# THE INFLUENCE OF VIDEO GAMES ON HUMAN CIVILIZATION AND CONTROVERSIAL VIEWPOINTS BEHIND GAME DEVELOPMENT

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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## Introduction

Video games are forms of interactive entertainment that allow players to participate in virtual worlds and control in-game characters, objects, or environments. Video games have been around for decades and have grown into a massive industry spanning multiple genres, platforms, and audiences. According to statistics, video games make up a $100 billion global industry, and nearly two-thirds of American homes have household members who play video games regularly ("Video Game History," 2017).

In 1971, Nutting Associate releases the first video game, Computer Space. Later, one of the development team members left Nutting Associate and started his own company: Atari. In 1972, Atari launches the pong game (MacDonald, 2014). 1970 was the year video games starts to evolve, and game developers began to show their talents. Because of the various flowers blooming in the technological world, we now have multiple games that we can enjoy. Video game players often use various devices, including PCs, mobile phones, and tablets. Each platform offers different functions, features, and playstyles, giving players different feelings. The most popular video game genres include action, adventure, role-playing, sports, simulation, and many others (Adam Chapman, 2016).

The video game industry is growing significantly and spans different demographics, from children to adults. Among the different groups of people, everyone has different opinions about video games. Video games have become essential to modern entertainment and hold significant importance in entertainment, education, socialization, economics, and technology.

This paper aims to discuss the influence of video games on human civilization and the controversial viewpoints behind game development. This analysis provides context regarding the

background of current video games, applies Actor-Network Theory to find the relationship between social groups, uses discourse analysis to detail the views among the different social groups, and synthesizes previous literature to help define different group viewpoints. Then I discuss the various impacts and bring the topic to a broader view of how video games affect politics and society.

<div align="center">**<u>Modern Video Games and Viewpoints</u>**</div>

*Background*

      The video game industry has grown significantly in recent years, and by this year, the global market expects to be worth more than $200 billion (Wijman 2021). There are several factors contributing to this growth, including the growing popularity of mobile gaming, the rise of esports, the flourishing of society, the promotion of the economy, and the continuing success of significant gaming franchises. In recent years, video games are continuing to evolve with the advent of virtual reality and mobile gaming. Virtual reality provides players with more immersive and realistic gaming experiences, while mobile gaming has made games more accessible and available to a broader audience (Norcia and Jean, 2019).

      The emergence of current video games can be traced back to the early days of arcade games in the 1970s and 1980s. Early games such as Pong, Space Invaders, and Pac-Man were simple in design and gameplay, but they laid the foundation for the video game industry as we know it today (MacDonald, 2014). In the 1990s and 2000s, video games became more complex and immersive with the introduction of 3D graphics, larger game worlds, and more sophisticated gameplay mechanics. During this time, popular franchises such as Super Mario, the Legend of Zelda, and Final Fantasy helped shape the industry.

Currently, some of the most popular video games in the gaming industry are League of Legends, Overwatch, Dota 2, Fortnite, Call of Duty, FIFA, Minecraft, and PUBG (Scharrer and Leone, 2006). These games offer a range of experiences, from first-person shooter action to open-world exploration and simulation. Many current video games also incorporate online and multiplayer features, allowing players to compete and cooperate with others worldwide.

