as works under the said categories.

Surely, the overall audiovisual presentation in video games can also be subject to cinematographic and audiovisual work protection. This aspect of video games will be discussed in the following sections regarding the protection of video games holistically as copyrighted works.

E. Video Game Elements as Adaptations and Collections

Adaptations and collections are not a "work category" *per se*, however, they also find themselves within the scope of copyrighted work protection by special measures. The principles of intellectual property protection require a product of independent and original intellectual effort.[492] However, these protected works are based on previously existing works in a way that still connects them to these works, meaning they are not relatively independent original works on their own.[493] Literary and artistic works that are simply inspired from other works do not fall under the scope of adaptations or collections in case they have acquired originality to the extent they are independent.[494]

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[491] Glassner, *Interactive Storytelling: Techniques for 21st Century Fiction*, 285. "*Sometimes it's actually a pre-rendered piece of video, and sometimes it's rendered in real time using the computer or console's hardware (a technique called machinima or mechanimation).*"

[492] Ateş, *Fikrî Hukukta Eser*, 287.

[493] Tekinalp, *Fikrî Mülkiyet Hukuku*, 133; Ateş, *Fikrî Hukukta Eser*, 287.

[494] Tekinalp, *Fikrî Mülkiyet Hukuku*, 134.

Berne Convention Article 2(3) clearly states that derivative works such as "*translations, adaptations, arrangements of music and other alterations of a literary or artistic work*" are subject to copyright protection just like any other literary and artistic work, without any prejudice to the original works they were based on.[495] Following that, in Article 2(5), "*collections of literary and artistic works*" such as anthologies or encyclopedias, which hold the qualities of intellectual creations "*by reason of the selection and arrangement of their contents*" are also covered for copyright protection, again, "*without prejudice to the copyright in each of the works forming part of such collections.*".[496]

WCT and TRIPS extended the scope of protection by providing a wider subject matter as "*compilations of data or other material*". Additionally, the reasoning behind the quality of "intellectual creation" was clarified as "selection *or* arrangement of their contents" instead of wording it as "selection *and* arrangement" as Berne Convention did.[497]

The US law also includes adaptations and collections for copyright subject matter as "compilations and derivative works" within Section 103 of Title 17 of the United States Code.[498] The protection is provided only to the extent of lawful use of materials in the works, and any unlawful use will result in the exclusion of copyright protection for those parts without affecting the remaining lawfully used materials.[499] The definition given for a derivative work is quite comprehensive and gives examples such as "*translation,*

[495] Berne Convention Article 2(3).

[496] Berne Convention Article 2(5).

[497] WCT Article 5; TRIPS Article 10(2).

[498] 17 U.S. Code § 103.

[499] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 205; House Report No. 94-1476 on 17 U.S. Code § 103. "*In providing that protection does not extend to "any part of the work in which such material has been used unlawfully," the bill prevents an infringer from benefiting, through copyright protection, from committing an unlawful act, but preserves protection for those parts of the work that do not employ the preexisting work.*"

musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation" further expanded as "*any other form in which a work may be recast, transformed, or adapted*".[500] The originality requirement for categorized works of authorship also applies to derivative works. While translation of a fictional work will be of wider protection, translation of a technical work will be lesser accordingly.[501] As stated in the decision of "*Alfred Bell & Co., Ltd. v. Catalda Fine Arts, Inc*.", reproduction of an art piece enjoys the same amount of protection even if it reflects a "more than trivial" and sufficient amount of originality from its adapting artist.[502]

For compilations, again, the US law generously clarifies the scope by defining compilations as works that are created from previously existing materials and data through collecting and assembling of such material and data, and eventually reflecting the qualities of an original work of authorship as a whole.[503] Collective works consisting of separate, independent and individual works such as anthologies or encyclopedias are also considered as compilations.[504] The originality is looked for within the acts of selection, coordination, or arrangement. The landmark decision in "*Feist Publications,*

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[500] 17 U.S. Code § 101 "*A "derivative work" is a work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship, is a "derivative work".*"

[501] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 204-205.

[502] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 205; Alfred Bell & Co., Ltd. v. Catalda Fine Arts, Inc. 191 F.2d. 99, 102-103 (2d Cir. 1951). "*All that is needed to satisfy both the Constitution and the statute is that the "author" contributed something more than a "merely trivial" variation, something recognizably "his own." Originality in this context "means little more than a prohibition of actual copying."*"

[503] 17 U.S. Code § 101 "*A "compilation" is a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship. The term "compilation" includes collective works.*"

[504] 17 U.S. Code § 101 "*A "collective work" is a work, such as a periodical issue, anthology, or encyclopedia, in which a number of contributions, constituting separate and independent works in themselves, are assembled into a collective whole.*"

Inc. v. Rural Telephone Service Co." regarding a compilation of a telephone directory showed that the "modicum of creativity" reflected in the work is what matters for the determination of originality, rather than the effort and economic investment made for the included data collection.[505]

The EU does not have a special regulation regarding adaptations in general and national jurisdictions mostly comply with the standards set through international agreements. The one special Directive 96/9/EC for databases, however, sets the standards clearly as previously explained in the previous chapter of this study on the scope of a copyrighted work in the EU.[506] One distinction from the US practice is that the EU protects databases with the sole criterion of being the author's "own intellectual creation" created through the selection or arrangement of contents[507], while also providing a *sui generis* protection for databases that do not fulfill the copyright standards yet were created with substantial investment in obtaining, verifying or presenting the contents on the creator's side.[508] A qualifying database can benefit from both copyright and *sui generis* protection.[509] The substantial investment can be qualitative or quantitative.[510]

The definition of database given in Directive 96/9/EC is a "*collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means*" which points to two significant

[505] Feist Publications, Inc. v. Rural Telephone Service Co., Inc., 499 U.S. 340 (1991); Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 240.

[506] Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases.

[507] Directive 96/9/EC Article 3(1).

[508] Directive 96/9/EC Article 7(1) "*Member States shall provide for a right for the maker of a database which shows that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents to prevent extraction and/or re-utilization of the whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of that database.*"

[509] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 239.

[510] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 240.

qualities: "independent" and "individually accessible" content.[511] In "*Fixtures Marketing Ltd v Organismos prognostikon agonon podosfairou AE (OPAP)*", it was clarified that the contents in a database should be "*separable from one another without the value of their contents being affected*".[512] Furthermore, the "substantial investment" for *sui generis* protection covers the "*resources used to seek out existing independent materials*" but not the "*resources used for the creation of materials*"[513] or the "*resources used for verification during the stage of creation of materials*" as stated in the decision of "*The British Horseracing Board Ltd and Others v William Hill Organization Ltd.*".[514] The computer program that operates the electronic database is protected under the respective computer program directive and not under Directive 96/9/EC.[515] The database could be in any form, whether electronic or analogue.[516]

[511] Directive 96/9/EC Article 1(2).

[512] Fixtures Marketing Ltd v Organismos prognostikon agonon podosfairou AE (OPAP), CJEU, Case C-444/02, November 9, 2004, ECLI:EU:C:2004:697. "*The term 'database' as defined in Article 1(2) of Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases refers to any collection of works, data or other materials, separable from one another without the value of their contents being affected, including a method or system of some sort for the retrieval of each of its constituent materials.*"

[513] Fixtures Marketing Ltd v Organismos prognostikon agonon podosfairou AE (OPAP), CJEU, Case C-444/02. "*The expression 'investment in … the obtaining … of the contents' of a database in Article 7(1) of Directive 96/9 must be understood to refer to the resources used to seek out existing independent materials and collect them in the database. It does not cover the resources used for the creation of materials which make up the contents of a database. In the context of drawing up a fixture list for the purpose of organising football league fixtures, therefore, it does not cover the resources used to establish the dates, times and the team pairings for the various matches in the league.*"

[514] The British Horseracing Board Ltd and Others v William Hill Organization Ltd., CJEU, Case C-203/02, November 9, 2004, ECLI:EU:C:2004:695. "*The expression 'investment in … the obtaining … of the contents' of a database in Article 7(1) of Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases must be understood to refer to the resources used to seek out existing independent materials and collect them in the database. It does not cover the resources used for the creation of materials which make up the contents of a database. The expression 'investment in … the … verification … of the contents' of a database in Article 7(1) of Directive 96/9 must be understood to refer to the resources used, with a view to ensuring the reliability of the information contained in that database, to monitor the accuracy of the materials collected when the database was created and during its operation. The resources used for verification during the stage of creation of materials which are subsequently collected in a database do not fall within that definition. The resources used to draw up a list of horses in a race and to carry out checks in that connection do not constitute investment in the obtaining and verification of the contents of the database in which that list appears.*"

[515] Directive 96/9/EC Article 1(3).

[516] Directive 96/9/EC Article 1(1) "*This Directive concerns the legal protection of databases in any form.*"; Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 239.

Turkish jurisdiction protects adaptations and collections together under a single provision. Article 1/B gives definitions for both adaptations and collections separately.[517] Article 6 of Law No. 5846 frames the adaptations and collections by providing a detailed list of examples. Adaptations and collections include translations; converted versions of novels, stories, poems or plays to one another; converted versions of musical, literary, fine arts works into films or suitable forms of filming and broadcasting; "*musical arrangements or compositions*"; transformed versions of fine arts works to one another; collections of "*all or the same type of works*" of an author; collections of "*selected works according to a specific purpose and in accordance with a specific plan*"; "*making an unpublished work ready for publication as a result of scientific research and study*" with the exclusion of "*ordinary transcriptions and facsimiles that are not the result of scientific research and study*"; annotations, comments or abridgements of someone else's work; as well as adaptations, editing or any modifications of computer programs; and databases "*obtained by the selection and compilation of data and materials according to a specific purpose and a specific plan, which are in a form that can be read by a device or in any other form*" with the exclusion of protection that is not extended to the "*data and materials contained in the database*".[518]

While the last paragraph of Article 6 states that these works are protected if they are "*created without prejudice to the rights of the author of the original work*"[519], in principle this would not affect the status of being a "copyrighted work", since there could

[517] Law No. 5846 Article 1/B(c) "*Adaptation: Intellectual and artistic product bearing the characteristic of the adaptor, which is created by benefiting from another work but which is not independent of such work.*"; Law No. 5846 Article 1/B(d) "*Collection: Works such as encyclopedias and anthologies whose content consists of selection and arrangements, which are the results of intellectual creativity, provided that the rights on the original work are reserved.*"

[518] Law No. 5846 Article 6.

[519] Law No. 5846 Article 6 "*Adaptations bearing the characteristic of the person making the adaptation, which are created without prejudice to the rights of the author of the original work, shall be deemed works under this Law.*"

be adaptations and collections created without the permission of the originating work's author. The only legal issue would be practicing the rights arising from the adaptation or collection.[520] Regarding databases, Turkish law also provides a *sui generis* protection similar to the EU jurisdiction, through the Additional Article 8[521] of Law No. 5846 inspired from Directive 96/9/EC.[522]

Adaptations are works that are bearing the characteristics of the adaptor. In order to qualify as an adaptation, the originating work must also be an original copyrighted work, regardless of the current protection status of that work.[523] It is also possible to make adaptations of other original adaptations.[524] Adaptations may also switch between not only work types but also work categories.[525] When it comes to collections, the law requires a product of "intellectual creativity" instead of the "characteristics of the adaptor" as in adaptations.[526] Additionally, the content of collections may be consisting of both copyrighted works and materials that do not qualify as works.[527]

It is possible to see adaptations and derivative works as well as collections and compilations incorporated into video games. Very common examples are video games

[520] Tekinalp, *Fikrî Mülkiyet Hukuku*, 134; Ateş, *Fikrî Hukukta Eser*, 314; Kılıçoğlu, *Sınai Haklarla Karşılaştırmalı Fikri Haklar*, 142.

[521] Law No. 5846 Additional Article 8 "*The maker of a database who has made qualitatively and/or quantitatively substantial investment in either creation, verification or presentation of the contents shall have the right of permitting or prohibiting; a) Permanent or temporary transfer to another medium by any means and in any form, b) Distribution or sale, rental or communication to the public in any way, of all or a substantial part of the content of the database contents with the exceptions specified in this Law and required by purposes of public security and administrative and judicial procedures. Term of protection granted to the maker of a database shall be 15 years from the date of being made public of the database. After every qualitative and quantitative addition, removal, or modification producing a substantial change in the contents of the database and requiring a new investment, the new database resulting from such investment shall qualify for its own conditions of protection. The provisions of Article 72, subparagraph (3) of this Law shall apply to those who violate the rights granted by this Article.*"

[522] Tekinalp, *Fikrî Mülkiyet Hukuku*, 141.

[523] Ateş, *Fikrî Hukukta Eser*, 292.

[524] Ateş, *Fikrî Hukukta Eser*, 293.

[525] Polater, *Fikir ve Sanat Eserleri Hukukuna Göre Güzel Sanat Eserleri ve Eser Sahibinin Hakları*, 74.

[526] Ateş, *Fikrî Hukukta Eser*, 294.

