Západočeská univerzita v Plzni Fakulta filozofická

Bakalářská práce

The Phenomenon of Video Games and their Influence on the Economic, Social and Moral Development of American Society

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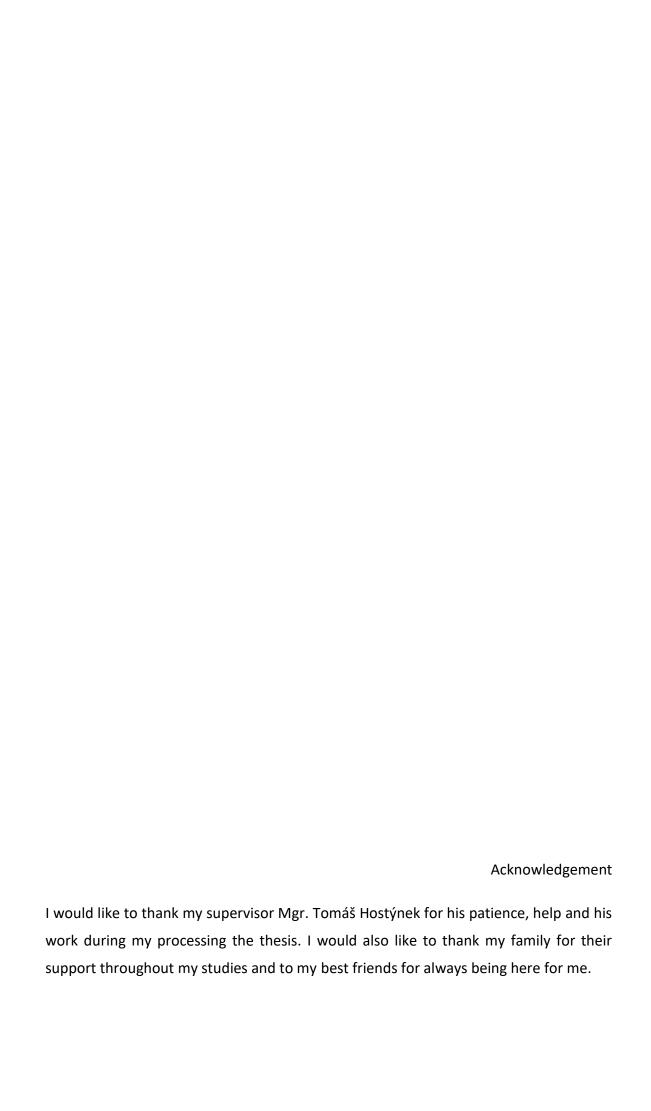


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1. Introduction

My bachelor thesis is based on the influence between video games and society. Video games are, in our modern world of screens and connectivity, one of the main sources of entertainment for all ages and social classes. With more than 2.5 billion video gamers throughout the world the industry of video games is a net worth 80 billion U.S. dollars and has a strong influence in our modern lifestyle and habits.

From console games to internet, from portable game consoles to mobile phone video games are everywhere and a source of inspiration for education, films and all sorts of media. Video games are a multifunction and multigenre medium used by everyone and for everyone.

Like every form of entertainment and media video games experienced throughout their short history several changes due to the changes in society: technical changes with the quick evolution of new technologies but also changes in the contents of games with new ways how to tell a story or to play a game. The genres became multiple and more mature contents appeared not without criticism for the part of the public opinion, journalists or politicians. In my bachelor thesis I try to depict how the social and historical events changed the way of creating the games and to consider video games or video gamers.

The theoretical part of my thesis is based on the descriptions of the main features involving video games and the gaming world. It is firstly dedicated to the history of video games where I describe the evolution of the medium from the beginning to the modern era of gaming. The second part of the study focuses on the educational use of video games both in school and the US military programs. In the third part I speak about the links between video games and the film industry as well as the collaboration between the two media. Then, I describe in the study the current video game industry in the United States, its economical background, importance and influence.

In the practical part of my study I analyse the influences of social events on video games especially violent events which occurred in the American society. In the first part I analyse the political background in the United States and what it means for the video game sector. I then try to analyse the connections between violent crimes, mass murders and video games such as the transformation of video game contents following those attacks. Finally, I analyse the importance of the events of 9/11 on video games and the importance of video games in the American popular culture.

To write my bachelor thesis I used sources from academic articles, specialized articles and sources from the internet.

2. Theoretical section

2.1 History

2.1.1 Invention and development

Video games are nowadays an integral part of our lives and they affect us more than we think. It is a sign of the times that the number of websites devoted to a topic may safely be taken as a measure of its popularity. By that standard, video games are definitely "in". ¹

Furthermore, there are a lot of individuals out there who are genuinely interested in playing retro games that they fondly remember from their long-lost youth; maybe it's Pac-Man that beckons or perhaps Space Invaders conjure up happy moments of a player's past. We can see that a bigger part of players are also interested in the story of how those ancient video games came into being. Most of the players who have video games at home do not know that their origins began at scientists' laboratories.²

At the University of Cambridge, in 1952, British professor A.S.Douglas created *OXO*, also known as noughts and crosses or a tic-tac-toe. Six years after, William Higinbotham created *Tennis for Two*. This game was created on a large analog computer and connected oscilloscope screen for the annual visitor's day at the Brookhaven National Laboratory.³

The first video game that could be played on multiple computer was invented by Steve Russella at the Massachusetts Institute of Technology. *Spacewar!* was

¹BAER, Ralph H. VIDEOGAMES: IN THE BEGINNING. Springfield: Rolenta Press, 2005. ISBN ISBN 0-9643848-1-7.

² BAER, Ralph H. *VIDEOGAMES: IN THE BEGINNING*. Springfield: Rolenta Press, 2005. ISBN ISBN 0-9643848-1-7.

³Video Game History - HISTORY. [online]. Copyright © 2019 A [cit. 12.02.2019]. Available at: https://www.history.com/topics/inventions/history-of-video-games.

computer-based space combat video game for the PDP-1 (Programmed Data Processor-1) and then a cutting-edge computer mostly found at universities.⁴

"In 1967, developers at Sanders Associates, Inc., led by Ralph Baer, invented a prototype multiplayer, multi-program video game system that could be played on a television. It was known as "The Brown Box." "

But other sources can tell us that the first video game was created in 1971 and the name was *Computer Space* by Nutting Associates. They say that it was the first commercial arcade video game.⁶

However, the interesting fact is that Nolan Bushnell who developed Computer space formed Atari and in 1972 Atari introduced Pong to the arcades.⁷

"Yet, one of the Odyssey's 28 games was the inspiration for Atari's Pong, the first arcade video game, which the company released in 1972. In 1975, Atari released a home version of Pong which was as successful as its arcade counterpart."

At that time Magnavox with the company Sanders Associates sued Atari for copyright infringement. Because of this dispute, Atari settled and became an Odyssey licensee; over the next 20 years, Magnavox went on to win more than \$100 million in copyright lawsuits related to the Odyssey and its video game patents.

In the year 1977, Atari 2600 (also known as the Video Computer System) was created. It was an establishment of home console that featured joysticks and

⁴Video Game History - HISTORY. [online]. Copyright © 2019 A [cit. 12.02.2019]. Available at: https://www.history.com/topics/inventions/history-of-video-games.

⁵Video Game History - HISTORY. [online]. Copyright © 2019 A [cit. 11.02.2019].Available at https://www.history.com/topics/inventions/history-of-video-games.

⁶The History of Video Games | HowStuffWorks. Electronics | HowStuffWorks [online]. Copyright © 2019 [cit. 11.02.2019]. Available at: https://electronics.howstuffworks.com/video-game2.htm.

Video Game History - HISTORY. [online]. Copyright © 2019 A [cit. 11.02.2019]. Available at: https://www.history.com/topics/inventions/history-of-video-games.

⁸Video Game History - HISTORY. [online]. Copyright © 2019 A [cit. 11.02.2019]. Available at: https://www.history.com/topics/inventions/history-of-video-games.

interchangeable game cartridges that played multi-colored games, effectively kicking off the second generation of the video game consoles.

In 1970s and 1980s, a series of video games were created which are known and played even in these days and some of them were upgraded.

In 1978 was the release of Space Invaders. The year after belonged to the launch of Activision, the first third-party game developer that develops software without making consoles or arcade cabinets.9

In the era of 1970s and 1980s, Japan's hugely popular Pac-Man was introduced to the United States and Nintendo's Donkey Kong was created introducing the world the character of Mario. To this era also belongs Microsoft's release of its first *Flight Simulator* game. 10

However, it was not always easy to keep video game industry on the top of the market. "In 1983, the North American video game industry experienced a major "crash" due to a number of factors including an oversaturated game console market, competition from computer gaming and a surplus of over-hyped, low-quality games, such as the infamous E.T., an Atari game based on the eponymous movie and often considered the worst game ever created. "11

In 1985, Nintento Entertainement System came to the United States and the video game industry began to recover because the crash in 1983 caused the bankruptcy of several home computer and video game console companies. 12

After that, a number of important video game franchises were created and are still around today, such as Super Mario Bros., The Legend of Zelda, and Metroid. 13

⁹ Ibid.

¹⁰Ibid.

¹¹Ihid

¹²Ibid.

¹³lbid.