[527] Ateş, *Fikrî Hukukta Eser*, 295.

that were adapted from other literary and artistic works such as books or movies. The popular game series "*The Witcher*"[528] trilogy was adapted from the fantasy literature books written by the Polish author Andrzej Sapkowski. Another interesting example comes from the famous fantasy literature series "*The Lord of the Rings*" written by J. R. R. Tolkien, which was adapted into a trilogy of movies in almost complete accuracy by the director Peter Jackson. "*The Lord of the Rings: The Battle for Middle-Earth*"[529] is the game that was adapted from these movies but not necessarily the original base content of the books. Electronic Arts, which is the video game company behind this game, initially only had rights to make a derivative work from the material in the movies, later on acquired the rights from the original base material of the books which opened up many possibilities to create and expand the video games that could be developed based on the vast fictional world.[530]

The derivative works or adaptations in video games are not always necessarily the entire story or script taken from other works. Survival-horror game "*Dead by Daylight*" continuously publishes new "licensed" chapters as game expansions and downloadable content ("DLC") which usually include new characters as survivors and killers and new maps adapted from famous movies, drama series and even other games. *Dead by Daylight* offers fictional characters from popular horror movies such as "Pinhead" from "*Hellraiser*", "Michael Myers" from "*Halloween*", "Ghost Face" from "*Scream*", "Freddy Krueger" from "*A Nightmare on Elm Street*", and "Sadako" from "*Ringu*". The game also adapted characters and maps from other popular horror game franchises such as "*Silent Hill*" with the characters "Pyramid Head" and "Cheryl Mason" along with the

[528] "The Witcher" game series is a fantasy action role-playing game franchise based on the books of the same name from the Polish author Andrzej Sapkowski, developed and published by CD Projekt Red.

[529] "The Lord of the Rings: The Battle for Middle-Earth" is a RTS game developed by EA Los Angeles and published by EA Games on December 6, 2004.

[530] Boyd, Pyne, and Kane, *Video Game Law: Everything You Need to Know about Legal and Business Issues in the Game Industry*, 26.

map of "Midwich Elementary School"; and "*Resident Evil*" with the characters "Nemesis", "Jill Valentine" and "Leon Kennedy" along with the map of "Racoon City Police Station".[531]

Figure 9. Pyramid Head in "Silent Hill 2" (2001) on the left[532]; adaptation of Pyramid Head as "*The Executioner*" in "Dead by Daylight" (2016) on the right, screenshot taken by the author.

Dead by Daylight also hosts characters from Netflix's hit drama series "*Stranger Things*", adapted from the personal appearances of the actress and the actor who portrayed "Nancy Wheeler" and "Steve Harrington" as well as the fictional monster "Demogorgon", which are currently only available to players who purchased the relevant DLC chapter before the license agreement ended between Netflix and Behaviour Interactive and these characters were removed from the game store.[533] All these characters and maps were

[531] "Dead by Daylight Chapters: New Chapters & All DBD Chapters," Dead by Daylight, accessed March 29, 2022, https://deadbydaylight.com/game/chapters.

[532] "Pyramid Head" (edited), "Pyramid Head," Silent Hill Wiki, accessed March 29, 2022, https://silenthill.fandom.com/wiki/Pyramid_Head.

[533] Matthew Byrd, "Dead by Daylight: Why is the Stranger Things DLC Being Removed from the Game?" Den of Geek, August 17, 2021, accessed March 29, 2022, https://www.denofgeek.com/games/dead-by-daylight-stranger-things-dlc-content-removal-explained.

adapted according to the visual style of the game and suitable for game mechanics in an original way yet still tightly connected to the original materials they were based on.

There is also user created content in video games that come up as derivative works such as "modifications", commonly known as "mods". Mods are the creations which "change the behavior of the game" made by third parties who are mostly the players.[534] "*Counter-Strike*" was originally a "mod" created from "*Half-Life*" by independent players, which was later on acquired by Valve and still a popular multiplayer FPS game today.[535] The creation of mods is possible with the very tools made available to the players by the developers, and legal conditions for such mods are generally covered by the "end-user license agreements" ("EULA") that come with the installation of the game.[536] EULAs define the terms of use for the game, including the right ownership of possible mods or even the possibility of creating mods without any infringement. Playing the game itself does not constitute a derivative work by any means, since all the possibilities are already set within the codes of the game.[537] Another notable derivative work would be the "translations" in video games. Translations cover not just the subtitles but the entire text material within the video game.[538]

There are examples of collections in video games as well. "*The Jackbox Party Pack*"[539] series in which the video game itself includes multiple different games, could

[534] Marc E. Mayer, "Copyright Law," in *Computer Games and Immersive Entertainment: Next Frontiers in Intellectual Property Law*, ed. Chrissie Scelsi and Ross A. Dannenberg, 2nd ed. (Chicago, IL: American Bar Association, Section of Intellectual Property Law, 2019), 61-117.

[535] Mayer, "Copyright Law," 61-117.

[536] Yin Harn Lee, "Copyright and Gaming," in *Research Handbook on Intellectual Property and Digital Technologies,* ed. Tanya Aplin (Cheltenham, UK: Edward Elgar Publishing, 2020), 60-61.

[537] W. Ronald Gard and Elizabeth Townsend Gard, "Chapter 2: Copyright and Video Games," in *Video Games and the Law* (New York, NY: Routledge, 2017), 7-24; Doğan and Özocak, "Dijital Oyunlar, Multimedya Yaratımlar ve Güncel Hukuki Problemler," 9-10.

[538] Doğan and Özocak, "Dijital Oyunlar, Multimedya Yaratımlar ve Güncel Hukuki Problemler," 9.

[539] "The Jackbox Party Pack" is a series of party video games developed by Jackbox Games, first game released on November 26, 2014.

be arguably considered a collection in the legal sense, only if the games within existed independently outside the "pack" itself. A safer example would be the old-school console games collections which were marketed under collective titles as "1000 games in one" within the console "cartridges", where multiple independent games were selected and arranged carefully to form a unique selection of games to be played as chosen by players.[540] When it comes to databases, however, there are two notable issues regarding video games. First, the database should consist of "independent" works or materials, and second, the contents should be "individually accessible"; either condition not easily applicable for video games as a whole or their parts, considering the strict interaction and connection between all the components in a video game.[541]

II. VIDEO GAMES IN THEIR ENTIRETY AS TYPES OF COPYRIGHTED WORKS

The two protection regimes for video games as mentioned before are the "distributive approach" which grants copyright protection by individually considering the work qualification of the elements one at a time, and the "unitary approach" which handles video games as a holistic product to be protected as a copyrighted work.[542] The most common and prominent work categories considered for video games to be protected in their entirety are "cinematographic or audiovisual works" and the relatively novel class of "multimedia works". Even under these categories, the matter of accurate placement of video games lead to some debates on the scope of copyright protection arising from the unique qualities of these work categories. The general approach is that cinematographic

[540] Yılmaz, "FSEK Bakımından Video Oyunlarının Eser Niteliği," 122.

[541] Stein, "The Legal Nature of Video Games - Adapting Copyright Law to Multimedia," 49.

[542] Ramos et al., *The Legal Status of Video Games: Comparative Analysis in National Approaches*, 10-11; Rendas, "*Lex Specialis(sima)*: Videogames and Technological Protection Measures in EU Copyright Law," 5.

and audiovisual works as well as multimedia works cover quite a lot of newly arising work types that came with the cultural and technological progress, maybe because adopted copyright traditions have a hard time keeping up with the fast-paced changes in human society's needs. In this section, we will examine the legal approaches from the courts and the doctrine accordingly and evaluate the pertinence of each of these categories for video games as "one work".

A. Video Games as Cinematographic and Audiovisual Works

The context and concept of cinematographic and audiovisual works were explained in the previous section on the protection of video game elements as these specific work categories. The forms video games took throughout the decades of historical progression kept changing, however, video games kept their complex visual and interactive nature at their core, unaffected by constant transformation. Despite some conflicted opinions regarding the classification of video games, one of the most common approaches from the EU, the US and Turkey altogether is that video games are qualified for copyright protection as cinematographic or audiovisual works, depending on how each jurisdiction prefers to work through either of these comprehensive terms. The most pressing conflictions surface with the inadequate classification of a video game as a "computer program" instead of an audiovisual or cinematographic work. Yet, the courts of law made progress in clarifying this matter over the years.

1. The United States

On the side of the US, it is widely accepted by the courts that video games, ever so complex works of authorship with multiple copyrighted works intertwined, are

eventually protected as audiovisual works regardless of the separate protection of underlying computer programs.[543] "Audiovisual work" is the umbrella term for all the works that could fit within the category which also covers motion pictures and cinematographic works as well. According to the definition provided by the law, audiovisual works "*consist of a series of related images which are intrinsically intended to be shown by the use of machines, or devices such as projectors, viewers, or electronic equipment, together with accompanying sounds, if any, regardless of the nature of the material objects, such as films or tapes, in which the works are embodied.*"[544] It is only natural to consider video games as audiovisual works by this definition, as the courts did.

Through a great number of cases brought before the courts of law, the legal nature of video games was evaluated in detail and the courts classified video games as audiovisual works eligible for copyright protection one case after another. Not every video game is automatically considered as an audiovisual work and a "case-by-case" analysis must be conducted to determine if the subject video game is predominantly an audiovisual work of original expression.[545]

In "*Stern Electronics Inc. v. Kaufman*", the defendant claimed that video games do not qualify as audiovisual works because they are not "original" and "fixed" as required by law, since every unique playthrough is different. The court held that the player's participation in the visual expressions of the game, which is the interactivity element, does not hinder the audiovisual work's protection as a copyrighted work.[546]

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[543] Hemnes, "The Adaptation of Copyright Law to Video Games," 179.

[544] 17 U.S. Code § 101.

[545] Ramos et al., *The Legal Status of Video Games: Comparative Analysis in National Approaches*, 93.

[546] Stern Electronics Inc. v. Kaufman, 669 F.2d 852, 856 (2d Cir. 1982). "*We agree with the District Court that the player's participation does not withdraw the audiovisual work from copyright eligibility. No doubt the entire sequence of all the sights and sounds of the game are different each time the game is played, depending upon the route and speed the player selects for his spaceship and the timing and accuracy of his release of his craft's bombs and lasers. ...But the images remain fixed, capable of being seen and heard each time a player succeeds in keeping his spaceship aloft long enough to permit the*

Every original playthrough shares substantially the same displayed elements despite the variations arising from player's actions and choices, and the underlying computer program being protected as a copyrighted work does not prevent the audiovisual work protection for the displayed elements.[547] Furthermore, both originality and fixation requirements are already met when the game expresses an original display and is fixed on a memory device.[548] The court dismissed the defendant's both arguments and found the plaintiff's game "*Scramble*" eligible for copyright protection as an audiovisual work under the law.

In "*Atari, Inc. v. Amusement World, Inc.*" the court found that the fixation of the video game's playthrough on a videotape is sufficient to register the game as an audiovisual work.[549] The defendant argued that only one playthrough would not be sufficient the represent the game entirely therefore it would not be a "complete copy". The court disagreed, stating that an audiovisual presentation of the video game recorded on tape is an acceptable "alternative identifying material" as required by the Copyright Office.[550] While the defendant argued that the copyrightable matter is the computer program and not the audiovisual presentation submitted for an audiovisual work

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appearances of all the images and sounds of a complete play of the game. The repetitive sequence of a substantial portion of the sights and sounds of the game qualifies for copyright protection as an audiovisual work."

[547] 669 F.2d 852, 856 (2d Cir. 1982). "*The visual and aural features of the audiovisual display are plainly original variations sufficient to render the display copyrightable even though the underlying written program has an independent existence and is itself eligible for copyright. Nor is copyright defeated because the audiovisual work and the computer program are both embodied in the same components of the game.*"

[548] 669 F.2d 852, 855 (2d Cir. 1982). "*If the content of the audiovisual display were not affected by the participation of the player, there would be no doubt that the display itself, and not merely the written computer program, would be eligible for copyright. The display satisfies the statutory definition of an original "audiovisual work," and the memory devices of the game satisfy the statutory requirement of a "copy" in which the work is "fixed".*"

[549] Atari, Inc. v. Amusement World, Inc., 547 F. Supp. 222 (D. Md. 1981).

[550] 547 F. Supp. 222, 227 (D. Md. 1981). "*Plaintiff submitted a videotape of one game sequence, and defendants contend that this is not a complete copy of the "Asteroids" game. However, the Copyright Office Regulation, 37 C.F.R. 202.20(d), allow the Register of Copyrights to permit the deposit of only one copy or "alternative identifying material." Given the bulkiness and cost of the actual video game, a video tape of the audiovisual presentation in the game is a reasonable "alternative identifying material.*"

registration, the court again dismissed this argument by stating that the defendant "*fails to distinguish between the work and the medium in which it is fixed*" and clarified that the work as the audiovisual presentation being fixed on "printed circuit board" is fixation requirement fulfilled.[551]

In "*Atari Games Corp. v. Oman*", the court evaluated whether the video game "*Breakout*" was copyrightable as an audiovisual work.[552] The video game was denied registration by the defendant because the audiovisual elements were comprised of simple shapes and sounds that do not qualify as creative and original expressions of copyright subject matter, and the displayed images were random creations of the player and not the author.[553] The court, however, ruled for copyrightability of the video game as an audiovisual work, stating that the Copyright Office set a higher standard of originality and "substantial creativity" than the normally required "modest degree of intellectual labor".[554] Furthermore, regarding the argument of expression being the random creations of the player and not the video game's author, the court cited "*Williams Electronics, Inc. v. Artic International, Inc.*"[555] and stated that player's manipulations do not affect the

[551] 547 F. Supp. 222, 227 (D. Md. 1981). "*A video game's printed circuit board is clearly such a medium of expression, since the "work," the audiovisual presentation, can be communicated from the printed circuit board with the aid of the video game's display screen.*"

[552] Atari Games Corp. v. Oman, 888 F.2d 878 (D.C. Cir. 1989).

[553] 888 F.2d 878, 880 (D.C. Cir. 1989). "*BREAKOUT did not qualify, she wrote, because neither the "[c]ommon geometric shapes . . . contained in th[e] work" nor "the coloring of th[o]se shapes" constituted copyrightable subject matter. Similarly, she stated, "[t]here is not enough original authorship to register a claim in the sounds." She further said that the "images ... created by playing the video game ... are also not registrable since they are created randomly by the player and not by the author of the video game."*"

[554] 888 F.2d 878, 882 (D.C. Cir. 1989). "*Second, we do not grasp the standard of creativity the Copyright Office employed in determining whether to register BREAKOUT as an audiovisual work. Was it the normal standard under which a very modest degree of intellectual labor will suffice? See, e.g., West Publishing Co. v. Mead Data Cent., Inc., 799 F.2d 1219, 1223 (8th Cir. 1986), cert. denied, 479 U.S. 1070, 107 S.Ct. 962, 93 L.Ed.2d 1010 (1987); 1 M. NIMMER D. NIMMER, NIMMER ON COPYRIGHT § 1.08[C][1] (1989). Or did the Office test BREAKOUT against a higher standard, one resembling the "substantial creativity" measuring rod sometimes used to judge derivative works? See 17 U.S.C. § 103; Chamberlin v. Uris Sales Corp., 150 F.2d 512, 513 (2d Cir. 1945) (compilations or other derivative works must contain "some substantial, not merely trivial, originality"). And if an elevated creativity requirement was employed, what justified use of a heightened standard?*"

[555] Williams Electronics, Inc. v. Artic International, Inc., Appellant, 685 F.2d 870 (3d Cir. 1982).

overall "substantial portion of the sights and sounds" which remain the same in their repetitive nature.[556] After this ruling the Copyright Office again refused registration of the subject video game, which led to the final court decision of subsequent appeal.[557] This time the Copyright Office based their refusal on the grounds of lacking "original authorship". The court finalized the issue of copyright eligibility of *Breakout* as an audiovisual work by emphasizing the evaluation of an audiovisual work as a whole and not as its parts, since the simple visual elements were "*copyrightable because the stationary screen display, separately not eligible for copyright protection, was as a series of images greater than the sum of its parts*".[558]

There are several other cases brought before the US courts that ruled for the copyright eligibility of video games as audiovisual works, without prejudice to the underlying computer program as a copyrighted work on its own.[559]

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[556] 888 F.2d 878, 884 (D.C. Cir. 1989). "*Although there is player interaction with the machine during the play mode which causes the audiovisual presentation to change in some respects from one game to the next in response to the player's varying participation, there is always a repetitive sequence of a substantial portion of the sights and sounds of the game, and many aspects of the display remain constant from game to game regardless of how the player operates the controls. Williams Elecs., Inc. v. Artic Int'l, Inc., 685 F.2d 870, 874 (3d Cir. 1982); accord Midway Mfg. Co., 704 F.2d at 1012 ("The player of a video game does not have control over the sequence of images that appears on the video game screen … The most he can do is choose one of the limited number of sequences the game allows him to choose.")*"

[557] Susan Corbett, "Videogames and Their Clones - How Copyright Law Might Address the Problem," *Computer Law & Security Review* 32, no. 4 (August 2016): 618; Atari Games Corp. v. Oman, 979 F.2d 242 (D.C. Cir. 1992).

[558] Leena M. Sheet and A. Benjamin Katz, "Protecting Rights in Videogames: Next Generation Licensing," *Virginia Sports and Entertainment Law Journal* 6, no. 1 (2006): 130; 979 F.2d 242, 245 (D.C. Cir. 1992). "*The hallmark of a video game is the expression found in "the entire effect of the game as it appears and sounds," its "sequence of images." Stern Elecs., Inc. v. Kaufman,669 F.2d 852, 857 (2d Cir. 1982); see also Nintendo of America, Inc. v. Elcon Indus.,564 F.Supp. 937, 943 (E.D.Mich. 1982) (protectable "expression includes the characters, obstacles and background as well as the sequence of play of the game"); Midway Mfg. Co. v. Bandai-America, Inc.,546 F.Supp. 125, 147 (D.N.J. 1982) (protecting a video game's "play and sequence of images"), aff'd sub nom. Bandai America, Inc. v. Bally Midway Mfg. Co.,775 F.2d 70 (3d Cir. 1985), cert. denied,475 U.S. 1047, 106 S.Ct. 1265, 89 L.Ed.2d 574 (1986).*"

[559] See also Midway Mfg. Co. v. Dirkschneider, 543 F. Supp. 466 (D. Neb. 1981); Williams Electronics, Inc. v. Artic International, Inc., Appellant, 685 F.2d 870 (3d Cir. 1982); Atari, Inc. v. North American Philips Consumer Electronics Corp., 672 F.2d 607 (7th Cir. 1982); Nintendo of America, Inc. v. Elcon Industries, Inc., 564 F. Supp. 937 (E.D. Mich. 1982); Tetris Holding, LLC v. Xio Interactive, Inc., 863 F. Supp.2d 394 (D.N.J. 2012); Midway Mfg. Co. v. Artic Intern., Inc., 704 F.2d 1009 (7th Cir. 1983); Midway Mfg. Co. v. Bandai-America, Inc., 546 F. Supp. 125 (D.N.J. 1982).

There is an obvious "dual protection" granted for video games caused by their complex nature as entire works. This hybrid unitary protection regime should be interpreted carefully by considering both types of works being not mutually exclusive. Video games are not just computer programs, but they are more comprehensively classified as audiovisual works as a singular creation. The courts of law approach video games as audiovisual works in a consensus, carefully evaluating each step and condition that creates the audiovisual work defined by the law.

2. The European Union

The EU level protection for video games beyond the classification of "computer programs" was defined by the landmark decision of the CJEU on "*Nintendo v PC Box*".[560] The CJEU works towards the harmonization of copyright law practice in the Member States and this decision was a crucial step for determining the scope of protection for video games to be evaluated as a whole product rather than minimizing the perspective on software level. In "*Nintendo v PC Box*", the CJEU applied the principles arising from the EU Directives and video games as singular creations were excluded from the scope of protection in the "Directive 2009/24/EC" which is limited to the legal protection of computer programs.[561] The applicable protection framework was pointed out as the system established by "InfoSoc Directive"[562] which regulates the entire cluster of works of authorship. The CJEU confirmed that video games in their entirety are highly complex works with multiple creative elements including graphic and sound expressions, tightly

[560] Nintendo Co. Ltd and Others v PC Box Srl and 9Net Srl, CJEU, Case C-355/12, January 23, 2014, ECLI:EU:C:2014:25.

[561] Directive 2009/24/EC of the European Parliament and of the Council of 23 April 2009 on the legal protection of computer programs.

[562] Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society.

connected with the underlying computer program; therefore, video games are surely more than plain "software".[563] The copyright protection should not be reduced to the computer program with the original expression since encrypted graphic and sound elements within the program are also a part of that "originality", and "*they are protected, together with the entire work*".[564]

It was mentioned that the EU perspective on cinematographic and audiovisual works is quite broad. Directive 2006/116/EC[565] regarding the protection term includes the terms cinematographic, audiovisual, and even films generously, however not all directives have a consistent use of wording. The flexibility in using all these terms is probably because the Member States in their respective legislations have varying descriptions and classifications when it comes to categorizing works of these natures.[566] Other than computer programs, databases and photographs, the EU directives do not explicitly harmonize the types of "works" as well as the "work categories", so there is not a uniform approach for categorization in the Member States.[567] *Nintendo v PC Box* decision points to the protection of video games as an "entire work" and not necessarily

[563] Rosati, "Relevance of EU Copyright Law to (Future) Non-EU Member States," 184; Sganga, "The Notion of 'Work' in EU Copyright Law After Levola Hengelo: One Answer Given, Three Question Marks Ahead," 5; Nintendo Co. Ltd and Others v PC Box Srl and 9Net Srl, CJEU, Case C-355/12, paragraph 23. "*That finding is not weakened by the fact that Directive 2009/24 constitutes a lex specialis in relation to Directive 2001/29 (see Case C-128/11 UsedSoft [2012] ECR, paragraph 56). In accordance with Article 1(1) thereof, the protection offered by Directive 2009/24 is limited to computer programs. As is apparent from the order for reference, videogames, such as those at issue in the main proceedings, constitute complex matter comprising not only a computer program but also graphic and sound elements, which, although encrypted in computer language, have a unique creative value which cannot be reduced to that encryption. In so far as the parts of a videogame, in this case, the graphic and sound elements, are part of its originality, they are protected, together with the entire work, by copyright in the context of the system established by Directive 2001/29.*"

[564] Nintendo Co. Ltd and Others v PC Box Srl and 9Net Srl, CJEU, Case C-355/12, paragraph 23.

[565] Directive 2006/116/EC of the European Parliament and of the Council of 12 December 2006 on the term of protection of copyright and certain related rights.

[566] Henrike Maier, "Games as Cultural Heritage: Copyright Challenges for Preserving (Orphan) Video Games in the EU," *Journal of Intellectual Property, Information Technology and E-Commerce Law* 6, no. 2 (2015): 121-122.

[567] Maier, "Games as Cultural Heritage: Copyright Challenges for Preserving (Orphan) Video Games in the EU," 122.

their parts separately. Furthermore, the decision does not define a "type" of work as audiovisual or cinematographic for the video game in its entirety. It is common for Member States to put video games under a distributive protection regime by granting protection for the computer program, graphic and sound elements separately, so long as they meet the criteria of copyright eligible intellectual creations. While it may seem like *Nintendo v PC Box* decision entails a "unitary approach" for the video game protection,[568] "*Bezpečnostní softwarová asociace - Svaz softwarové ochrany v Ministerstvo kultury*"[569] decision indicates the contrary by stating the GUI to be protected separately from the computer program, and keeps the door open for a distributive protection.[570]

The EU jurisdiction does not have a uniform approach for the legal status of the entirety of video games as cinematographic or audiovisual works, and Member States handle the overall protection in accordance with their legislations on the national level. The German jurisdiction evaluates video games on a "dual nature" of computer program or film on a case-by-case basis.[571] The German courts approach video games as audiovisual works on the basis that either the "lack of predefined sequence of images" or the medium of fixation, as well as the interactive input from the players which is naturally limited by the computer code, do not affect the audiovisual work qualification.[572] A similar approach is also present in the doctrine in Belgium, where scholars argue that

[568] Eleonora Rosati, "Closed Subject-Matter Systems Are No Longer Compatible with EU Copyright," *GRUR Int, Forthcoming*, July 18, 2014, https://ssrn.com/abstract=2468104, 6.

[569] Bezpečnostní softwarová asociace - Svaz softwarové ochrany v Ministerstvo kultury, CJEU, Case C-393/09, December 22, 2010, ECLI:EU:C:2010:816.

[570] Maier, "Games as Cultural Heritage: Copyright Challenges for Preserving (Orphan) Video Games in the EU," 123.

[571] Tomasz Grzegorczyk, "Qualification of Computer Games in Copyright Law," *ASEJ Scientific Journal of Bielsko-Biala School of Finance and Law* 21, no. 1 (April 2017): 137; Stamatoudi, *Copyright and Multimedia Products: A Comparative Analysis*, 177.

[572] Stamatoudi, *Copyright and Multimedia Products: A Comparative Analysis*, 177. "*OLG Karlsruhe, 14 September 1986, [1986] CR 723. Galaxy Electronics Pty Ltd v. Sega Enterprises Ltd, (1997) 37 IPR 462. Other German cases where video games qualified as both computer programs and films are Super Mario III, OLG Hamburg, 12 October 1989, [1990] GRUR 127, and Amiga Club, OLG Cologne, 18 October 1991, [1992] GRUR 312.*"

video games can be protected under multiple types of works simultaneously, mostly as computer programs and audiovisual works.[573] The Belgian courts also adopted this approach by taking into account the suitable nature of modern video games under audiovisual works with their display elements of "*images that are not incidental, but were planned by the game developer*" where player's interactivity does not hinder the quality as an audiovisual work.[574] Similar distributive and dual protection principles can also be seen in other EU countries such as Denmark, France, Italy and Sweden.[575] Interestingly, a recent case from France did classify a video game as a "computer program" while discussing the digital distribution of video games and its effects on the exhaustion principles.[576] The case-by-case evaluation approach is quite prominent as seen by different approaches from the courts depending on the issue at hand.

On the EU level, the prominent approach is to protect video games as a cinematographic or audiovisual work as a whole product without prejudice to possible copyright protection applicable to separate elements within the game such as the underlying computer program as well as the literary, graphical, and aural works encrypted within the software.

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[573] Ramos et al., *The Legal Status of Video Games: Comparative Analysis in National Approaches*, 14-15.