According to this article: "In 1989, Nintendo made waves again by popularizing handheld gaming with the release of its 8-bit Game Boy video game device and the often-bundled game Tetris. Over the next 25 years, Nintendo would release a number of successful successors to the Game Boy including the Game Boy color in 1998, Nintendo DS in 2004 and Nintendo 3DS in 2011."¹⁴

In 1993, Super Mario Bros. live-action movie was released when video games leaped to the Bug Screen. Other well-known movies released were Street Fighter and Mortal Combat. Since then, a number of movies based on video games were released.¹⁵

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¹⁴lbid.

¹⁵Ibid.

2.1.2 Modern era of gaming

The modern era of gaming is a time of great development of video games. "Since the early 2000s, Internet capabilities have exploded and computer processor technology has improved at such a fast rate that every new batch of games, graphics and consoles seems to blow the previous generation out of the water." 16

The report which was released in 2015 by *ESA Computer* and video game industry showed that 1.5 billion people are playing video games.¹⁷

A lot of new game consoles have been created in the new era of gaming. In 2005 and 2006 were released new versions of Microsoft's Xbox 360, of Sony's Playstation 3, and Nintendo's Wii. In 2012 video games spread to social media platforms like Facebook and mobile devices like the iPhone reaching a more casual gaming audience.¹⁸

This page claims that: "The 8th and current generation of video games began with the release of Nintendo's Wii U in 2012 followed by the Playstation 4 and Xbox One in 2013. Despite featuring a touch screen remote control that allowed off-TV gaming and being able to play Wii games, the Wii U was a commercial failure—the opposite of its competition—and was discontinued in 2017."

The year 2016 was significant for developing new editions of consoles. "In 2016, Sony released a more powerful version of its console called the Playstation 4 Pro, the first console capable of 4K video output. In early 2017, Nintendo released its Wii U successor, the Nintendo Switch, the only system to allow both television-

¹⁶The History Of Gaming: An Evolving Community – TechCrunch. TechCrunch – Startup and Technology News [online]. Available at: https://techcrunch.com/2015/10/31/the-history-of-gaming-an-evolving-community/?guccounter=1.

¹⁷The History Of Gaming: An Evolving Community – TechCrunch. TechCrunch – Startup and Technology News [online]. Available at: https://techcrunch.com/2015/10/31/the-history-of-gaming-an-evolving-community/?guccounter=1.

¹⁸Video Game History - HISTORY. [online]. Copyright © 2019 A [cit. 12.02.2019]. Available at: https://www.history.com/topics/inventions/history-of-video-games.

¹⁹Ibid.

based and handheld gaming. Microsoft will release its 4K-ready console, the Xbox One X, in late 2017. " 20

Video games are still in development and new versions of games and consoles are being created. "With their new revamped consoles, both Sony and Microsoft currently have their sights set on virtual reality gaming, a technology that has the potential to change the way players experience video games." ²¹

²⁰lbid.

²¹lbid.

2.2 Education using video games

2.2.1 The system of education

Harry Brown says in his book: "The reality of such experiments in "edutainment"—the marriage of education and entertainment—has been more modest and creators of educational videogames, while exploiting their potential as entertainment, have been careful not to misrepresent the past simply to make history seem more fun."²²

We can say that video games represent a big part in schools. On top of it, video games are used more and more to educate students. Greg Toppo argues that video games are poised to transform not just schools but education at large. It is clear that most of the children are more interested in video games than the average class at school.²³

One of the game used in schools is *The Oregon Trail*. It is one of the earliest and most successful attempts to use interactive entertainment to teach history, places us at the reigns of a wagon train migrating westward.²⁴

The game offers the students to learn American geography. They learn about nineteenth-century economy and material culture and see what rivers, mountains or deserts look like. Faced with threats of sickness, accident or attack, moreover, students try to keep their virtual family alive learning something of the human struggles of the past.²⁵

Harry Brown claims that: "By constructing a virtual past and granting the player agency within it, videogames have become the ideal medium for teaching the lesson of contingency, and history teachers have been quicker than those in other fields to experiment with this new medium." The game-based learning is

²²BROWN, Harry J. *Videogames and education*. USA: M.E. Sharpe, 2008. ISBN ISBN 978-0-7656-1996-9.

²³SHAPIRO, T. Rees. *How video games can be an educational tool* [online]. 2015 [cit. 2019-02-12]. Available at: https://www.washingtonpost.com/opinions/an-education-in-gaming/2015/05/28/b6920cbe-edcc-11e4-8666-a1d756d0218e story.html?noredirect=on&utm term=.2116258385ed.

²⁴BROWN, Harry J. *Videogames and education*. USA: M.E. Sharpe, 2008. ISBN ISBN 978-0-7656-1996-9.

²⁵BROWN, Harry J. *Videogames and education*. USA: M.E. Sharpe, 2008. ISBN ISBN 978-0-7656-1996-9.

attractive for students but some historians doubt if students can really learn by playing video games. ²⁶

Recently, video game developers have taken a more restrained approach to simulating the past. If students are studying history interactively, it does not give them the opportunity to have much fun but it invites students to consider a new range of issues, such as identity, perspective, agency and causality.²⁷

However, there is an essential difference when a student is playing a game based on the American Revolution and hearing a lesson on the American Revolution. They can play the role of a historical person and they can make decisions on another person or nations.²⁸

The importance is to understand how video games have an impact on the brain. Recent studies have elucidated, through magnetic resonance imaging (MRI), the fact that video gaming can stimulate neurogenesis and connectivity in the brain.²⁹

According to this research is seen an increase of the quantity of grey matter in the brain, specifically the right hippocampus, right prefrontal cortex and cerebellum, and these particular regions are associated with spatial navigation, memory, strategic planning and fine motor control. It is a way to a little understand the application of video games in education.³⁰

Through this study we can see that video games encourage and motivate students to learn less popular subjects, such as mathematics. Video games can help students to learn in a much funnier and more interesting way.³¹

According to the U.S. Department of Education and the National Science Foundation, the potential is seen in the games, and they have invested millions

²⁷BROWN, Harry J. *Videogames and education*.

³¹lbid.

²⁶Ibid.

²⁸BROWN, Harry J. *Videogames and education*.

²⁹BROWN, Harry J. *Videogames and education*.

³⁰SNEYD, Tamara. *HOW VIDEO GAMES ARE CHANGING EDUCATION* [online]. 2017 [cit. 2019-02-12]. Available at: https://thegizmolife.com/video-gaming-and-education/.

accordingly. The Gates Foundation and the MacArthur Foundation have together committed \$100 million to educational gaming.³²

The decision is up to teachers if video games should be used for education in classrooms. T.Rees Shapiro writes in his article about a new book of Greg Toppo and he claims that: "Toppo shows that the games clearly hold promise. But do we need more video games in schools when they have already spread everywhere else? Even Shigeru Miyamoto, the eminent game designer of Super Mario Bros., tells children: "On a sunny day, play outside."³³

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³²SHAPIRO, T. Rees. *How video games can be an educational tool* [online]. 2015 [cit. 2019-02-12]. Available at: https://www.washingtonpost.com/opinions/an-education-in-gaming/2015/05/28/b6920cbe-edcc-11e4-8666-a1d756d0218e_story.html?noredirect=on&utm_term=.2116258385ed.

³³Ibid.

2.2.2 US military using video games

Nowadays, US military uses video games as training and recruting devices. Computers and gaming consoles have become elaborated to the details over the recent decade and that makes them more realistic and immersive.³⁴

Seymour Papert, an educational technology researcher at MIT, argues that they adopted video games for education for the same reason as the U.S. Army recruiters have. It is widely believed that games are the best means of getting the attention of young people.³⁵

Seymour Papert said: "So the recent news that the US Army has decided to invest \$50 million into video game development was not much of a surprise to the industry. After all, the Army has realized that video games are immensely useful tools, both for capturing the public's interest as well as training soldiers in the art of war." "

As a result, video games are a perfect method for military training. They encourage and develop the kind of decision-making that leads to becoming a better tactician or strategist. To learn the dynamic skills, it only takes eight to twelve weeks of basic training. This training is useful for most branches of the military.³⁷

In 2002, the military has shown its interest in video games by releasing the first military-developed game named *America's Army*. The free-to-play first-person shooter simulates a more realistic approach to warfare that gives players an illustration of what is like to be a member of the Armed Forces.³⁸

³⁶Killing in the name of: The US Army and video games | Ars Technica. Ars Technica [online]. Copyright © 2019 Condé Nast. All rights reserved. Use of and [cit. 12.03.2019]. Available at: https://arstechnica.com/gaming/2019/01/army-video-games/.

How the U.S. uses video games for military training | Version Daily. Version Daily | Information Gateway [online]. Available at: http://www.versiondaily.com/how-the-u-s-uses-video-games-for-military-training/.

³⁵BROWN, Harry J. *Videogames and education*. USA: M.E. Sharpe, 2008. ISBN ISBN 978-0-7656-1996-9.

³⁷How the American military is using videogames to capture the hearts and minds of children - Kill Screen. Home - Kill Screen[online]. Available at: https://killscreen.com/articles/how-american-military-using-videogames-capture-hearts-and-minds-children/.

³⁸Killing in the name of: The US Army and video games | Ars Technica. Ars Technica [online]. Copyright © 2019 Condé Nast. All rights reserved. Use of and [cit. 12.03.2019]. Available at: https://arstechnica.com/gaming/2019/01/army-video-games/.

Consequently, the intentions behind *America's Army* became a way to rebuild the military's public image during the Iraq War. Thanks to the financial crisis in 2008, the military was flooded with recruits.³⁹

Due to little education funding at schools, military programs help schools to finance education for students, which means that more and more schools collaborate with military. "But the military isn't using video games exclusively as recruitment tools and not even all of them are shooters." 40

A great amount of reasons are given for the question why video games have become useful for military training. There is a program which was created by the United States Department of Defence to carry out this initiative and it is called the Advanced Distributed Learning program (ADL).⁴¹

This page claims: "The program centres on providing the U.S. military with access to the highest quality learning and performance tools that could be tailored to particular needs or requirements." The ADL workers have to deal with all the the research developing and delivering next-generation learning technologies and learning environment.⁴²

Aviation Week Network published in 2008 an article about reason why US government uses video games for military training and according to the article, ADL has been using a combination of commercial games and in-house video simulation tools to train the military in leadership, reaction, and war or battlefront scenarios. 43

Robert A. Wisher, former ADL director, referred that commercial games were used in training exercises alongside in-house developed games. These are the games

³⁹How the American military is using videogames to capture the hearts and minds of children - Kill Screen. Home - Kill Screen[online]. Available at: https://killscreen.com/articles/how-american-military-using-videogames-capture-hearts-and-minds-children/.

⁴⁰How the American military is using videogames to capture the hearts and minds of children - Kill Screen. Home - Kill Screen[online]. Available at: https://killscreen.com/articles/how-american-military-using-videogames-capture-hearts-and-minds-children/

⁴¹How the U.S. uses video games for military training | Version Daily. Version Daily | Information Gateway [online]. Available at: http://www.versiondaily.com/how-the-u-s-uses-video-games-for-military-training/

⁴²Ibid.

⁴³lbid.

like *Cassandra, Doom, Corrosion, Peacemaker*, and *World of Warcraft*. Therefore, multiplayer games which were mentioned provide an immersive environment that promotes teamwork and mirrors the real world.⁴⁴

According to the report conducted by Curtis J. Bonk and Vanessa P. Dennen, video games identify the strenghts and weaknesses of trainers. The identification of weakness is important because it creates a feedback loop.⁴⁵

As a consequence, it helps trainers to provide additional training in problem areas. Besides, there are different types of video games which can assist for different learning styles.⁴⁶

As a result of the studies, the positive impacts of playing are in sharpening the cognitive and perceptual abilities of individuals. "Specifically, one study revealed that gamers who play action-packed and fast-paced games have greater visual performance and prediction capacity than those who play non-action games."

A large number of studies have been made. "Another study concluded that gamers saw the world differently than non-gamers. It is possible that these individuals see more immediately and they are better able to make the most appropriate decisions from available information." "48"

In 2017 were interviewed 15 current and former members of the U.S. military. The average age was between 24 and 35 years. This study was about to understand the role of violent first-person shooter games which use military for recruitment and training. The answer was that it was relevant to stay in the mindset of a soldier even when not on duty.⁴⁹

45 Ibid.

⁴⁴ Ibid.

⁴⁶How the U.S. uses video games for military training | Version Daily. Version Daily | Information Gateway [online]. Available at: http://www.versiondaily.com/how-the-u-s-uses-video-games-for-military-training/.

⁴⁷lbid.

⁴⁸Ibid.

⁴⁹How the US military is using 'violent, chaotic, beautiful' video games to train soldiers. [online]. Copyright © 2010 [cit. 12.03.2019]. Available at: https://theconversation.com/how-the-us-military-is-using-violent-chaotic-beautiful-video-games-to-train-soldiers-73826.

"Game preferences varied among the soldiers we interviewed but popular titles included "Ghost Recon Advanced Warfighter 2" and "ARMA 2," which a current member of the Army said was "one of the most hardcore assault experiences in gaming." "⁵⁰

However, it is not easy to accurately simulate the real life of soldiers. "First, military tours of duty are not solely made up of hard-charging, chaotic battles like those in first-person shooters. The majority of soldiers won't participate in any full-frontal combat operations." ⁵¹

As a consequence, the second fact is that in the digital world there are no legal and ethical considerations. When there is a mission and innocent people are killed, there are no ramifications. In addition, in a study of 2012 made by psychologists Brock Bastian, Jolanda Jettel and Helena R.M.Radke is showed that playing violent video games can lead to real-life violence.⁵²

According to a journalist: "Meanwhile, games such as "UrbanSim," "Tactical Iraqi" and "Frontlines: Fuel of War" teach players and potential recruits about the discourse of modern-day warfare." Players try to battle Islamic militants during the missions and they engage with the dangers of improvised explosive devices. ⁵³

On the other hand, not everyone likes these methods of the military using video games to appeal to young adults. Joseph DeLappe, an art professor, first gained attention for spamming players of America's Army with the names of soldiers killed in Iraq. He wrote one of the most outspoken critics of this tactic.⁵⁴

A group of recent Iraq veterans, the other major opponent, arranged peaceful protests at events where the Army is using games or virtual scenarios to attract

 $^{^{50}}$ How the US military is using 'violent, chaotic, beautiful' video games to train soldiers. [online]. Copyright © 2010 [cit. 12.03.2019]. Available at: https://theconversation.com/how-the-us-military-is-using-violent-chaotic-beautiful-video-games-to-train-soldiers-73826.

⁵¹lbid.

⁵²lbid.

⁵³lbid.

⁵⁴Ibid.

interest. According to Iraq veterans: "Their worry is that games glorify only certain parts of war and gloss over the bitter reality of fighting and killing other men." "55"

In September 2018, at the end of the US army's fiscal year, Army Times reported that the army had failed to meet its recruitment target by 7,500 bodies despite offering up to \$40,000 in bonuses. They offer to recruit shorter enlistments and student loan repayments.⁵⁶

The US military announced that they wanted to enter a video game competition by creating a military branded esports team. ⁵⁷

"The team would be made by veterans, active personnel and reservists bringing together accomplished players of first-person shooter (FPS) video games like Call of Duty, PlayerUnknown's Battlegrounds as well as this year's breakout title, Fortnite, to tour esports competitions. "⁵⁸

The video game industry has been used by the military for decades. Washington DC even invited Dave Anthony, a British former writer of the FPS titan Call of Duty to join the discussion with a group of military experts about the future of warfare. This relationship between the military and games rises more and more. ⁵⁹

The reports which are not rarely published indicate that makers of FPS titles have to pay a licence fee to weapons manufacturers in order to use their weaponry within their games. However, the skills demanded on the battlefield are different to those needed to be successful in front of a PC. ⁶⁰

⁵⁵ Ibid.

⁵⁶The US military is using video games and esports to recruit – it's downright immoral | The Independent. The Independent | News | UK and Worldwide News | Newspaper [online]. Available at: https://www.independent.co.uk/voices/army-military-video-game-fortnite-battlegrounds-call-duty-esports-defence-a8648656.html.

⁵⁷lbid.

⁵⁸lbid.

⁵⁹lbid.

⁶⁰Ibid.

This article about US military shows that: "Both US and British armed forces have controlled attack drones with unbranded Xbox controllers in the past blurring the lines between play and real-life bloodshed further." ⁶¹

Due to the conflicts in Iraq and Afghanistan the fear is that other armed forces outside the US will continue to bring glamour to entertainment fields like video games. Their intention is to strengthen their ranks by using traditional recruitment techniques.

The positive impact is that playing video games can slow the natural breaking down of cognitive functions, increase accuracy within training surgeons and be as effective at treating depression as therapy and even the US army uses games to deal with soldiers' PTSD.⁶²

"The use of virtual systems and modified games to deliver the Army's message to potential recruits will only increase and critics have to remember that soldiers all come from somewhere, so why not gamers?" 63

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⁶¹Ibid.

⁶²The US military is using video games and esports to recruit – it's downright immoral | The Independent. The Independent | News | UK and Worldwide News | Newspaper [online]. Available at: https://www.independent.co.uk/voices/army-military-video-game-fortnite-battlegrounds-call-duty-esports-defence-a8648656.html.

⁶³Killing in the name of: The US Army and video games | Ars Technica. Ars Technica [online]. Copyright © 2019 Condé Nast. All rights reserved. Use of and [cit. 12.03.2019]. Available at: https://arstechnica.com/gaming/2019/01/army-video-games/.