[574] "*Nintendo v. Horelec, I.RD.I., 1996, p. 89 (Prés. Com. Bruxelles, 12 December 1995), On appeal, the Court applied the rules on computer programs without questioning the classification of video games as audiovisual works (Bruxelles, 11 April 1997, A&M, 1997, p. 265). The Court held that video games consist of computer programs that organize a series of situations to which players react, causing a series of preprogrammed events.*" quoted in Ramos et al., *The Legal Status of Video Games: Comparative Analysis in National Approaches*, 15; Stamatoudi, *Copyright and Multimedia Products: A Comparative Analysis*, 138, 177.

[575] Ramos et al., *The Legal Status of Video Games: Comparative Analysis in National Approaches*, 31, 36-37, 50-51, 85-86.

[576] Melinda Rucz, "Does the Doctrine of Exhaustion Apply to Videogames Purchased Digitally? French Court Says Oui," Kluwer Copyright Blog, December 12, 2019, accessed April 28, 2022, http://copyrightblog.kluweriplaw.com/2019/12/12/does-the-doctrine-of-exhaustion-apply-to-videogames-purchased-digitally-french-court-says-oui.

3. Turkish Law

While the Turkish jurisdiction has a strict *numerus clausus* categorization of copyright eligible works, the work types that could be placed within these categories are not limited by the law. Regardless of the denomination of the subject work, if the work can qualify to be put under at least one of the four categories, it will be eligible for copyright protection. The Turkish Law No. 5846 specifies "cinematographic works" as one of these categories and defines a cinematographic work in Article 5.[577] The term "audiovisual" is not specified as a work category however it is connected to cinematographic works through the definition of phonograms given in Article 1/B(f).[578] It may seem like the Turkish law does not provide protection to "all" audiovisual works, only "cinematographic works" given as an example for audiovisual works, since the law only specifies the category of "cinematographic works" for copyright protection. However, this interpretation would not be convenient since the special criteria defined by Article 5 for cinematographic works may well be present in different audiovisual works, depending on the legal perspective.[579]

The copyright protection criteria for cinematographic works should be construed as flexible as possible to ensure protection of all newly arising intellectual creation forms, including video games. In 1994, the 10th Chamber of the Turkish Council of State made a crucial decision on a case[580], stating that video games are in fact based on computer

[577] Law No. 5846 Article 5 "*Cinematographic works are works such as films of an artistic, scientific, educational or technical nature or films recording daily events or movies, that consist of a series of related moving images with or without sound and which, regardless of the material in which they are fixed, can be shown by the use of electronic or mechanical or similar devices.*"

[578] Law No. 5846 Article 1/B(f) "*Phonogram: The physical medium that carries sounds in which sounds of a performance or other sounds or representations of sounds are fixed, excluding fixation of sounds that are comprised in audiovisual works such as cinematographic works.*

[579] Tosun, *Sinema Eserleri ve Eser Sahibinin Hakları*, 139.

[580] Decision of the 10th Chamber of the Turkish Council of State dated 27.04.1994 and numbered E. 1992/4550, K. 1994/1856. The case was about the banderole application on video game disks and cartridges. The plaintiff company, which was the distributor of imported video game disks and cartridges,

programs as literary works, however the displayed "moving sound and images" within a planned scenario frame that are reproduced by that computer program, also fixed on a medium, falls under the very definition of cinematographic works.[581] This 1994 dated landmark decision was based on Law No. 3257[582], which is now repealed by the "*Turkish Law No. 5224 of July 14, 2004, on the Evaluation, Classification and Promotion of Cinema Films*" ("Law No. 5224").

Decades later, however, a decision of the Turkish Court of Cassation refused to consider video games as cinematographic works by simply prioritizing the computer program element, which in our opinion, is an inappropriate treatment that leaves all the creative intellectual efforts put in the process of creating the video game.[583] The Turkish Court of Cassation in their 2018 decision recalled the 1994 decision of the Turkish Council of State, and argued that video games should not be protected as cinematographic works as stated by the Turkish Council of State. The argument was that the basis of the Council's decision was the repealed Law No. 3257, and video games do not fall under the definition of cinema films in Article 3/B of the replacing legislation Law No. 5224[584], as well as the definition of cinematographic works in Article 5 of Law No. 5846. The reasoning behind this interpretation was stated as the interactivity element in video games

had requested legal protection and banderole application for the imported hard copies of video games under the Turkish Law No. 3257 of January 23, 1986, on Cinema, Video and Music Works.

[581] Decision of the 10th Chamber of the Turkish Council of State dated 27.04.1994 and numbered E. 1992/4550, K. 1994/1856. "*As a result, from the computer programs in the nature of scientific and literary works within the scope of Article 2/1 of the Law No. 5846 on Intellectual and Artistic Works; computer games that contain a set of commands that enable the computer to reproduce moving and sound images within a certain mise-en-scène or scenario frame; are within the scope of Law No. 3257 on Cinema, Video and Music Works as expressions recorded on cassettes, discs and similar moving image and sound carriers or transmitters.*"

[582] Turkish Law No. 3257 of January 23, 1986, on Cinema, Video and Music Works.

[583] Decision of the General Assembly of Criminal Chambers of the Turkish Court of Cassation dated 09.06.2018 and numbered E. 2017/642 K. 2018/295.

[584] Law No. 5224 Article 3/B "*Cinema Films: Films that are in documentary, fiction, animation and similar genres, created with the language and methods specific to the art of cinema; with or without a theme, feature-length or short, that consist of a series of related moving images with or without sound and which, regardless of the material in which they are fixed, can be shown by the use of electronic or mechanical or similar devices.*"

that provides freedom to manipulate the game beyond the act of watching, which eventually excludes them from the cinematographic works category.[585] The court further explained that video games are mixed and complex works of authorship with various visual, aural, literary and software elements and should not be considered solely as computer programs under literary and scientific works category; however, eventually proceeded to find the most suitable category for protection as the prominent element of video games that is the computer program under the category of literary and scientific works in Law No. 5846, leaving all the other elements without any evaluations as to the method of copyright protection.[586] The same approach has been practiced in other following decisions of the Turkish Court of Cassation as well.[587] This vague and superficial evaluation leaves out many questions regarding the sufficient protection of video games as a singular work as well as the distributive protection of elements other than the underlying computer program.

Another crucial matter that needs to be mentioned regarding this decision of the Turkish Court of Cassation is regarding the banderole requirement regarding video games. Law No. 5846 Article 81(1) sets the standards for compulsory banderole requirement for

[585] Decision of the General Assembly of Criminal Chambers of the Turkish Court of Cassation dated 09.06.2018 and numbered E. 2017/642 K. 2018/295. "*Based on these definitions; it cannot be said that computer games, which have the freedom to interact and manage the game beyond the act of watching, are no longer within the scope of the category of cinematographic works.*"

[586] Decision of the General Assembly of Criminal Chambers of the Turkish Court of Cassation dated 09.06.2018 and numbered E. 2017/642 K. 2018/295. "*On the other hand, due to many elements (such as video, text, picture, photograph, visual and audio tools, graphics, animation, and software code) that computer games contain, it would not be appropriate to evaluate them only as computer programs and to evaluate them within the scope of scientific works. For these reasons; it is necessary to accept that computer games, which have the characteristics of a mixed work in terms of many elements they contain, will be subject to the protection provisions regarding computer programs, since they are software-based, in other words, they are built on a computer software that has the characteristics of a computer program.*"

[587] Decision of the General Assembly of Criminal Chambers of the Turkish Court of Cassation dated 09.10.2018 and numbered E. 2018/398, K. 2018/413; Decision of the 19th Criminal Chamber of the Turkish Court of Cassation dated 09.07.2018 and numbered E. 2018/3836, K. 2018/8304; Decision of the 19th Criminal Chamber of the Turkish Court of Cassation dated 17.10.2018 and numbered E. 2018/4281, K. 2018/10439; Decision of the 19th Criminal Chamber of the Turkish Court of Cassation dated 31.10.2018 and numbered E. 2018/4456, K. 2018/11169;

certain literary and artistic works and states that "*it is compulsory to affix banderoles on the reproduced copies of musical and cinematographic works and on non-periodical publications*". Furthermore, this provision is continued by the optional banderole requirement for works other than the previously listed work types as "*it is also compulsory, upon the request of the author or right holder, to affix banderoles on the reproduced copies of other works that can be easily copied*". The following paragraphs of this provision prescribe criminal sanctions regarding infringements against banderole applications and requirements accordingly.[588] The law limits the compulsory banderole requirement to musical works, cinematographic works, and non-periodical publications such as books.

The procedural standards for banderole application are regulated with "*Regulation on the Procedure and Principles for the Implementation of the Banderole System*" ("Banderole Regulation"). The Turkish Court of Cassation stated that the amendment made to Article 7 of the Banderole Regulation on November 6, 2004, which provided compulsory banderole requirement for video games for the first time[589], resulted from the 1994 decision of the Turkish Council of State which classified video games as

[588] Law No. 5846 Article 81(4) "*Any person who reproduces a work in contravention of the banderole requirements or without a banderole and puts it up for sale, sells, distributes or buys or accepts due to commercial purposes shall be sentenced to imprisonment from one year to five years or a judicial fine up to five thousand days.*"; Article 81(9) "*Any person who produces, puts up for sale, sells, distributes, buys, accepts or uses counterfeit banderoles shall be sentenced to imprisonment from three years to seven years and a judicial fine up to five thousand days.*"; Article 81(10) "*Any person who uses duly obtained banderoles on another work shall be sentenced to imprisonment from one year to five years and a judicial fine up to one thousand and five hundred days.*"; Article 81(11) "*Any person who obtains banderoles by collusive behaviors and without authority shall be sentenced to imprisonment from one year to three years.*"; Article 81(12) "*Any person who provides banderoles to unauthorized persons shall be sentenced to imprisonment from two years to five years and a judicial fine up to five thousand days.*"

[589] Banderole Regulation Article 7 (Amendment with its title: R.G.-06/11/2004-25635) "*Regardless of the material in which they are fixed; it is compulsory to use a banderole for computer games that consist of a series of related moving images with or without sound, which can be shown by the use of electronic or mechanical or similar devices.*"; The subsequent amendment made to this provision on November 1, 2010, which was in force at the time of Decision of the General Assembly of Criminal Chambers of the Turkish Court of Cassation dated 09.06.2018 and numbered E. 2017/642 K. 2018/295, added the requirement of recording and registration: Banderole Regulation Article 7 (Amendment: R.G.-1/11/2010-27746) "*Regardless of the material in which they are fixed; it is compulsory to use a banderole for computer games that consist of a series of related moving images with or without sound, which can be shown by the use of electronic or mechanical or similar devices, and have been recorded and registered.*"

cinematographic works. Nonetheless, the Turkish Court of Cassation argued that the decision of the Turkish Council of State lost its validity when Law No. 3257, which was the basis legislation for the decision, was repealed; hence, the classification of video games as cinematographic works, which are one of the *numerus clausus* subjects to compulsory banderole requirement specified in Article 81 of Law No. 5846, is no longer valid.[590] The Turkish Court of Cassation further stated that the most a video game can acquire from the banderole application is the optional banderole requirement as a computer program which could be easily copied, simply because video games are software-based. [591] In accordance with the principle of "*legality of crimes and punishments*", criminal sanctions prescribed in Article 81 of Law No. 5846 can only be applicable for banderole crimes regarding musical and cinematographic works and non-periodical publications subject to compulsory banderole requirement along with works subject to optional banderole requirement if requested. The Turkish Court of Cassation argued that if the author of the video game did not request for optional banderoles, then no crime is present, because Banderole Regulation cannot broaden the scope of crimes in Law No. 5846, against the *legality* principle, by making video games subject to compulsory banderole requirement.

The issue with the Turkish Court of Cassation's evaluation of video games in terms of banderole requirement is that, in our opinion, the legislation indicates otherwise. We interpret the legislation with the thought that the law makers did not intend to broaden

[590] Decision of the General Assembly of Criminal Chambers of the Turkish Court of Cassation dated 09.06.2018 and numbered E. 2017/642 K. 2018/295. "*However; since Law No. 3257 was repealed with Article 16 of the Law No. 5224 on the Evaluation, Classification and Promotion of Cinema Films, which entered into force on 21.07.2004, the aforementioned decision of the 10th Chamber of the Council of State no longer has a legal basis.*"

[591] Decision of the General Assembly of Criminal Chambers of the Turkish Court of Cassation dated 09.06.2018 and numbered E. 2017/642 K. 2018/295. "*In terms of the requirement of banderole application; it must be acknowledged that computer games, which cannot be considered, in terms of publication type, within the scope musical and cinematographic works and non-periodical publications which are compulsory to be affixed with a banderol in the first paragraph of Article 81 of Law No. 5846, remain within the scope of other works that can be easily copied due to their software-based nature.*"

the scope of crimes and punishments defined in Law No. 5846 through the amendments made to Banderole Regulation. Video games do in fact have the qualities of cinematographic works as accepted earlier by the Turkish Council of State and several First Instance Courts, as well as in the doctrine.[592] There are a couple certain legislative matters that must be addressed to support this approach.