2.3 Video games in film industry

2.3.1 The beginning of collaborating with film

After Steven Spielberg released the film E.T., the parent company of Atari, Warner Communications, created an E.T. video game for the Atari 2600 and in July 1982 Atari led the games market and landing E.T. they acquired the hottest film license since Star Wars.⁶⁴

Atari anticipated massive sales. As a result, Atari hurried to complete the game in time for 1982 holiday season. Five million game cartridges were manufactured for every two Atari consoles owned in the United States. 65

For Atari this game was a disaster. In 1983, Atari claimed more than \$500 million in losses. After that, Atari buried tons of unsold merchandise in a landfill in Alamogordo, New Mexico, including (rumor had it) almost 4 million E.T. cartridges and within a year Warner sold Atari. 66

In 2005, George Lucas welcomed 2,000 guests to the gala opening of the Letterman Digital Arts Center (LDAC) in the Presidio of San Francisco. Lucasfilm and its special effects and video game divisions, LucasArts and Industrial Light and Magic (ILM), had just moved into their new, shared headquarters.⁶⁷

A "new vision" for the entertainment industry was announced by Lucasfilm film-makers and game designers. Their intention was the integration of entertainment technologies. A new way to work recognized the convergence of movies, visual effects, video games, animation and online and brings Lucasfilm to the forefront of that movement.⁶⁸

⁶⁴Harry J. Videogames and education. USA: M.E. Sharpe, 2008. ISBN ISBN 978-0-7656-1996-9.

⁶⁵Harry J. *Videogames and education*. USA: M.E. Sharpe, 2008. ISBN ISBN 978-0-7656-1996-9.

⁶⁶Steven Spielberg's history with videogames | Den of Geek. [online]. Copyright © Copyright [cit. 19.03.2019]. Available at: https://www.denofgeek.com/uk/games/steven-spielberg-ready-player-one/55782/steven-spielberg-shistory-with-videogames.

⁶⁷Ibid.

⁶⁸Harry J. *Videogames and education*. USA: M.E. Sharpe, 2008. ISBN ISBN 978-0-7656-1996-9.

Warner bought E.T. license and commissioned Atari with an adaptation for the Atari 2600 in 1982. The video game industry waited for someone to make a blockbuster film and then to buy the rights to the film and the industry followed Hollywood's lead and therefore Lucasfilm faciliated the simultaneous production films and games.⁶⁹

However, what was expected by the: ""new vision" and the "future of entertainment" and what changed the relation between video game industries in the two decades between 1982 when the adaptation of E.T. to the Atari 2600 cost Warner \$500 million, when George Lucas has reconfigured his \$15 billion-dollar—empire in order to maximize the potential for film-game franchising. " 70

It was the influence of film-game franchising and how artists create films and video games. The way that audiences consume them and the way scholars interpret them.⁷¹

2.3.2 The video game industry in Hollywood

A legendary French film director Jean-Luc Godard once said: "All you need to make a movie is a girl an a gun." However, video games made by Nolan Bushnell needed only just a ball and a couple of bats. The question that the staff at Digital Pictures were asking was how to make an interactive movie. 72

In California, in the early 1990s started a new wave of convergence between games and movies. This collaboration of two industries would have consequences for both sides.⁷³

Denis Dyack, a game designer, said that games were not only more sophisticated and popular than films. However, they are the most advanced in their text, sound,

⁷⁰lbid.

⁶⁹lbid.

⁷¹ Ibid.

⁷²RUSSELL, Jamie. *Generation Xbox: How Videogames Invaded Hollywood*.

⁷³RUSSELL, Jamie. *Generation Xbox: How Videogames Invaded Hollywood*.

image and in their active participation of the audience into a unified aesthetic experience.⁷⁴

The fact is that games and films share in each other's commercial success which is not seen in predictions of video games supremacy. In addition, the rivalry between film and game producers ends up with a harmony of these two industries as it is at Lucasfilm.⁷⁵

Who has to be mentioned in this collaboration between films and games is a famous American film director Steven Spielberg. In 1982, Steven Spielberg was at the height of his film-making powers and he had changed the Hollywood landscape with Jaws.⁷⁶

Almost everybody knows Steven Spielberg but: "Something that a lot of cinema-goers probably didn't know at the time: he was really into video games." "77

Although his E.T., The Extra-Terrestrial film, was in the 1980s one of the biggest films, the Atari's spin-off game was a big fiasco and its creators ended up with thousands of unsold copies.⁷⁸

In the mid-90s, Spielberg was involved in creation of adventure game, *The Dig* and *Sega GameWorks*, a kind of Planet Hollywood for video games. However, these video games didn't attack the video game industry as much as he thought.⁷⁹

After Spielberg directed a WWII film *Saving Private Ryan*, his team at DreamWorks Interactive began thinking about reflecting the movie into a video game.

⁷⁶Steven Spielberg's history with videogames | Den of Geek. [online]. Copyright © Copyright [cit. 19.03.2019]. Available at: https://www.denofgeek.com/uk/games/steven-spielberg-ready-player-one/55782/steven-spielberg-shistory-with-videogames.

⁷⁴Harry J., Videogames and education.

⁷⁵ Ibid.

⁷⁷ Ibid.

⁷⁸ Ibid.

⁷⁹Steven Spielberg's history with videogames | Den of Geek. [online]. Copyright © Copyright [cit. 19.03.2019]. Available at: https://www.denofgeek.com/uk/games/steven-spielberg-ready-player-one/55782/steven-spielberg-shistory-with-videogames.

A game based on this movie, Medal of Honor, which was published by Electronic Arts was a hit shooter that went on to redefine the whole genre.80

According to this game, one of the biggest video game franchises of all time was created with unwittingly help of Spielberg. "Spawning a series of spin-offs and sequels, the series' influence spread further when several of its creators went off and made a rival game, Call of Duty."81

The latest movie directed by Spielberg is inspired by Ernest Cline's best-selling book, Ready Player One. The story is about a virtual world steeped in 80s culture. This movie gives Spielberg the opportunity to speak to his affection for video games. An affection that endured long after the E.T. video game in the early 80s.82

Nevertheless, there have been many of Hollywood famous directors from whose films video games were created. In 2003, creators of The Matrix trilogy released the game Enter the Matrix, the same day as The Matrix: Reloaded was released.83

In 2004, Lucasfilm released Star Wars: Battlefront, a combat game in which players could reenact battles from all six Star Wars films. King Kong, which was produced by Peter Jackson, was also released as a King Kong game designed by Michael Ancel.84

A large number of video games based on famous multi-part movies were published after the release of them including Harry Potter films, The Lord of the Rings, Pirates of the Caribbean, Ironman, Hulk and many others.85

On the other hand, movies which are based on video games do not always end up as a good movie and there has never been, in the 23 years since the release of the

⁸⁰ Ibid.

⁸¹Ibid.

⁸² Ibid.

⁸³ Harry J. *Videogames and education*.

⁸⁴ Harry J. *Videogames and education*.

⁸⁵lbid.

first video-game movie, Super Mario Bros., critically speaking, a good entry in the genre.⁸⁶

According to Jordan Crucchiola, the movie *Warcraft* of 2016 tried so hard and wanted so badly to make us happy but the best efforts of director Duncan Jones, and all the time and all that money, the final product was a whole lot of "meh" with great visual effects.⁸⁷

Another unsuccessful movie of 2016 was *Assassin's Creed*. This movie according to Jordan Cruchiola wasted the talents of Michael Fassbender and Marion Cotillard.⁸⁸

One of the recent movie that has been made is named *Tomb Raider* and is the better version of movie based on video game. *Tomb Raider* which followed in the footsteps of 2013 returned to the cinemas in 2018 and gave us newly-vulnerable Lara. This movie certainly marks a watershed moment for video game movies and it opened up the door for even more video game treasures down the line. ⁸⁹

It is widely believed that the best video game movies are just about video games and are not based on real video games.⁹⁰

The fact about video games and movies is that: "While there have been some amazing movies based on comic books (even some great ones based on toys), it seems that Hollywood is still looking for that one truly great movie based on a video game." ⁹¹

⁸⁶Vulture - Entertainment News - TV, Movies, Music, Books, Theater, Art [online]. Copyright ©A [cit. 20.03.2019]. Available at: https://www.vulture.com/2016/12/every-video-game-movie-ranked-bad-to-worse.html.

⁸⁷ Ibid.

⁸⁸ Ibid.

⁸⁹The 10 best video game movies of all time | GamesRadar+. [online]. Copyright © [cit. 20.03.2019]. Available at: https://www.gamesradar.com/best-video-game-movies/

⁹⁰ [online]. [cit. 2019-03-20]. Available at: Screen Rant: Movie News, Movie Reviews, Movie Trailers, TV News [online]. Copyright © 2018 Screen Rant.com [cit. 20.03.2019]. Available at: https://screenrant.com/10-best-video-game-movies/.

⁹¹Ibid.

2.4 Video game industry in the USA

Data released in 2018 show that video game revenue reached a record-setting \$43.4 billion. According to figures from the Entertainment Software Association (ESA) and market tracker NPD Group, money which is spent on games in the US that year climbed 18 percent from the previous year. 92

Multichannel New published that the streaming services also surpassed the \$43.8 billion tally although they are estimated to rake in somewhere around \$28.8 billion for the year. 93

The phenomenon of video games has become the new source of entertainment for a generation and it's something that has new media moguls like Netflix chief executive Reed Hastings concerned. 94

Netflix mentioned that well-known *Fortnite* which is played all around the world was more of a threat to its business than TimeWarner's HBO. 95

Stanley Pierre-Louis, an ESA president chief executive, announced:"The impressive economic growth of the industry announced today parallels the growth of the industry in mainstream American culture."⁹⁶

The ESA research showed that about 150 million people in the U.S. played video games while the industry there boasted more than 220,000 jobs throughout the country. 97

⁹²[online]. 2019 [cit. 2019-03-21]. Available at: https://phys.org/news/2019-01-video-game-industry-scored-bn.html.

⁹³Video game revenue tops \$43 billion in 2018, an 18% jump from 2017 – TechCrunch. TechCrunch – Startup and Technology News[online]. Available at: https://techcrunch.com/2019/01/22/video-game-revenue-tops-43-billion-in-2018-an-18-jump-from-2017/.

⁹⁴ Ibid.

⁹⁵ Ibid.

⁹⁶US video game industry scored \$43.4 billion record sales in 2018 | The Express Tribune. The Express Tribune - Breaking News, Latest Pakistan News Updates [online]. Copyright © 2019 [cit. 21.03.2019]. Available at: https://tribune.com.pk/story/1894800/8-us-video-game-industry-scored-43-4-billion-record-sales-2018/.

⁹⁷Ibid.

Statistics of 2018 denote that women accounted for nearly 45 percent of all gamers in the United States, a slight increase over the previous year, and 27 percent of U.S. video gamers are between the ages of 18 and 35 and they are more and more towards the younger generation with recent years. ⁹⁸

"However, 26 percent of surveyed Americans who admitted to playing video games were at least 50 years old." 99

It is obvious that the video game industry is experiencing remarkable growth and that this is the right time to learn game development skills and cut a slice of the lucrative industry. 100

2.4.1 Gaming companies

Video game industry is not just one gaming company. Nowadays, there is a large number of gaming companies. It is known that they are not just companies from the USA but worldwide. We can find several companies from Europe or Japan. In this chapter, we find some best known and the most profitable gaming companies. In addition, the best selling video games in 2018.

Ubisoft, at first a small project created in rural France, is nowadays a big competitor to gaming companies. This company is behind the creation of for example known *Assassin's Creed*. Ubisoft is integral to gaming giants thanks to its net worth of \$3.69 billion.¹⁰¹

Nintendo was founded in Japan in 1889. Nintendo introduced a new way of gaming by creating the Gamecube and Wii consoles which let us race against donkeys

¹⁰⁰10 Interesting 2018 Video Game Industry Statistics, Trends & Data. Medium – a place to read and write big ideas and important stories [online]. Available at: https://medium.com/swlh/10-interesting-2018-video-game-industry-statistics-trends-data-499050f976b3.

^{98 •} U.S. video gamer gender statistics 2018 | Statista. • Statista - The Statistics Portal for Market Data, Market Research and Market Studies [online]. Copyright © Statista 2019 [cit. 21.03.2019]. Available at: https://www.statista.com/statistics/232383/gender-split-of-us-computer-and-video-gamers/.

¹⁰¹The biggest gaming companies and what they're worth. Medium – a place to read and write big ideas and important stories[online]. Available at: https://medium.com/buff-game/the-biggest-gaming-companies-and-what-theyre-worth-91755a1969de.

and turtles as an Italian plumber. The net worth of this company is \$20.11 billion. Some of the notable video games created by this company are *Super Mario Bros.*, *Pokémon* and *The legend of Zelda*. 102

Electronic Arts is also referred to as EA Games. EA has made several sports games. The most famous games are FIFA, NBA or NFL. Thanks to smart business move EA acquired DIC in Sweden to take over the Battlefield franchise. In addition, after working with Disney EA distributed all Star Wars games. Electronic Arts is now worth \$22.9 billion.¹⁰³

Although *Activision Blizzard* is not as known as *Nintendo*, it has produced games like *Call of Duty, World of Warcraft, Overwatch* or *Diablo* which are well known among gamers. These well-known games ensured the company net worth of \$29.23 billion.¹⁰⁴

2K is a gaming studio which has produced several video games. This studio also owns Rockstar games known for its creation of *Grand Theft Auto*, one of the most gainful game. Their production also includes games like *Read Dead Redemption*, *Bioshock* or *Borderlands*. 2K worth is \$3.22 billion.¹⁰⁵

Microsoft Corporation was founded by Bill Gates and Paul Allen and it is one of the biggest companies in the world. However, Microsoft does not just sell PCs, they made a game console *Xbox* which competes *PlayStation* in the console market. Thanks to these consoles, Microsoft's net worth is \$402.06 billion.¹⁰⁶

Sony, which is a subsidiary of the Sony Corporation, was established in Tokyo in 1993. It has made the most well-known gaming console *PlayStation*. *Sony* is a leading

¹⁰³lbid.

¹⁰²Ibid.

The biggest gaming companies and what they're worth. Medium – a place to read and write big ideas and important stories[online]. Available at: https://medium.com/buff-game/the-biggest-gaming-companies-and-what-theyre-worth-91755a1969de.

¹⁰⁵ Ibid.

¹⁰⁶The 50 Top Video Game Design Companies in The World. The Ultimate Game Designing Website for Aspiring Game Designers[online]. Available at: https://www.gamedesigning.org/game-development-studios/.

company in the gaming industry, besides their excellent audio equipment and other electronics, and the company's net worth is \$37.45 billion. 107

The best-selling video game in 2018 is for example *Far Cry 5* which was published by *Ubisoft* and it pulled in \$310 million in its first week. Another game *God of War* published by *Sony* earned \$131 million in digital revenue during its launch month. In addition, a paid game like *Call of Duty: WWII* published by *Activision Blizzard* earned \$506 million. First in the list of Free to Play games is *Fortnite* which earned over \$2.4 billion in 2018. ¹⁰⁸

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¹⁰⁷Ibid.

 $^{^{108}}$ MORRIS, CHRIS. [online]. 2018 [cit. 2019-04-07]. Available at: http://fortune.com/2018/07/06/2018-best-selling-video-games/.

3. Practical section

The practical section is based on video games and their link to politics. Video games are important to society and also important to sociologists then, the reason is that they are an object constructed by individuals using technology that is meant to reflect popular culture. The influence of the video games is connected to the historical background and the events that changed the visual side of the video games, however, the interesting thing about that is also the influence of the conception of the video games.

For the purpose of this study I analyse the video games and their changes through the history in America. I am further interested in the games that are the main sources of entertainment nowadays, but not just nowadays, already a many years ago.

It explains what attitude the developers of video games have on the policy that appears in them or is related to them. In the practical part is also mentioned the attitude of US President Trump to video games and how, for example, the video game *Borders* was inspired by what the President said.

This section is also dedicated to the violence that is caused by playing video games, and studies that show the impact of playing video games on young people. A lot of crimes have been committed in the USA where a criminal has been known by playing video games which contain violence like shooting people. Several of the attacks that have been committed are mentioned in this section. I analyse then the dark side of this entertainment but also the effects that are supposed to be the dark side of them. I analyse the changes of these games through the history to make the conclusion where we can really notice both of the sides, negative and positive, of the existence of the video games and their influence.

3.1 Popular culture

The definition of popular culture may be different. It is a sort of accumulation of cultural products. It includes art, literature, music, fashion, film, dance, radio and television. These are the main categories of cultural products used by the majority of society's population. The term "popular culture" has been used since 19th century. However, the growth of mass media got big social changes after World War II. 109

Popular culture is considered as appealing to a specific category of people. The generation born in 1990s requires to play video games more than the older generation. As time goes, games are more and more available since the connection to the internet and the introduction of home consoles and handheld consoles. ¹¹⁰

However, middle-aged adults are more and more interested in video games.

Concerning the development: "Video games have become a popular culture with an older generation (albeit, a generation that has grown up with the birth of video games) as much as being a youthful past-time increasing the interactive medium's hold as a popular culture to today's society."

Playing video games is some kind of satisfaction for gamers. They never receive rewards and recognition in society. On the contrary, in the video arcade they have skills, performance and self-esteem of the subordinate. It is seen that video games are an escape from reality unless the real world changes. They play a significant role in education and mental illnesses that are caused by violence which appears in some games. This claimed John Fiske, an American media scholar and author. 112

¹⁰⁹The Definition of Popular Culture in Sociology. *ThoughtCo.com is the World's Largest Education Resource* [online]. Available at: https://www.thoughtco.com/popular-culture-definition-3026453.

Video Games as Popular Culture – Andrew J. Reid – Medium. Medium – a place to read and write big ideas and important stories[online]. Available at: https://medium.com/@ajreid93/video-games-as-popular-culture-49d22adbd091

¹¹¹Ibid.

¹¹²Ibid.

The way that society regards those who play video games has consequently changed. Furthermore, a new neologism "geek" was created. It characterizes people who are able to work with technology but they do not have the skills in branches like fashion sense or athletic ability. At first, the term "geek" used to be an insult. However, during the time video games became popular, people changed their minds about this kind of people and it started to mean that it is a person who understands computers and technology. ¹¹³

Nowadays, video games as a form of popular culture play a significant role in today's advancing society and they are continuing to influence the world.

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^{113 10.4} The Impact of Video Games on Culture – Understanding Media and Culture: An Introduction to Mass Communication. 301 Moved Permanently [online]. Available at: https://open.lib.umn.edu/mediaandculture/chapter/10-4-the-impact-of-video-games-on-culture/.