First of all, "*Regulation on the Recording and Registration of the Intellectual and Artistic Works*" ("Registration Regulation") Article 5 regulates the works subject to "compulsory recording and registration", which was only for cinematographic and musical works until 2008.[593] The amendment made on October 28, 2008, made a crucial addition to the provision by explicitly including video games within the scope of compulsory recording and registration requirement.[594] The purpose behind this addition, in our opinion, is not to create a separate compulsory recording and registration requirement which will apply to video games in addition to musical and cinematographic works that were framed within Law No. 5846 Article 13(3)[595]; but to simply *recognize*

[592] Tekinalp, *Fikrî Mülkiyet Hukuku*, 127; Ateş, *Fikrî Hukukta Eser,* 163; Ataşlar and Ülgen, *Türk Hukukunda Dijital Oyunların Korunması*, 29; Suluk/Nal (Karasu), *Fikri Mülkiyet Hukuku*, 67; Kılıç, *Bilgisayar Oyunlarının Eser Niteliği,* 161; Güneş, *Uygulamada Fikir ve Sanat Eserleri Hukuku*, 84.

[593] Registration Regulation Article 5(1) (before the 2008 amendment) "*In cinematographic and musical works, film producers that make the first fixation of films and phonogram producers that make the first fixation of sounds, without the aim of creating any rights, shall have their productions containing cinematographic and musical works recorded and registered for the purpose of preventing violation of their rights, facilitating proof of rightholdership and tracking the authority to exercise economic rights.*"

[594] Registration Regulation Article 5(1) (Amendment: R.G.-28/10/2008-27038) "*… In addition, just as works containing cinematographic works, because they contain moving and sound images within the frame of a certain mise-en-scène or scenario, computer games are recorded and registered by the rightholders for the purpose of determining the rights owned and facilitating proof of rights.*"

[595] Law No. 5846 Article 13(3) "*Film producers that make the first fixation of films and phonogram producers that make the first fixation of sounds shall have their productions containing cinematographic and musical works recorded and registered for the purpose of preventing violation of their rights, facilitating proof of rightholdership and tracking the authority to exercise economic rights, and without the aim of creating any rights. The recording and registration of all the works protected under this Law may be made for the same purpose upon demand of the authors; the authority to exercise economic rights may also be recorded. The Ministry can not be held responsible for these procedures which are made based on declaration. However, persons who make a wrong declaration in the procedures on which the recording and registration shall be based, with regard to moral or economic rights which they do not own or whose non-existence was known or should have been known to them, shall be subject to the legal and criminal sanctions set out in this Law. All fees regarding recording and registration procedures carried out under this Law shall be determined by the Ministry. The rules and procedures of recording*

the cinematographic work nature that could be found in video games and ensure the legal protection. To qualify as a cinematographic work, the law set certain conditions such as containing related moving pictures with or without sound, fixation on a medium suitable for display, production with cinematography techniques, and originality of the authors. The same conditions certainly apply for video games on most occasions. The interactivity element and the underlying computer program do not eliminate the quality of a cinematographic work in a video game. This provision added to Registration Regulation reflects the purpose of the law maker by bringing video games closer to cinematographic works.

The second matter that must be examined is the multiple amendments made to Article 7 of Banderole Regulation over the decades. Long before the Turkish Court of Cassation ruled for video games to be protected as computer programs and not as cinematographic works in 2018, the 2004 version of Article 7 of Banderole Regulation was worded as "*regardless of the material in which they are fixed; it is compulsory to use a banderole for computer games that consist of a series of related moving images with or without sound, which can be shown by the use of electronic or mechanical or similar devices*". The additional condition to "*have been recorded and registered*" for the compulsory banderole application on video games was implemented into this provision on November 1, 2010[596], only after the 2008 amendment made to Registration Regulation Article 5(1) that made video games subject to compulsory recording and registration same as cinematographic works. The 2010 version of the Article 7 of Banderole Regulation was in force when the Turkish Court of Cassation made their 2018 ruling. However,

and registration, the determination of the fees and other matters shall be set out in a by-law to be issued by the Ministry."

[596] Banderole Regulation Article 7 (Amendment: R.G.-1/11/2010-27746) "*Regardless of the material in which they are fixed; it is compulsory to use a banderole for computer games that consist of a series of related moving images with or without sound, which can be shown by the use of electronic or mechanical or similar devices, and have been recorded and registered.*"

Article 7 of Banderole Regulation was recently amended again, on January 14, 2021.[597] The amendment tweaked the provision by explicitly stating that computer games are now "*subject to banderole procedures regarding cinematographic works*" and removed the additional condition for recording and registration, since it is no longer necessary to mention. Instead of wording it as a separate compulsory banderole requirement, the Banderole Regulation now clearly states that video games are subject to cinematographic work banderole procedures, which are already subject to compulsory recording and registration.

In our opinion, the law maker's intentions are clear as day, getting rid of any hesitations as to the nature of video games as cinematographic works and clearly expressing that the principle of *legality of crimes and punishments* is in no way overlooked with any attempts to broaden the scope of banderole crimes defined in Article 81 of Law No. 5846. The amendments made to Article 7 of Banderole Regulation is evidence that banderole crimes should apply to video games *under the category of cinematographic works*. Thus, the recent practices of the Turkish Court of Cassation regarding the work category and type of video games determined as computer programs under literary works while waving aside the cinematographic work nature simply because of the interactivity aspect should be renounced as soon as possible.

As explained in the US and the EU practices for video games as cinematographic and audiovisual works, the prevalent approach is to ensure cinematographic or audiovisual work protection for video games while also taking the computer program protection into account. Despite the possible flaws in this dual protection regime, it is the

[597] Banderole Regulation Article 7 (Amendment: R.G.-14/1/2021-31364) "*Regardless of the material in which they are fixed; computer games that consist of a series of related moving images with or without sound, which can be shown by the use of electronic or mechanical or similar devices, are subject to banderole procedures regarding cinematographic works.*"

most common and safeguarding method of protection for video games, almost universally accepted, also supported by many scholars in the Turkish doctrine.[598]

The Turkish jurisdiction must also consider the most efficient way of unitary protection while solving the conflictions and irregularities between the court practices and the legislations. This would also clear the differences in practice compared to the approaches from the US courts and the CJEU, towards a more harmonized protection of video games as cinematographic or audiovisual works. It should also be noted that the practices of Directorate General for Copyright in Turkey have been considering video games subject to "compulsory recording and registration" and "compulsory banderole requirement" for decades, based on the 1994 decision of the Turkish Council of State and relevant regulations. Providing copyright protection within the right context and categorization for video games also becomes crucial to harmonize legal and administrative practices within the Turkish jurisdiction alone.

The number of video game related cases brought before the courts of law in the Turkish jurisdiction remains quite few to this day, and only handled by criminal courts regarding the copyrighted work classification. Copyrighted work evaluation of video games from the Turkish courts so far is simply within the framework of banderole crimes. It is possible, and also necessary, to see further clarification on video games as holistic copyrighted works not only from the perspective of criminal courts but also from the civil courts in the future. Then, we may see a different view on the cinematographic and audiovisual nature of video games, beyond the computer program element; and maybe, also a clarification on the holistic protection of all the other elements other than the computer program.

[598] Tekinalp, *Fikrî Mülkiyet Hukuku*, 127; Ateş, *Fikrî Hukukta Eser*, 163; Ataşlar and Ülgen, *Türk Hukukunda Dijital Oyunların Korunması*, 29; Suluk/Nal (Karasu), *Fikri Mülkiyet Hukuku*, 67; Kılıç, *Bilgisayar Oyunlarının Eser Niteliği,* 161; Güneş, *Uygulamada Fikir ve Sanat Eserleri Hukuku*, 84.

4. Interactive Movies: Game or Film?

Before concluding our assessments on video games as cinematographic and audiovisual works, the interesting subject of interactive movies concept should be examined. Interactive movies are exactly what they are named. They are audiovisual or cinematographic works that have the additional interactivity element that is not present in the traditional works of cinema. While comparing examples of interactive movies, for the sake of evaluation, we will refer to traditional works of cinema as "films" and video games as "games" in this section.

"Interactive movie" is a sub-genre of adventure video games, mostly based on the game's production method, flow, and mechanics. There are levels to how much "real" filmed footage is used in games as interactive movies, as well as the extent of interactivity required by the player. Films as interactive movies are more focused on placing the viewers in a "spectator" position and lead them into minimal interaction with choices affecting turning points in the course of the next scenes to play out, while games as interactive movies "*using the same technical means, add rules to the experience and ways to measure player performance*" by raising the threshold of interactive involvement of the players.[599]

"*Fahrenheit: Indigo Prophecy*"[600] is a game where players can walk around freely and interact with NPCs, other controllable characters and objects.[601] The game's narrative is designed like a mystery-action movie, containing 44 separate scenes where players can

[599] Jonathan Lessard, "Fahrenheit and the Premature Burial of Interactive Movies," *Eludamos: Journal for Computer Game Culture* 3, no. 2 (2009): 196.

[600] "Fahrenheit" (with the alternative title "Indigo Prophecy") is an action-adventure game developed by Quantic Dream and published by Atari, first released on September 16, 2005. A remastered version of the game was released on January 28, 2015.

[601] Lessard, "Fahrenheit and the Premature Burial of Interactive Movies," 198.

take control of one to five characters playing out each sequence, affecting and altering the rest of the scenes that follow.[602] The creators of *Fahrenheit* described the game as an "*interactive drama*" with "*bending stories*".[603] *Fahrenheit* also has a game mechanism called "quick time events" ("QTE") where players are taken by surprise and required to take action with the controller they use, according to the indicated command prompts appearing on screen in a very limited time window and in the correct sequences, in order to accomplish certain objectives and eventually "survive".[604] QTEs are very common not only in interactive movies but other game genres as well. The addition of QTEs enhance the immersive nature of video games by requiring greater attention from the players.[605]

Another example is "*Phantasmagoria*"[606], which is basically a horror-thriller film in the form of a video game. The game was filmed with real and live actors and actresses performing in front of blue screen sets, while the visual elements of background art and "maps" are supported with 3D rendered CGI.[607] *Phantasmagoria* is the perfect blend of actual video and film footage and computer graphics. The game tells the story of the writer Adrienne Delaney and her husband moving into a new house, more like a mansion, which has an unsettling history along with questionable supernatural occurrences.[608] The gameplay is based on usual adventure game qualities of exploration and puzzle solving with point-and-click mechanics.

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[602] Ben Miller, "Immersive Game Design: Indigo Prophecy," in *Well Played 2.0: Video Games, Value and Meaning*, ed. Drew Davidson (Pittsburg, PA: ETC Press, 2010), 190.

[603] Laura MacDonald, "Quantic Dream - David Cage and Guillaume De Fondaumiere," Adventure Gamers, August 3, 2005, accessed April 3, 2022, https://adventuregamers.com/articles/view/17865.

[604] Miller, "Immersive Game Design: Indigo Prophecy," 193-194.

[605] Miller, "Immersive Game Design: Indigo Prophecy," 194.

[606] "Phantasmagoria" is a point-and-click adventure horror game designed by Roberta Williams and released by Sierra On-Line on August 24, 1995.

[607] Alicia Ong, "Game Review of Roberta Williams' Phantasmagoria," History of Computer Game Design: Technology, Culture, and Business, February 22, 2001, accessed April 4, 2022, https://web.stanford.edu/group/htgg/cgi-bin/drupal/sites/default/files2/aong_2001_1.pdf.

[608] Ong, "Game Review of Roberta Williams' Phantasmagoria".

Figure 10. An in-game still from "Phantasmagoria" (1995) featuring the main character Adrienne Delaney (portrayed by Victoria Morsell).[609]

Another interactive movie example is "*Black Mirror: Bandersnatch*"[610] from Netflix. *Bandersnatch* is a "film" from every aspect, filmed and produced with usual cinematography techniques no different than any other movie or drama series in the market. The viewers are occasionally prompted to decide and take a certain action or dialogue option that alters the progression of the rest of the film. Depending on the choices made, the film plays out with alternative selections of sequences to eventually reach a conclusion in the narrative.

Drawing the line between different productions of interactive movies as to the "game" or "film" distinction is not easy. Certainly, films are naturally cinematographic

[609] "Phantasmagoria" (original), Chad Concelmo, "Why Phantasmagoria Is Awesome (and Why It Could Never Be Released Today)," Destructoid, accessed April 3, 2022, https://www.destructoid.com/why-phantasmagoria-is-awesome-and-why-it-could-never-be-released-today.

[610] "Black Mirror: Bandersnatch" is an interactive movie in the science fiction anthology series Black Mirror, written by series creator Charlie Brooker and directed by David Slade, premiered on Netflix on December 28, 2018.

works, while games are based on the computer program that is coded for operating the video game. If *Phantasmagoria* is strictly a game and not a film, then the copyrighted work questions of what happens to the purely cinematographic productions in the game and the real video footage featuring real actors and actresses; or for *Fahrenheit*, the fate of the amazing plot and script written for the game which is by far more detailed than a straightforward film script, remain unanswered. Again, *Bandersnatch* is a "film" published on a streaming platform featuring countless movies and drama series, in fact, *Bandersnatch* is a product that is a part of the drama series "*Black Mirror*". The interactivity aspect is often mentioned as a distinctive element while comparing video games to cinematographic works. As an interactive movie, would that make *Bandersnatch* a "game"?