3.2 Political background

Not only that video games are for fun, they also can make a political point too. The major developers and publishers have declined to speak openly with journalists about the provocative political connotations of popular titles, including *Call of Duty*, *Wolfenstein*, *Far Cry*, *Detroit*, and *The Division*. The video game industry decided as well to avoid political controversy at all costs.¹¹⁴

Since the presidency of Donald Trump a new era of American politics reflected on our screens. The titles developed by Western studios have incorporated provocative political elements including settings, dialogues, characters and themes.¹¹⁵

The New Colossus from Wolfenstein dramatizes an armed rebellion against a Nazi takeover of the U.S. and Far Cry 5 which shows a federal raid on a militaristic religious cult in Montana. Tom Clancy's The Division 2 which has been released this year portrays an American presidential tyranny and a second civil war.¹¹⁶

"The provocative elements in these games suggest explicit, deliberate commentary on post-Trump politics."

Borders, a lo-fi arcade game, explores immigration themes. The players of this game have a task to help an 8-bit Mexican stick figure cross over to American soil avoiding patrols of armed soldiers hiding in bushes along the way. 118

Creator of this game, Gonzalo Alvarez, said:"Borders came to me while I was sketching and hearing about Trump."¹¹⁹

¹¹⁴Video Game Companies Want to Reflect Trump's America—They Just Don't Want to Talk About It - The Ringer. The Ringer [online]. Copyright ©2019 The Ringer All Rights Reserved [cit. 22.03.2019]. Available at: https://www.theringer.com/2018/6/22/17492296/video-games-donald-trump-violence-tom-clancy-the-division-wolfenstein-policy.

¹¹⁵Ibid.

¹¹⁶lbid.

¹¹⁷ Ibid.

¹¹⁸Video games are getting political in the era of Donald Trump's America | London Evening Standard. London News | London Evening Standard - London's newspaper [online]. Available at https://www.standard.co.uk/stayingin/techgaming/video-games-are-getting-political-in-the-era-of-donald-trump-s-america-a3575836.html.

The game refers to people who cross the border and how hard it is for them. His campaign brought out a lot of fear and hate, especially towards foreigners and immigrants and it displays how many people die there.¹²⁰

Gonzalo Alvarez is the son of two immigrants who crossed illegally 20 years ago. The story of his parents was a model for him. *He said: "My father told me the story of when he saw a skeleton of another human on his way to America. He said it's the one thing he has never forgotten."*

Last year, North American leaders of the video game industry came to a summit in the White House to meet President Trump. Trump wanted to talk about violent video games, which, many activists argue, inspire school shootings. Researches have proved the suggestion that first-person shooters inspire school massacres.¹²²

However, the summit did not go so well. The Trump administration made efforts to turn away the prevailing political discourse from a more sensible, practical argument for strict gun control laws. The gaming industry escaped Washington, D.C. without any injury after Trump's meeting with GOP lawmakers, conservative activists and gaming executives who produced no substantial legislation, executive action or commercial concessions. 123

The gaming industry stands against an emergent political crisis within its own ranks and among consumers. In the wake of Gamergate, Western video game companies are afraid of radicalized fans and political agitators who often mobilize online to harass game developers.¹²⁴

¹²⁰Video games are getting political in the era of Donald Trump's America | London Evening Standard. London News | London Evening Standard - London's newspaper [online]. Available at https://www.standard.co.uk/stayingin/techgaming/video-games-are-getting-political-in-the-era-of-donald-trump-s-america-a3575836.html.

¹²¹Ibid.

¹²²Video Game Companies Want to Reflect Trump's America—They Just Don't Want to Talk About It - The Ringer. The Ringer [online]. Copyright ©2019 The Ringer All Rights Reserved [cit. 22.03.2019]. Available at: https://www.theringer.com/2018/6/22/17492296/video-games-donald-trump-violence-tom-clancy-the-division-wolfenstein-policy.

¹²³Ibid.

¹²⁴Ibid.

Many games in their stories communicate with progressive values and at this moment of cultural and political uncertainty they can and should be put to work for leftwing politics. ¹²⁵

There has been speculation by the gaming press that companies are afraid of losing consumers and sales by politicizing the promotional campaigns and polarizing the fan bases. The industry seems to realize that its biggest, massively profitable titles are intellectually tepid, stunted and repressed, much like the reactionary fandoms irrespective of imagined or real resistance to any particular game's political outlook.¹²⁶

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 $^{^{125}\}mbox{Video}$ games are political. Here's how they can be progressive | Games | The Guardian. [online]. Copyright © 2019 Guardian News [cit. 23.03.2019]. Available at: https://www.theguardian.com/games/2018/aug/13/video-games-are-political-heres-how-they-can-be-progressive.

¹²⁶Video Game Companies Want to Reflect Trump's America—They Just Don't Want to Talk About It - The Ringer. The Ringer [online]. Copyright ©2019 The Ringer All Rights Reserved [cit. 22.03.2019]. Available at: https://www.theringer.com/2018/6/22/17492296/video-games-donald-trump-violence-tom-clancy-the-division-wolfenstein-policy.

3.3 Violent crimes related to video games

It is well known that video games have moved to the center of cultural life in the past few decades. Due to this increase of their playing they are partly responsible for modern ills including real world violence perpetrated by deeply disturbed young men. They are popular both among adults and children. 127

Mike Snider writes in his article that: "An international study looking at more than 17,000 adolescents aged 9 to 19, from 2010 to 2017, found playing violent video games led to increased physical aggression over time." 128

In the U.S., Canada, Germany and Japan the analysis of 24 studies found that students who played violent games such as *Grand Theft Auto*, *Call of Duty* and *Manhunt* had to be sent to the principal's office for fighting or hitting a non-family member.¹²⁹

The National Rifle Association which is the gun industry's main lobbyist group attributes mass shootings to video games, most especially when they are committed by young men. The NRA spent more than \$5 million on lobbying last year. 130

This makes a political stand-off in which virtual entertainment worlds become the patsy for very real firearms. The history where games are facing down blame for real world acts of murder is extensive. According to statistics that were made, video games are in some cases responsible for mass school-shooting murderers. ¹³¹

¹²⁷A brief history of blaming video games for mass murder - Polygon. Polygon [online]. Copyright © 2019 [cit. 25.03.2019]. Available at: https://www.polygon.com/2018/3/10/17101232/a-brief-history-of-video-game-violence-blame.

¹²⁸SNIDER, *Mike*. USA TODAY [online]. 2018 [cit. 2019-03-25]. Available at https://eu.usatoday.com/story/tech/news/2018/10/01/violent-video-games-tie-physical-aggression-confirmed-study/1486188002/.

¹²⁹ Ibid.

¹³⁰A brief history of blaming video games for mass murder - Polygon. Polygon [online]. Copyright © 2019 [cit. 25.03.2019]. Available at: https://www.polygon.com/2018/3/10/17101232/a-brief-history-of-video-game-violence-blame.

¹³¹ Ibid.

Lead author of the study, Jay Hull, said: "Although no single research project is definitive, our research aims to provide the most current and compelling responses to key criticisms on this topic."

On the contrary, the newest study at the University of Oxford published in Royal Society Open Science claims that there is no connection between playing violent video games and aggression in adolescents. For their study they compared previous research about this topic which used information from parents and carers to judge the level of aggressive behavior in their children. In addition, it relied on self-reported data from teenagers. ¹³²

Lead researcher professor Andrew Przybylski said:"The idea that violent video games drive real-world aggression is a popular one but it hasn't tested very well over time. Despite interest in the topic by parents and policy-makers, the research has not demonstrated that there is cause for concern."

40 of the 100 deadly school massacres happened in the United States. In 1927, 38 elementary school children and six adults were murdered by a man who wanted revenge for his failure to secure an elected position. This attack claimed the largest number of casualties.¹³⁴

Before video games were a part of American life, 7 attacks took place in the previous era. 33 school shootings took place between 1980 and 2018 in which more than one person was slain. And in four cases of these 33 murderers they have been identified as being fans of video games.¹³⁵

¹³²BARDER, Ollie. [online]. 2019 [cit. 2019-04-10]. Available at: 404. Forbes [online]. Copyright © 2019 Forbes Media LLC. All Rights Reserved [cit. 10.04.2019]. Available at: https://www.forbes.com/sites/olliebarder/2019/02/15/new-study-shows-that-there-is-no-link-between-violent-video-games-and-aggression-in-teenagers/#43ad3900328e.

¹³⁴A brief history of blaming video games for mass murder - Polygon. Polygon [online]. Copyright © 2019 [cit. 25.03.2019]. Available at: https://www.polygon.com/2018/3/10/17101232/a-brief-history-of-video-game-violence-blame.

¹³⁵Ibid.

3.3.1 School shootings

Three students were killed by 14-year-old Michael Carneal in 1997. He enjoyed playing video games. The reason why he did this act should have been mental illnesses and that he had been a target of bullies. The parents of the victims sued multiple organizations including game companies, unfortunately, their attempt was not successful. 136

In 1999 at the Columbine high school in Littleton, 12 students and a teacher were murdered by Eric Harris and Dylan Klebold. Other 23 students were wounded. They enjoyed playing video games like *Doom* which is licensed by the US military to train soldiers to kill. First they made a classroom project in which they dressed in trenchcoats, carried guns and killed school athletes and a less than a year later they did it with real guns. After this massacre they took their life by shooting themselves.¹³⁷

Mass shooting in Newtown in 2012 was committed by 20-year-old Adam Lanza. 28 people were murdered and 2 injured. His attack began when he killed his mother at home and then he went to Sandy Hook Elementary School and shot 20 children and 6 adults. This attack was one of the deadliest school shootings in U.S. history. Adam Lanza spent a lot of time playing a wide variety of games. He enjoyed playing *Call of Duty* for hours and he was known to be first-person shooter fan. He suffered from mental health issues and mental disruption. 138

Afterward, the legislators pledged to introduce some form of gun control legislation. Ex-president Barack Obama claimed that he would do anything that was in his power to prevent future mass shootings. At that time, more than one-fifth of public and private schools in the U.S. already employed police or other armed security personnel. The bill proposed by Sen. Dianne Feinstein imposed a ban on the sale of

¹³⁶Ibid.

¹³⁷RADFORD, *Tim*. Computer games linked to violence | UK news | The Guardian. [online]. Copyright © 2019 Guardian News [cit. 25.03.2019]. Available at: https://www.theguardian.com/uk/2000/apr/24/timradford.

¹³⁸Ibid.

more than 150 specific firearm models as well as magazines that held more than 10 rounds of ammunition. 139

Most of the school shootings are perpetrated by young men who are known for playing video games and they often suffer from mental health. 140

3.3.2 Non-school mass murders

Not only mass shootings in the USA but also worldwide massacres are often perpetrated by individual shooters who suffer from mental illnesses or because of their professional failures and often take place in the public spaces. ¹⁴¹

17-year-old Daniel Petric shot both his parents and killed his mother after being barred from the game. At that time, in 2008 many teenagers were addicted to the competitive multiplayer modes and played *Halo's*. His youthful age was a reason why he didn't get the death penalty.

More players have become obsessed with *World of Warcraft* which is a massively-multiplayer online role-playing game. Parents of 5-year-old and 10-year-old girls, Lester Louis and Petra Huffmire, took their addiction too far. Their children were not allowed to leave the house, neither go to school and the surroundings of the house were in terrible condition. Police discovered the two girls ended up with damaged teeth, malnutrition and both with and dirt caking their skin. ¹⁴²

Grand Theft Auto is well known for its large number of violent parts. Devin Moore who was inspired by this game murdered two police officers and one 911 operator by shooting them into a head. As Moore's lawyers argued, he committed murder due to a life full of physical and mental abuse. This game enables players to

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RAY, Michael. Sandy Hook Elementary School shooting [online]. [cit. 2019-03-26]. Available at: https://www.britannica.com/event/Newtown-shootings-of-2012.

¹⁴⁰A brief history of blaming video games for mass murder - Polygon. Polygon [online]. Copyright © 2019 [cit. 25.03.2019]. Available at: https://www.polygon.com/2018/3/10/17101232/a-brief-history-of-video-game-violence-blame.

¹⁴¹Ibid.

¹⁴²Real Life Crimes Inspired By Video Games | TheGamer . TheGamer - The World's Most Entertaining Video Game Site [online]. Copyright © 2018 TheGamer.com [cit. 25.03.2019]. Available at: https://www.thegamer.com/15-real-life-crimes-inspired-by-video-games/?v=6&n=f.

steal cars, murder police officers and commit acts of torture against fellow criminals. He was condemned to death by lethal injection in 2005. The fact that this video game influenced his crime is seen on statements which he said after his arrest. 143

Another crime inspired by video game *Grand Theft Auto IV* happened in New Hyde Park in 2008. A group of teenagers violently attacked a man in a grocery store parking lot. Then the gang stole a pack of cigarettes from a woman who was in a car. After that, they damaged her car using baseball bats. As a consequence, the gang was arrested by the police and when they were asked about their motives they stated that they were inspired by this game. ¹⁴⁴

3.3.3 Worldwide attacks

One more case which included parents who were addicted to video game happened in South Korea. Their three-month-old daughter died due to starvation. The 41-year-old man and 25-year-old woman visited internet cafes and they rarely came home to take care of her. They played *Prius* online which is about the creation of an alternate reality. Judging by the police the couple lost their will to live an actual life and they rather lived their life in the virtual world. 145

Crimes connected to video games were also detected in Australia. 2012 was a year in which New South Wales was dealing with a sharp increase of teenage violent crime. Several of teens were killed or injured because the criminals were carrying knives. Andrew Scipione, police commissioner, believed that behind all these crimes were video games where the player was rewarded for killing, raping and causing mayhem.¹⁴⁶

144 Ibid.
 145 Real Life Crimes Inspired By Video Games | TheGamer - The World's Most Entertaining Video Game
 Site [online]. Copyright © 2018 TheGamer.com [cit. 25.03.2019]. Available at: https://www.thegamer.com/15-real-life-crimes-inspired-by-video-games/?v=6&n=f.

¹⁴³CAHILL, James. Sandy Hook Elementary School shooting [online]. 2017 [cit. 2019-03-26]. Available at: http://listverse.com/2017/10/28/top-10-violent-crimes-tied-to-video-games/.

¹⁴⁶CAHILL, James. Sandy Hook Elementary School shooting [online]. 2017 [cit. 2019-03-26]. Available at: http://listverse.com/2017/10/28/top-10-violent-crimes-tied-to-video-games/

However, who has to be mentioned in this section is Anders Breivik who is the deadliest mass shooter in human history. He murdered 69 young adults in Norway at a youth political camps on July 22, 2011. The total death toll was 77 because eight other people were killed by a bomb. He believed to be a missionary giving a warning against "islamization" of Norway at the hands of the Norwegian Labor Party and that was probably his motivation to perpetrate this crime. 147

Breivik was enthusiastic about playing video games. As Breivik said, he was playing *World of Warcraft* only for relaxation. On the contrary, Breivik used *Call of Duty: Modern Warfare 2* as a training simulator having played the game using a hologram device in order to make the gameplay appear three-dimensional. In this version of *Call of Duty* players commit a terrorist attack at an airport against innocent civilians. It is why this version had fallen under controversy due to its level "No Russian". ¹⁴⁸

The criminal offence he committed did not remain without punishment.

"Breivik was sentenced to containment which is a minimum of ten years in jail and a maximum of 21 years but can be extended indefinitely based on the offender's danger to the public. This is the maximum sentence available under Norwegian law." 149

It is widely believed that video games are nowadays the center of entertainment. Not only among young people but also among adults. However, most of the crimes which are committed are frequently associated with video games. The violence which is reflected in them might have a great impact on real-world behaviour and society.

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¹⁴⁸Ibid.

¹⁴⁷Ibid.

¹⁴⁹Ibid.

3.4 Transformation of video games

Over the last 30 years video games have gone through several stages. Through the evolution of them there has been a major technological advancement that had influenced our society. There are obvious changes which show the improvement over the past decades. ¹⁵⁰

What is evident about the major difference is in the graphics and picture in games. If we look back to the 1980s and 1990s, the pictures had a grainy composure and the major characteristic was that they were seriously pixelated. Nowadays, the graphics of the games is far away from the graphics in the past. 151152

There have been many changes which can be discussed at this time. The technology is highly advanced. The changes which can be seen are in 2D figures and scenes that are nowadays in 3D or sometimes 4D dimensions. It is clear because developers and gaming companies didn't have the technology to make the games look like real-life in the '80s and '90s. For the gamers these advancements are a great experience. The games seem more like a real story and it moves the game to a completely different level. 153

Over the years, online gaming started to dominate the industry more and more. Before, if you wanted to play with your friend, there was only one way on a console and the screen was split. This type of gaming was a way to invite friends over for playing. Even though, at the beginning of the domination of online gaming, it did not

¹⁵⁰How Video Games Have Changed Over the Last 30 Years: A Gallery. Video Games, Movie Reviews, Television Shows - Unrealitymag[online]. Copyright © 2019. [cit. 28.03.2019]. Available at: https://unrealitymag.com/how-video-games-have-changed-over-the-last-30-years-a-gallery/.

¹⁵¹Ibid.

¹⁵² For more, see appendix 1,2,3

¹⁵³Ibid.

stop players from meeting up to play split screen still. But currently, players mostly play and talk to each other online instead of sharing the same screen in person. 154

In video games the main difficulty is solving problems. In the past it was quite harder to solve the problem. It often took longer time and you could only ask friends and family. On the contrary, nowadays possibilities are large. It only takes a few minutes to find it on the internet. 155

Times are changing.

According to this article: "That sense of community for helping each other solve problems has been replaced with responses of "Why don't you just Google it?" when asking a friend for help." 156

The increase of competitive games, competing teams and tournaments has been noted in recent years. There are two main reasons which ensured the growth of esports. On one hand is the internet. It gives the opportunity and provides comfort for everybody in the industry. On the other hand are platforms like Twitch.tv and YouTube which everybody watches. 157

The popularity of esports rises increasingly but before: "In the early days of esports competing often meant heading to your nearest LAN cafe or LAN event and taking part against hundreds of other players." 158

Nowadays we find several ways to play games. The gaming industry is wideranging and therefore offers plenty of options. Not only are new gaming consoles still

¹⁵⁸Ibid.

¹⁵⁴PELL, *Will*. 7 Examples That Show How The Gaming Industry Has Changed | Gamebyte. Gamebyte | Gaming Rumours, Reviews & Entertainment [online]. Copyright © [cit. 28.03.2019]. Available at: https://www.gamebyte.com/7-examples-show-gaming-industry-changed/.