Interactivity provides "choices" for the player or the viewer; however, it does not turn them into authors.[611] While a game as an interactive movie provides somewhat more freedom and visual output alternatives, a film as an interactive movie is a little less flexible in that aspect. Films as interactive movies are more limited for each scenario that could be played out and the displayed output may be more static as in a "closed circuit" form, compared to games that allow different camera movement controls and perspectives.[612] Yet again, every possible alternative scenario is already decided by the work's author. Despite the extent of interactivity found in interactive movies produced as either games or films, interactivity in a technical sense is not a definite distinction point in the modern digital era.

While the US courts and some EU state courts already recognized that the interactivity element does not prevent a video game to be protected as an audiovisual

[611] Paul Göttlich, "Online Games from the Standpoint of Media and Copyright Law," *IRIS Plus: Legal Observations of the European Audiovisual Observatory* 2007, no. 10 (2007): 4.

[612] Göttlich, "Online Games from the Standpoint of Media and Copyright Law," 4.

work[613], the Turkish Court of Cassation took the opposite approach and based their decision for video games as computer programs and not cinematographic works on the very aspect of interactivity.[614] Excluding video games from the scope of cinematographic works category simply because of the interactive nature is not a well-directed evaluation. As it could be seen in the various creations of interactive movies, video games are closer to cinematographic and audiovisual works than they seem. Along the same line, it is safe to say that some films as cinematographic and audiovisual works are also getting closer to video games by taking the form of interactive movies. Sure enough, no matter how close games and films are to each other, this alikeness would not necessarily change their fundamental nature as a game or film. However, it is very clear that these creations are not so different, and the affinity should be taken into consideration while evaluating the applicability of cinematographic and audiovisual work protection for video games.

B. Video Games as Multimedia Works

"Multimedia work category" does not yet have an official presence within the widely accepted and "common" copyrighted work categories. Some jurisdictions provide copyright protection for works within the existing categories and some does not enforce a classification; thus, the questions on the method of copyright protection for multimedia works remain with their significance regarding the categorization as a "whole work" or separate protection granted to the components within.

Multimedia works are newly emerged types of works that came with the advancements in technology of digital era. According to *Stamatoudi*, multimedia works

[613] Stern Electronics Inc. v. Kaufman, 669 F.2d 852, 856 (2d Cir. 1982).

[614] Decision of the General Assembly of Criminal Chambers of the Turkish Court of Cassation dated 09.06.2018 and numbered E. 2017/642 K. 2018/295.

are "hybrid products" that combine multiple elements such as software, data, and graphics; each one bringing them closer to multiple types of works including computer programs, databases, or even cinematographic works.[615] Multimedia works are fundamentally a combination of multiple types of works in a unique manner not easily put under any copyrighted work category. They incorporate various visual, aural, and literary elements intertwined.[616] The distinctive qualities that put multimedia works on a different level than already easily categorized works are that they are created with the integrated elements of differing natures; they require some extent of interactivity; and they are digitalized, meaning, they are supported with an underlying software.[617] *Stamatoudi* states that multimedia works can even be considered "a category in itself".[618] *Aplin* also provides a definition for multimedia by looking from legal and technical perspectives and emphasizes "computerized combination" of discrete and continuous media creations which the user can interact with on different levels, and the final product that is available in either online or offline forms of expression.[619]

Video games are only one form of many multimedia products. In fact, the scope of multimedia is bigger than video games.[620] The interactivity element in video games is often the reason for hesitations regarding copyrighted work evaluations. However, as

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[615] Irini A. Stamatoudi, "Are Sophisticated Multimedia Works Comparable to Video Games?" *Journal of the Copyright Society of the U.S.A.* 48, no. 3 (2001): 468.

[616] Stamatoudi, "Are Sophisticated Multimedia Works Comparable to Video Games?" 469.

[617] Stamatoudi, "Are Sophisticated Multimedia Works Comparable to Video Games?" 469-479; Stamatoudi defines multimedia works as "*works which combine on a single medium more than one different kind of expressions in an integrated digital format, and which allow their users, with the aid of a software tool, to manipulate the contents of the work with a substantial degree of interactivity.*"

[618] Stamatoudi, *Copyright and Multimedia Products: A Comparative Analysis*, 17.

[619] Tanya Aplin, *Copyright Law in the Digital Society: The Challenges of Multimedia* (Oxford: Hart Publishing, 2005). 15. "*A computerised combination of multiple digital media, including at least one discrete media, such as text, graphics or still images, and one continuous media, such as sound, animation or moving images, where a user may interact with that digital information in varying degrees. It can be distributed in either stand-alone (off-line) media, such as CDRom or DVD-Rom, or via communication networks, such as the Internet (ie on-line).*"

[620] Stamatoudi, *Copyright and Multimedia Products: A Comparative Analysis*, 184.

explained in the previous sections of our study, interactivity required by the players does not really complicate the issue of authorship of the work, neither the alternative display outputs caused by it.[621] The comprehensive scope of multimedia works includes video games by their certain qualities of multiple works brought together on an interactive digital basis.

Multimedia works are recognized in the doctrine in terms of copyright eligibility. The differences in opinion generally arise from the attempts to fit them into already existing categories or to make them a standalone category. According to *Tekinalp*, multimedia works do not constitute a new copyrighted work category. Multimedia creations are already "computer-supported" works as defined in the legislation, falling under either one of the work categories or protected as "adaptations"; and video games are one type of multimedia creations.[622]

Aksu also considers video games as multimedia works based on their complex structures. According to *Aksu*, the computer program and displayed graphic and audio elements along with the effects connected to that computer program should be severalized and protected accordingly. Simply computer program protection is not sufficient for multimedia products like video games. Eventually, creating a separate multimedia work category established with dedicated protection conditions could be considered by law makers to answer the needs born from technological advancements.[623]

Similarly, *Ateş* also states that multimedia works can be protected under any suitable already existing work category, depending on the qualities of the multimedia

[621] Stamatoudi, *Copyright and Multimedia Products: A Comparative Analysis*, 170.

[622] Tekinalp, *Fikrî Mülkiyet Hukuku*, 132.

[623] Aksu, *Bilgisayar Programlarının Fikrî Mülkiyet Hukukunda Korunması,* 134-135.

work at hand. The prominent element of a video game is the "moving pictures", therefore a multimedia product as a video game could be placed under cinematographic works.[624]

Yavuz also defines video games as interactive multimedia products with their content of multiple elements of images, characters, along with the accompanying music and sound effects in the background. Modern complex video games are created with the contributions and efforts of graphic designers and sound experts. The displayed imagery of video games when launched is the result of the calculations and coding from the program developers. The end product is a continuous series of images like a film.[625]

Italian and French courts recognized video games as complex multimedia works; however, multimedia category is non-existent in the copyright legislations. Thus, this classification falls short in terms of providing copyright protection for video games as a whole under the sole category of multimedia works.[626] The Italian court while referring their questions to the CJEU regarding the case of *Nintendo v PC Box,* already took into consideration the hybrid nature of video games and defined video games as "complex multimedia works".[627] While the term "multimedia" is not present in any of the EU copyright directives, Recital 10 of "InfoSoc Directive" only mentions multimedia products along with phonograms and films which are subject to considerable amount of investment.[628] Additionally, French courts considered video games as multimedia works

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[624] Ateş, *Fikrî Hukukta Eser*, 163.

[625] Yavuz, *Fikir ve Sanat Eserleri Kanunu Yorumu*, 60-61.

[626] Stein, "The Legal Nature of Video Games - Adapting Copyright Law to Multimedia," 53.

[627] Opinion of Advocate General Sharpston delivered on 19 March 2013, Nintendo Co. Ltd and Others v PC Box Srl and 9Net Srl, CJEU, Case C-355/12, paragraph 25. "*The referring court finds that, in line with the case-law of the Italian courts, video games such as those in issue cannot be regarded simply as computer programs but are complex multimedia works expressing conceptually autonomous narrative and graphic creations.*"

[628] Directive 2001/29/EC Recital 10 "*If authors or performers are to continue their creative and artistic work, they have to receive an appropriate reward for the use of their work, as must producers in order to be able to finance this work. The investment required to produce products such as phonograms, films or multimedia products, and services such as "on-demand" services, is considerable. Adequate legal protection of intellectual property rights is necessary in order to guarantee the availability of such a reward and provide the opportunity for satisfactory returns on this investment.*"

in one of their rulings, while deciding that they can only be protected under the distributive protection regime because "multimedia works" are not eligible for copyright protection as a singular product in accordance with the work categories in the law.[629]

The prevalent copyright protection method for video games in most jurisdictions is the "dual protection" of computer program along with the audiovisual elements. While this method is somewhat sufficient for now, the question remains as to the necessity of creating a *sui generis* multimedia category to provide a unified protection by law.[630] The current practices in the US, the EU and Turkish jurisdictions recognize the existence of multimedia works, but not to the extent of creating a new "legal" category for them. The severe changes in the forms of expression caused by constant technological advancements may entail the establishment of a new work category for creative multimedia products in the future. When that moment happens to arrive, it would be possible to put video games under the scope of "multimedia work" protection without a doubt.

III. VIDEO GAME ELEMENTS OUTSIDE THE COPYRIGHT PROTECTION

Video games are eligible for copyright protection for certain. However, there are some fundamental elements found in every video game which cannot enter the copyright boundaries. The principles of copyright grants protection for the original expression, not the "ideas" behind. Copyright also prevents any monopoly over common and inevitable forms of expression by their nature. And sometimes, copyright excuses the unauthorized

[629] Stein, "The Legal Nature of Video Games - Adapting Copyright Law to Multimedia," 53; Grzegorczyk, "Qualification of Computer Games in Copyright Law," 139; Ramos et al., *The Legal Status of Video Games: Comparative Analysis in National Approaches*, 36. "*…video game is a complex work that cannot be reduced to its sole software dimension, however significant it may be, so that each of its components is governed by the legal framework applicable to it according to its nature…*"

[630] Stamatoudi, *Copyright and Multimedia Products: A Comparative Analysis*, 210.

use of some copyrighted expressions, only to a certain extent of course. The elements that are excluded from the scope of copyright appear in different forms. In this final section that concludes our study, we will take a closer look into these particular elements that cannot benefit from copyright protection.

A. The "Game"

Copyright does not extend the protection to ideas behind the expression.[631] It is the most significant principle applied to the evaluation of copyrighted works. From a wide perspective, this principle applies to video games by making a distinction between the idea of a game and the creative and original expression of that idea which forms that game in its entirety. Making this distinction, however, has not been easy since the very first cases brought before the courts of law.[632] The game mechanics that define the "gameplay" are part of the "idea", so they *generally* can't be subject to copyright infringement,[633] while game rules are certainly not copyrightable at all.[634] The copyright protection starts with the intellectual and artistic expressions of the elements in a video game that are beyond the rules and mechanics. The complexity of video games makes it difficult to determine where the idea ends and the expression starts, which brings the "idea-expression dichotomy" and the "game cloning" problems.

Revisiting "*Atari, Inc. v. Amusement World, Inc.*", the court was looking at the similarities between two games: Atari's "*Asteroids*" and Amusement World's

[631] TRIPS Article 9(2); WCT Article 2.

[632] Drew S. Dean, "Hitting Reset: Devising A New Video Game Copyright Regime," *University of Pennsylvania Law Review* 164, no. 5 (April 2016): 1251.

[633] Lunsford, "Drawing a Line between Idea and Expression in Videogame Copyright: The Evolution of Substantial Similarity for Videogame Clones," 91.

[634] Lunsford, "Drawing a Line between Idea and Expression in Videogame Copyright: The Evolution of Substantial Similarity for Videogame Clones," 93.

"*Meteors*".[635] The games were about controlling a spaceship and shooting the floating rocks and enemy spaceships in space while avoiding fire attacks from those enemy spaceships.[636] While both games shared a lot of conceptual similarities, they were also found different on certain aspects such as the color and movement of the rocks, 2D and 3D stylized art, the pace of the games, and background images.[637] The court looked for "substantial similarities" and also differences between the games of the plaintiff and the defendant. The determining standard was set as the "look and feel" of a game that shows itself in the unique way of expression and the overall design of various elements, which were found different enough to save the defendant.[638] Eventually, the court found that the defendant did in fact copy the idea of the plaintiff's game, but not the expression; so, no copyright infringement occurred.[639] The idea-expression dichotomy was carefully applied in this case and the court stated that Atari copyrighted the expression of the "idea

[635] Atari, Inc. v. Amusement World, Inc., 547 F. Supp. 222 (D. Md. 1981).

[636] 547 F. Supp. 222, 224 (D. Md. 1981). "*The principle of the two games is basically the same. The player commands a spaceship, represented by a small symbol that appears in the center of the screen. During the course of the game, symbols representing various sized rocks drift across the screen, and, at certain intervals, symbols representing enemy spaceships enter and move around the screen and attempt to shoot the player's spaceship. Four control buttons allow the player to rotate his ship clockwise or counterclockwise, to move the ship forward, and to fire a weapon. A variety of appropriate sounds accompany the firing of weapons and the destruction of rocks and spaceships.*"

[637] 547 F. Supp. 222, 225 (D. Md. 1981).

[638] 547 F. Supp. 222, 229-230 (D. Md. 1981). "*In light of this conclusion that the similarities in the forms of expression are inevitable, given the idea and the medium, the large number of dissimilarities becomes particularly significant. Given the unavoidable similarities in expression, the Court finds that the ordinary player would regard the aesthetic appeal of these two games as quite different. The overall "feel" of the way the games play is different. In "Meteors" the symbols are more realistic, the game begins with the player's spaceship blasting off from earth, and the player's spaceship handles differently and fires differently. "Meteors" is faster-paced at all stages and is considerably more difficult than "Asteroids."*""

[639] 547 F. Supp. 222, 229-230 (D. Md. 1981). "*It seems clear that defendants based their game on plaintiff's copyrighted game; to put it bluntly, defendants took plaintiff's idea. However, the copyright laws do not prohibit this. Copyright protection is available only for expression of ideas, not for ideas themselves. Defendants used plaintiff's idea and those portions of plaintiff's expression that were inextricably linked to that idea. The remainder of defendants' expression is different from plaintiff's expression. Therefore, the Court finds that defendants' "Meteors" game is not substantially similar to and is not an infringing copy of plaintiff's "Asteroids" game.*"

of a game with asteroids", but not the idea itself; so others can freely use that idea so long as they incorporate a different expression in their game involving asteroids.[640]

In "*Atari, Inc. v. North American Philips Consumer Electronics Corp.*", the court was again looking at similar games.[641] Atari's "*PAC-MAN*" and North American's "*K.C. Munchkin*" were both games involving gobblers, mazes, dots, and ghost monsters. Despite certain differences in the expression as to the designs of "moving dots and the variety of maze configurations", contrary to the previous case, this time the court found copyright infringement by cloning the overall "concept and feel" of the copyrighted game of *PAC-MAN*.[642] The court quoted another court decision by stating that "*it is enough that substantial parts were lifted; no plagiarist can excuse the wrong by showing how much of his work he did not pirate.*"[643]

One of the recent cases regarding unprotected elements in video games is "*Tetris Holding, LLC v. Xio Interactive, Inc.*" where the popular game "*Tetris*" and its clone "*Mino*" was evaluated.[644] Defendant Xio admitted that they took inspiration from *Tetris* when creating *Mino*, even to the extent that Mino "*was copied from Tetris and was intended to be its version of Tetris*". The crucial point in the defense was that *Mino* only

[640] 547 F. Supp. 222, 227 (D. Md. 1981). "*Thus, when plaintiff copyrighted his particular expression of the game, he did not prevent others from using the idea of a game with asteroids. He prevented only the copying of the arbitrary design features that makes plaintiff's expression of this idea unique. These design features consist of the symbols that appear on the display screen, the ways in which those symbols move around the screen, and the sounds emanating from the game cabinet. Defendants are entitled to use the idea of a video game involving asteroids, so long as they adopt a different expression of the idea i.e., a version of such a game that uses symbols, movements, and sounds that are different from those used in plaintiff's game.*"

[641] Atari, Inc. v. North American Philips Consumer Electronics Corp., 672 F.2d 607 (7th Cir. 1982).

[642] 672 F.2d 607, 619-620 (7th Cir. 1982). "*Although not "virtually identical" to PAC-MAN, K.C. Munchkin captures the "total concept and feel" of and is substantially similar to PAC-MAN.*"

[643] 672 F.2d 607, 619 (7th Cir. 1982); Sheldon v. Metro-Goldwyn Pictures Corp., 81 F.2d 49, 56 (2d Cir. 1936).

[644] Tetris Holding, LLC v. Xio Interactive, Inc., 863 F. Supp.2d 394 (D.N.J. 2012).

carefully copied the unprotected elements of *Tetris*.[645] The court recognized that the rules and mechanics of the game are not copyrightable. Defendant Xio argued that it is not only the ideas and rules that are unprotectable; the "functional aspects" of *Tetris* were also excluded from copyright.[646] However, the court also clarified that copyright protection covers the way the author chooses to express the rules and functional aspects regarding gameplay.[647] As long as the form of expression is not limited in ways to express an idea, then there is no "merger" of idea and expression, and the original expression of that idea is eligible for copyright protection.[648] The court examined the side-by-side comparison of both games and found that the games were so substantially similar, the "look and feel" of both games were almost identical to the extent of "literal copying", and a common player would not be able to tell apart the games.[649]

One of the defenses regarding the "rules" of the game was the size of the play grid being "20 units high by 10 units wide", which was again copied exactly by the defendant Xio. The court stated that this was not necessarily a rule of the game, and even if it was,

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[645] 863 F. Supp.2d 394, 397 (D.N.J. 2012). "*Xio does not dispute any of these facts. Yet, Xio says, it copied Tetris in such a way so as to not copy any protected elements after diligently researching intellectual property law, and that it also tried to obtain a license from Tetris Holding, but was refused.*"

[646] 863 F. Supp.2d 394, 404 (D.N.J. 2012). "*Xio repeatedly emphasizes that Tetris Holding cannot protect by copyright what is only protectible by patent and therefore not only are the ideas of Tetris (or the rules of the game) not protectible, but neither are the "functional aspects" of the game or expressive elements related to the game's function or play.*"

[647] 863 F. Supp.2d 394, 404-405 (D.N.J. 2012). "*Xio is correct that one cannot protect some functional aspect of a work by copyright as one would with a patent. But this principle does not mean, and cannot mean, that any and all expression related to a game rule or game function is unprotectible. Such an exception to copyright would likely swallow any protection one could possibly have; almost all expressive elements of a game are related in some way to the rules and functions of game play. Tetris Holding is as entitled to copyright protection for the way in which it chooses to express game rules or game play as one would be to the way in which one chooses to express an idea.*"

[648] 863 F. Supp.2d 394, 408 (D.N.J. 2012). "*If an expressive feature is dictated by functional considerations then there cannot be a number of ways to implement it. Rather, one's original expression is protected by copyright—even if that expression concerns an idea, rule, function, or something similar—unless it is so inseparable from the underlying idea that there are no or very few other ways of expressing it. "If other methods of expressing that idea are not foreclosed as a practical matter, then there is no merger.*"

[649] 863 F. Supp.2d 394, 410 (D.N.J. 2012). "*Without being told which is which, a common user could not decipher between the two games. Any differences between the two are slight and insignificant. If one has to squint to find distinctions only at a granular level, then the works are likely to be substantially similar.*"

there were endless ways to design a play grid "higher than it is wide".[650] The court dismissed the defendant's multiple "rule" and "function" arguments regarding *Tetris* and eventually found that there was an undeniable copyright infringement.

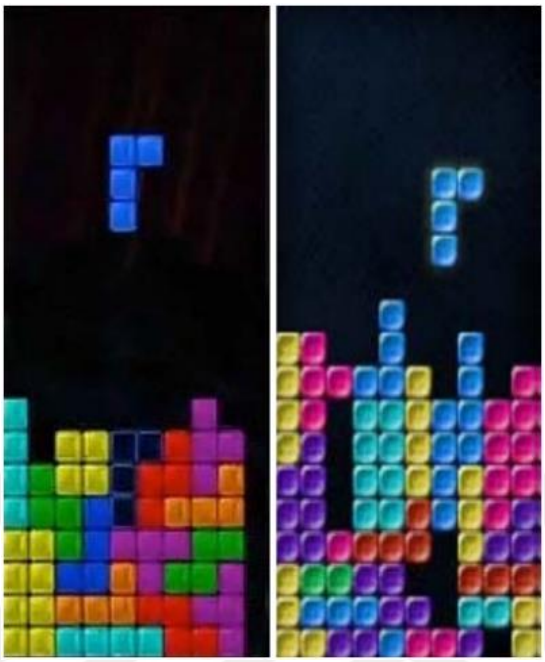

Figure 11. "Tetris" on the left, and "Mino" on the right.[651]

Game rules and mechanics are not subject to copyright by principle, but how they are expressed in the design of a game is definitely within the scope of copyright protection, as long as the idea and expression are not limited in the alternative ways for expression. The audiovisual expression of a video game, along with the underlying computer program are the two main elements considered for copyright protection by the courts of law in

[650] 863 F. Supp.2d 394, 413 (D.N.J. 2012). "Xio was not limited to those precise dimensions and was free to take the general idea of having a long game board and express it in its own unique way. For example, it could have had a field three times as high as it is wide or 15 units high by 8 units wide, without copying the exact game dimensions and infringing the look and feel of Tetris's expression. Thus, I find this to be protectible expression that Xio infringed."

[651] "Tetris and Mino" (original), "Tetris Holding, LLC v. Xio Interactive, Inc.," Wired, accessed April 6, 2022, https://www.wired.com/images_blogs/gamelife/2012/08/Tetris-Holdings.pdf.

most jurisdictions. Just as the idea and principles behind the computer program is excluded from copyright, the underlying idea of a "game" itself is also excluded.

B. Scènes à Faire

"*Scènes à faire*" means "scenes that must be done" in French. Although *scènes à faire* is a French term, "*scènes à faire* doctrine" is introduced in the US courts and it has no official presence in the EU jurisdiction. Practically, however, the criteria of originality possibly would make up for the lack of *scènes à faire* doctrine.[652] It could be said that the same goes for the Turkish jurisdiction as well. *Scènes à faire* doctrine, through its exclusion effect, extends and consolidates the principle of copyright only granted for "original" works of authorship.[653]

The US courts defined *scènes à faire* as "*incidents, characters or settings which are as a practical matter indispensable, or at least standard, in the treatment of a given topic*".[654] For the evaluation of video games in the copyright framework, the US courts consistently applied *scènes à faire* doctrine along with merger doctrine. Both doctrines "*implement the rule that ideas are uncopyrightable*" by denying copyright protection to expressions of the ideas that cannot be expressed in any alternative ways.[655] While merger doctrine is mostly applicable for functional elements such as the rules of the game, *scènes à faire* doctrine handles the fictional and real-life elements in video games.[656]

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[652] Boyd, Pyne, and Kane, *Video Game Law: Everything You Need to Know about Legal and Business Issues in the Game Industry*, 28.

[653] Hemnes, "The Adaptation of Copyright Law to Video Games," 197.

[654] Alexander v. Haley, 460 F. Supp. 40, 45 (S.D.N.Y. 1978); Atari, Inc. v. North American Philips Consumer Electronics Corp., 672 F.2d 607, 616 (7th Cir. 1982); Atari, Inc. v. Amusement World, Inc., 547 F. Supp. 222, 228 (D. Md. 1981).

[655] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 217.

[656] Goldstein and Hugenholtz, *International Copyright: Principles, Law, and Practice*, 217.

In a video game that simulates golf, for example, the fields, equipment, or even the weather will be excluded from copyright protection, because those elements are *scènes à faire* that must be allowed for use in any golf themed video game.[657] Other examples could be given from other video games that are simulations of various sports. A football-oriented video game needs to have a football, a match field, football players and an audience; a basketball game's must is a basketball along with the basketball court filled with basketball players; a tennis game has rackets, tennis balls and a tennis court along with all the shared elements in all kinds of sports. War-themed games will include soldiers and weapons, racing games will include cars. *Scènes à faire* is kind of similar to public domain.[658] Historical facts and events, and also myths and mythology cannot be copyrighted as well.[659] The examples could go on forever.

Apart from the real-life items and concepts, entirely fictional character types common in fantasy fiction works also fall under the scope of *scènes à faire*. Wizards and sorcerers, warriors and dragons; these are standard depictions in certain fantasy genres and cannot be monopolized by anyone. The stereotype of "a wizard" is not copyrightable, but the wizard "Gandalf" as an original character is copyrightable. Likewise, "an elf" is not protected, but the dark elf "Drizzt Do'Urden" is a copyrightable character.[660] The threshold is the creativity in the original expressions of these elements. Stock characters, items, stories, concepts, or any clichés are simply not copyrightable; everyone has the

[657] Dannenberg and Davenport, "Top 10 Video Game Cases (US): How Video Game Litigation in the US Has Evolved since the Advent of Pong," 94; Incredible Techs., Inc. v. Virtual Techs., Inc., 400 F.3d 1007 (7th Cir. 2005).

[658] Boyd, Pyne, and Kane, *Video Game Law: Everything You Need to Know about Legal and Business Issues in the Game Industry*, 28.

[659] Boyd, Pyne, and Kane, *Video Game Law: Everything You Need to Know about Legal and Business Issues in the Game Industry*, 27.

[660] Boyd, Pyne, and Kane, *Video Game Law: Everything You Need to Know about Legal and Business Issues in the Game Industry*, 28.

absolute freedom to use them in their original expressions. *Scènes à faire* doctrine applies to a video game's subject matter, style, and genre all together.[661]

C. Easter Eggs

"Easter eggs" are the little surprises hidden in video games. The developers express their creativity and humor through easter eggs they hide in video games, communicating with the players in their own unique way. Easter eggs in video games take form as "*hidden messages, jokes and secret features*", ready to be discovered by curious players who are on the hunt for the reward of joy and discovery.[662] The forms of easter eggs may vary from inscriptions to entire secret levels.[663]

There are mainly three types of easter eggs found in video games: entirely original content, references to other creations from the same developer or publisher, and references to third-party creations. First two types of easter eggs do not constitute any risks regarding copyright infringement since they are already secured by originality or right ownership. The risk of infringement elevates with references made without a license to other original copyrighted works such as books, movies, games, or other types of popular culture creations.[664] There are two options to avoid any copyright infringement with the placement of easter eggs referencing unlicensed third-party content. The first option is to make an easter egg which only uses the elements outside the scope of

[661] Lunsford, "Drawing a Line between Idea and Expression in Videogame Copyright: The Evolution of Substantial Similarity for Videogame Clones," 105; Data East USA, Inc. v. Epyx, Inc., 862 F.2d 204, 209 (9th Cir. 1988).