¹⁵⁵PELL, *Will*. 7 Examples That Show How The Gaming Industry Has Changed | Gamebyte. Gamebyte | Gaming Rumours, Reviews & Entertainment [online]. Copyright © [cit. 28.03.2019]. Available at: https://www.gamebyte.com/7-examples-show-gaming-industry-changed/. 156 Ibid.

¹⁵⁷ Ibid.

being created, but gaming is also spread on mobile phones. A new trend is also the virtual reality, which moves games to a completely different level and thanks to them the player feels almost like in the real world. With the expansion and development of gaming, games are available not only in stores but also online. Players use more and more online gaming to play with their friends, for example. With well-known websites such as *Twitch.tv* and *YouTube*, they provide gamers with the means that there is always somebody playing the game that you like to learn more about and gamers can tune into a stream or find a review or gameplay video on YouTube.

3.4.1 How 9/11 affected video games

On 11th September 2001 terrorists from aboard hijacked three passenger planes. Their intention was to make attacks on the World Trade Center in New York City and the Pentagon in Washington, D.C. They killed everyone in the planes and 3,000 people on the ground.¹⁵⁹

These attacks might seem like they do not have any connection to video games. Actually, they have been influenced by 9/11 quite heavily. Several developers tried to make games based on 9/11 but their attempts were unsuccessful. The relationship between games and 9/11 is one of the most complicated of any artistic medium. According to this relationship, it is seen where video gaming has its place from a cultural perspective. ¹⁶⁰

An incomprehensible action of game developers was to act as if the twin towers never existed. An example of this modification *Command and Conquer: Red Alert 2*. As a consequence, to make a marketing move it changed its back cover to a plane flying toward the twin towers. ¹⁶¹

¹⁵⁹9/11 Timeline - HISTORY. [online]. Copyright © 2019 A [cit. 07.04.2019]. Available at: https://www.history.com/topics/21st-century/9-11-timeline.

¹⁶⁰How 9/11 Affected Games | bit-tech.net. The UK's leading source for Hardware and Games reviews | bit-tech.net [online]. Copyright © 2000 [cit. 28.03.2019]. Available at: https://bit-tech.net/reviews/gaming/pc/how-9-11-affected-games/1/.

¹⁶¹ Ibid.

Spider Man 2: Enter Electro was one of the games that have changed its final stage. The reasons were that the final battle took place on the top of the World Trade Center. Following the attacks, developers re-worked and re-released this game. As a result, the final battle was no longer set up on the World Trade Center. 162

Without much thinking about this right or wrong reaction of developers to attacks, it was more substantial that games reacted about this event in heightened sensitivity of the time than other cultural mediums. Rapidly, video games faced a verbal attack about the suggested use of *Flight Simulator* by the perpetrators for training purposes and the violence appearing in them. ¹⁶³

Another game that has been changed after 9/11 was *Grand Theft Auto III*. However, it was still in development during the attacks. Its release had to be postponed due to 9/11. The developers were not satisfied with certain small contextual reference and with few gameplay instances. The main change was the removal of revolutionary Darkel, who was a character from the game, who wants to destroy Liberty City. ¹⁶⁴

However, not just video games were affected by September 11th. These attacks have affected the whole world not only from a moral point of view, when, for example, airport control has been tightened but also from the perspective of popular culture.

¹⁶²lbid.

¹⁶³ Ibid.

¹⁶⁴ Ibid.

To summarise my practical part, we can see the impact of video games on the world. For my study I have chosen the background of popular culture, mainly the video games that are the most common way of connection to popular culture nowadays. From the political point of view people think that the policy is reflected in video games, however, it is not always true. Many game developers do not follow this idea and it is not their intention to connect the video games with a policy.

The topic of policy in video games could be considered to appear in the game *Star Wars Battlefront 2* where we can see the strong female character as the main role in this game. It has been discussed why they use the female character. But it is not the first time because the *Star Wars* series has always featured strong female characters before starting Princess Leia in the original trilogy, another was Rey from the sequel trilogy and Jyn Orso from *Rogue One*.

This phenomenon influences all the world and for that reason we can see the diversity of attitudes. Many of them are controversial.

On one hand, we have an unnamed millionaire who wants to have a real-life battle royale play out on a private island inspired by the game *Playersunknown's Battleground*. They do not use the real weapons but it will be replaced by Airsoft guns. The millionaire offering £45,000 is looking for any gamers who also have experience in organizing large scale events to turn this into a reality. The real-life battle royale will have a £100,000 jackpot.

On the other hand, we have the phenomenon of gaming industry that is based on the streaming which is a widened common. Many of Youtubers use stream to making money by playing and streaming video games with their comments.

In my opinion, the industry of video games is developing rapidly. New video games and their new versions are being released all the time. It is all based on the technical innovations which can be seen on the quality of games and new technologies used by developers of video games.

Concerning the attacks including the video games players I personally think that the video games could play a big role in violent attacks caused by young students. However, I do not see this factor as the main reason why they committed these attacks. According to studies, it is not sure that there is a connection between the violent behaviour and video games but there is a small percentage that the video games support this behaviour.

My practical part helped me to broaden my horizons in the question of influence caused by video games and helped me to understand the connection between video games, popular culture, policy, new technologies and so on. All of these factors make video games a great phenomenon of this century and probably of the next centuries to come.

4. Conclusion

My bachelor thesis describes the current phenomenon of video games in America from economic, social and moral perspective. However, the impact of video games is more extensive, not only in America but all over the world.

The theoretical part is primarily based on history and development of this phenomenon from its beginning to the present including modern era of gaming. I also studied video games that are used in education and the positivity and negativity of using games in schools concerning methods of teaching. Another chapter describes using video games in the US Army for military training. The rest of the theoretical part is devoted to the collaboration between video games and film industry and to the gaming industry in the USA in general.

The practical part comments the changes of video games before and after the events that changed history, the transformation of video games from the technological point of view.

According to my study, I can see the impact of video games and their power to influence the violent crimes which were mostly committed by young students in schools. In this part we can see that video games can also have a dark side. In this part are mentioned worldwide attacks to see that the crimes are not only committed in the USA. The background comments on the political scenes concerning opinion of Donald Trump, historical events, popular culture and the influence of video games. This study explains video games from a different point of view, not just being a way of entertainment.

This phenomenon influences the whole generation for decades. After this study we cannot doubt the imortality of this way of entertainment. In my study I focused on the main impacts of video games nowadays as well as in the history of America. As the video games influenced the history of entertainement, the video games were also influenced by the technical innovations that I tried to show.

The motivation for my work was the impact on my younger brother and the importance of this phenomenon that touches each of us. Many films are based on famous video games. I know a lot of films based on this topic that makes me think about the impact they have. This fact was one of the main reasons to write this thesis because nowadays this topic is widely used.

For my bachelor thesis I used the internet sources, literature and other sources that helped me to understand the power of this phenomenon.

5. Résumé

Mon mémoire de licence décrit le phénomène actuel des jeux vidéo en Amérique du point de vue économique, social et moral. Toutefois, il est à noter que l'impact des jeux vidéo est plus étendu, pas seulement en Amérique, mais dans le monde entier.

La partie théorique de ce travail est principalement basée sur l'histoire et le développement de ce phénomène de ses débuts jusqu'à aujourd'hui, y compris l'ère moderne des jeuxvidéos. J'ai également étudié les jeux vidéo utilisés dans l'éducation, notamment les points positifs et négatifs propres à l'usage des jeux vidéos dans les écoles, en ce qui concerne les méthodes d'enseignement. Un autre chapitre décrit l'utilisation des jeux vidéo dans l'armée américaine pour l'entraînement militaire. Le reste de la partie théorique est consacré à la collaboration entre les jeux vidéos et l'industrie du film et à l'industrie du jeu vidéo aux États-Unis en général.

La partie pratique commente les changements rencontrés dans les jeux vidéo avant et après certains évènements qui ont changé l'histoire, par exemple l'évènement du 11 Septembre, ainsi que la transformation des jeux vidéos du point de vue technologique. J'ai ensuite étudié la place des jeux vidéos dans la culture populaire, les liens entre la politique et les jeux vidéos, les crimes violents causés pas les jeunes étudiants et les autres facteurs concernant les crimes reliés aux jeux vidéos.

Pour mon mémoire de licence, j'ai utilisé les sources Internet, la littérature et d'autres sources qui m'ont aidé à comprendre le pouvoir de ce phénomène.

6. Abstract

My bachelor thesis is divided into two parts- the theoretical part and the practical part. The theoretical part deals with video games and their origin, how video games are closely connected with education and their use in the US military. The next chapters, which are found in the theoretical part, describe the video games and their cooperation with the film, especially with Hollywood. There is also mentioned the video game industry and the most famous gaming companies. The practical part then deals with popular culture and political views of video games and their changes over the years. The main part of the practical part is the dark side of video games, which means violent crimes that are related to video games, such as shooting in American schools. The main idea of the work is to outline the fact that video games are not just for entertainment, but that they can have consequences.

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8. Appendices

1. Before: Call of Duty (2003)

After: Call of Duty WWII (2017)



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