[662] Anastasiia Chuvaieva, "How to Make a Video Game Easter Egg: Legal Tips and Tricks," *Journal of Intellectual Property Law & Practice* 14, no. 11 (2019): 864.

[663] Chuvaieva, "How to Make a Video Game Easter Egg: Legal Tips and Tricks," 865.

[664] Chuvaieva, "How to Make a Video Game Easter Egg: Legal Tips and Tricks," 865.

copyright protection such as the underlying ideas, names, titles, or short phrases. The second option is the attempt to seek shelter through the fair use and parody exceptions.[665]

Ideas are strictly uncopyrightable, as well as the names and titles which lack creativity.[666] However, sometimes even the very short phrases can be subject to copyright protection by showing sufficient originality and creativity. The US courts found on multiple occasions that short phrases containing a few words can be subject to copyright protection with examples as "*E.T. Phone Home*"[667] or "*Look!... Up in the sky!... It's a bird!... It's a plane!... It's Superman!*".[668] Another example in the same direction comes from the CJEU's *Infopaq* case where the court found that even phrases containing eleven words may be original enough to spark off copyright infringement.[669] In terms of easter eggs, there is no guarantee that using simple short phrases will prevent any copyright infringement claim, or, on some occasions even a trademark infringement claim.[670]

When it comes to ideas, the practices may be safer against copyright infringement. Using a character's certain qualities in design rather that the exact copy of a character design will only hint at the "idea". For example, in "*The Witcher 2: Assassins of Kings*"[671], during the prologue sequence of the game, the players can spot a dead body in white robes lying next to a cluster of haystacks and a crashed cart; this is a cheeky reference to the

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[665] Chuvaieva, "How to Make a Video Game Easter Egg: Legal Tips and Tricks," 865.

[666] Chuvaieva, "How to Make a Video Game Easter Egg: Legal Tips and Tricks," 866.

[667] Universal City Studios, Inc. v. Kamar Indus., Inc., 217 U.S.P.Q. (BNA) 1162, 1163-1166 (S.D. Tex. 1982). "*The name "E.T." itself is highly distinctive and is inseparable from the identity of the character… The inscriptions on the defendant's products would be readily recognizable to the lay observer as key lines of dialogue from the copyrighted movie and, therefore, the test for copyright infringement has been satisfied.*"

[668] DC Comics, Inc. v. Crazy Eddie, Inc. 205 U.S.P.Q. (BNA) 1177, 1178 (S.D.N.Y. 1979); Richard W. Stim, "E.T. Phone Home: The Protection of Literary Phrases," *University of Miami Entertainment & Sports Law Review* 7, no. 1 (1989): 73.

[669] Infopaq International A/S v Danske Dagblades Forening, CJEU, Case C-5/08, July 16, 2009, ECLI:EU:C:2009:465.

[670] Chuvaieva, "How to Make a Video Game Easter Egg: Legal Tips and Tricks," 867.

[671] "The Witcher 2: Assassins of Kings" is an action role-playing game developed and released by CD Projekt Red on May 17, 2011.

"*Assassin's Creed*" series where the protagonist assassins perform "leaps of faith" from high places into haystacks and survive no matter the tremendous heights, contradicting the laws of physics. In this easter egg, the "assassin" obviously miscalculated the landing spot, and the haystack cart is in pieces. When discovered, the player's character Geralt of Rivia says, in a playful tone, "*Hmm… Guess they'll never learn.*"[672]

Figure 12. "The Witcher 2: Assassins of Kings" (2011) easter egg referencing "Assassin's Creed" games. Screenshot taken by the author.

The white-robed figure in the easter egg is not a "copy" of the original characters in *Assassin's Creed* games. But it makes a clever reference with the entire setting of the outfit and haystacks. Easter eggs may only go to the extent of "appropriation of conceptual ideas". In such a case, copyright infringement most likely will not be problem.[673]

[672] *Requiescat in pace.*

[673] Anna Piechówka, "When Video Games Meet IP Law," WIPO, accessed April 7, 2022, https://www.wipo.int/wipo_magazine/en/2021/02/article_0002.html.

Establishing a connection to be figured out by the player, between the easter egg and the referenced work is called an "allusion". There are two elements of an allusion that works as intended; the "allusion marker" where the developer hints to a certain work without directly naming the subject, and the "background knowledge" of the player who could trace it back to the intended reference.[674] If the allusion marker is created from unprotected elements of the referenced work, then there is no risk of infringement. However, when the allusion marker somehow takes a portion that is subject to copyright protection without a license, then the only defense can be fair use or parody. Taking this road has its own risks because every jurisdiction has their unique standards for such unauthorized uses, and the outcome of a lawsuit may change based on each court's perspective.[675] While common law jurisdictions, such as the US, are more flexible in fair use and parody claims, the civil law jurisdictions, such as the EU and Turkey, are often "less tolerant".[676]

Easter eggs are most of time funny and smart additions in video games. The developers should always be cautious while implementing easter eggs which are referencing to protected works of others, in order to prevent encountering copyright infringement claims.

[674] Chuvaieva, "How to Make a Video Game Easter Egg: Legal Tips and Tricks," 869.

[675] Piechówka, "When Video Games Meet IP Law,"; Chuvaieva, "How to Make a Video Game Easter Egg: Legal Tips and Tricks," 869-873.

[676] Chuvaieva, "How to Make a Video Game Easter Egg: Legal Tips and Tricks," 869.

CONCLUSION

Video games we know today have come a long way since the very first video games that were created for science. The commercial potential of the video game industry was discovered not long after the first experimental attempts in creating video games purely for entertainment purposes. Since then, video games have evolved from plain dots on screens to fully engageable virtual worlds.

Video games are complex creations. They consist of visual, aural, literary works of authorship, all packed up with the help of the underlying software. They are interactive works, providing the players the sense of control over the rules and mechanics implemented in the game. They are challenging sports, immersive stories, educational tools, and theatrical experiences.

Video games are creations that find a place in all branches of intellectual property protection. The most important intellectual property protection comes with copyright, since video games are intellectual and "artistic" works in all aspects. Copyright protection for video games has its own challenges. Applying the principles of copyright protection on the subject matter, criteria or classification have been a struggle when the courts of law encountered video games over the decades. Copyright protection has its own unique journey in history. It was formed according to different traditions in different jurisdictions. To ensure a harmonized protection in various jurisdictions, nations gathered and committed to international agreements, setting the standards for copyright protection. Despite all the attempts in harmonization, there are still significant differences in some aspects of granted copyright protection in different types of copyrighted works. Video games are one of those complicated works of authorship treated differently in various

courts of law. The differences in opinions occur not only on different national jurisdiction levels, but sometimes within the courts of law practicing in the same jurisdiction.

The prominent copyright protection regime for video games has evolved over the decades. The current practice most commonly seen in different jurisdictions is to provide a "dual protection" by protecting the underlying computer program and the audiovisual elements of a video game. Despite all the attempts to provide a "true unitary approach", the current copyright regimes cannot go beyond the dual protection of computer program *plus* audiovisual work when it comes to video games. Even if a video game is considered an audiovisual or a cinematographic work, the underlying computer program is always protected separately, because that is the extent the current copyright framework allows. The distributive protection regime which grants protection to all the standalone works of authorship found within a video game is also a very common and safe practice, yet separate protection of every single "work" element in a video game is not something to be settled for.

The US courts have been granting protection for video games as audiovisual works and computer programs since the 1980's. The CJEU officially recognized the audiovisual nature of video games a bit later with the *Nintendo v PC Box* decision. The Turkish courts, however, changed their opinion on classification of video games very recently. The 1994 decision of the Turkish Council of State openly recognized video games as cinematographic works, yet in 2018, the Turkish Court of Cassation showed a quite outdated approach and invalidated the Council's ruling for video games as cinematographic works. The Turkish Court of Cassation also recognized the complex nature of video games with multiple visual, aural, and literary elements, yet surprisingly decided that video games can only be categorized as computer programs under the law; a vague standard that leaves many questions on the protection of video games as complex artistic creations.

A relatively new type of work category is “multimedia” that also covers video games. Multimedia works are still widely discussed in the doctrine; some consider them as derivative works, some consider them as compilations, and some argue that they establish an entirely new category on their own. National legislations have yet to officially recognize multimedia works as a separate category, however, the technological advancements may eventually come to a point where establishing a *sui generis* multimedia category becomes inevitable.

The copyright principles strictly exclude the protection of ideas. Only the original expressions are granted protection. Video games are creative expressions of multiple works brought together, yet the idea of the game must be separated when it comes to copyright evaluation. The idea of a video game, the rules and mechanics which define the gameplay, will not be eligible for copyright protection. Same goes for concepts and elements in public domain, as well as necessary and common elements behind ideas.

The legal regulations currently practiced universally are somewhat sufficient for copyright protection of video games, for now. Protecting the computer program as well as the audiovisual and cinematographic work within the video game ensures the broadest copyright protection possible with modern copyright practices. However, the times are changing. The velocity of these changes happens to be accelerating to the point that laws no longer will be able to keep up. There may come a moment when the copyright regimes we adopt today will not be able to sufficiently protect video games in their entirety. The law makers eventually will need to think of a way to protect video games as “one work”. As the nature of copyrighted works and categories keep changing, so will the nature of video games. The concept of multimedia works already gave the signal. And video games have already proven how fast they are evolving if we take a look at the short history that goes back merely 70 years.

Video games have complex structures indeed, yet they are simply “original” and “creative” works of authorship. Trying to fit video games into already existing copyrighted work categories still creates problems and doubts before the courts of law on some occasions. That is because the copyright framework at its core is in fact quite strict when it comes to categorization of works, despite the intents of wide inclusivity. The sad reality of copyright is that it is late and outdated. What lies ahead is a new method of “true” unitary protection for video games, either through the establishment of a *sui generis* form of copyright protection as flexible as possible to adapt the constant evolution of its subject matter, or through the evolution of current copyrighted work categories into an even more inclusive framework without room for hesitation.

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ABSTRACT

The opportunity of being anyone and anything, going to the places never imagined, wandering the realms never have been in existence, claiming wealth and power beyond reachable extents, living a historical event as the protagonist or a bystander; it is possible through the vast selections of video games offered to the players of the world today.

Video games are subject to intellectual property protection in various aspects. When it comes to copyright protection, the complex structure of video games as works of authorship raises many questions on the notion of a copyrighted work. Our study focuses on video games and video game elements as copyrighted works within the Turkish, the European Union and the United States laws.

The first chapter of this thesis focuses on understanding video games as to the definition, history, genres, platforms, elements, and an overview of intellectual property protection of video games. The second chapter focuses on explaining the scope of copyright and copyrighted work in the Turkish, the European Union and the United States laws along with relevant international agreements. The third and final chapter focuses on the in-depth copyrighted work evaluation of separate video game elements and video games in their entirety.

Keywords: Video Games, Computer Games, Digital Games, Copyright, Work, Turkish Law, European Union Law, United States Law, Intellectual Property.

ÖZET

Herhangi biri ve herhangi bir şey olabilmek, hayal bile edilemeyen yerlere gitmek, hiç var olmamış diyarlarda dolaşmak, ulaşılmazın ötesinde bir zenginlik ve güç elde etmek, tarihi bir olayı kahraman ya da seyirci olarak yaşamak; tüm bunlar günümüz dünyasında oyunculara sunulan çok çeşitli video oyunları ile mümkün.

Video oyunları, birçok açıdan fikri mülkiyet korumasına tabidir. Telif hakkı koruması söz konusu olduğunda, telif eseri olarak video oyunlarının karmaşık yapısı, telif hakkıyla korunan eser kavramına ilişkin birçok soruyu gündeme getirmektedir. Çalışmamız, Türk, Avrupa Birliği ve Amerikan hukukunda telif eseri olarak video oyunları ve video oyunu unsurlarına odaklanmaktadır.

Tezin ilk bölümü, video oyunlarını tanım, tarihçe, türler, platformlar, unsurlar ve video oyunlarının fikri mülkiyet korumasına genel bir bakış açısından anlamaya odaklanmaktadır. İkinci bölümde, ilgili uluslararası anlaşmalarla birlikte Türk, Avrupa Birliği ve Amerikan hukukunda telif hakkı ve telif eseri kapsamı açıklanmaktadır. Üçüncü ve son bölümde, bağımsız video oyunu unsurlarının ve bir bütün olarak video oyunlarının telif eseri niteliğinin detaylı değerlendirilmesi yapılmaktadır.

Anahtar Kelimeler: Video Oyunları, Bilgisayar Oyunları, Dijital Oyunlar, Telif Hakkı, Eser, Türk Hukuku, Avrupa Birliği Hukuku, Amerikan Hukuku, Fikri Mülkiyet.