*Framework – Actor-Network Theory*

To better understand this research, I use actor-network theory. Actor-network theory reveals the relationship of the various social groups and provides a more visual view of the research topic (Latour, 1996, pg373). The "Actor" in this theory refers to humans and non-human objects, such as concepts, technologies, organisms, organizations, and thoughts. In this research, the "actor" refers to online gaming and all the social groups since the definition of the actor is anything that changes the state of things by making a difference—for example, players, guardians, developers, devices, servers, etc. "Network" in this theory is the connections by actors through actions, and the network nodes in this research are the relationship between all three social groups to online gaming. In the graph below, starting from the center, where the video games circle is located, the outer layer of the ANT is all the human and non-human actors that I could think of. Then the most external portion of the graph is the relationship between the actors to gaming and how different actors feel about games.
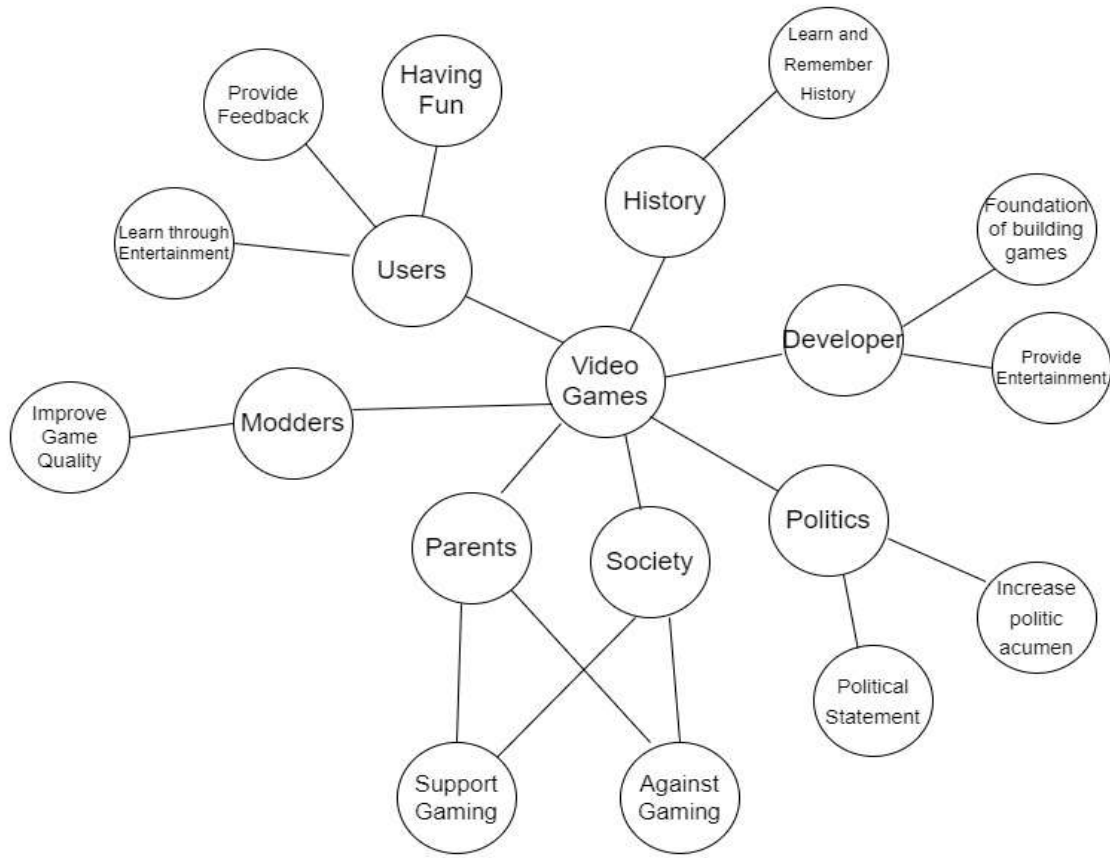
*Negative Viewpoints*

Although video games are a popular form of entertainment for people of all ages, it is also a controversial subject. That means knowing the negative of video games is essential for human civilization.

"As with gambling, many risks and harms of problematic gaming are identified in numerous studies; negative consequences were found for health-related aspects, such as sleep deprivation stress or lower psychosocial wellbeing as well as social functioning such as decreasing time for partner, friends and family and personal function indicated, for example, by lower academic achievement" (Festl, 2013).

According to Festl and other researchers, gaming, in this case, would have negative impacts. That includes addiction, physical problems, mental health problems, social isolation, and violent behavior (Jeong and Kim, 2011). It is essential to understand these negative impacts and take steps to mitigate them to ensure the lifestyle is healthy and balanced.

*Case I – Cyberbullying and Doxxing*

Cyberbullying in online games can lead to mental health problems (Milani, 2018). Cyberbullying can take many forms, including harassment, name-calling, exclusion, and threatening behavior. One of the most famous cases of cyberbullying is that of Zoe Quinn. In 2014, Quinn developed a game called "Depression Quest" (Parkin, 2014). This game is designed to deal with depression issues. However, after the game's release, Quinn's past boyfriend accused her of doing unethical things with game reviewers to get good reviews. A harassment campaign was coordinated against her by her past boyfriend. And this series of harassment activities made the harassment and abuse that Quinn suffered more and more widespread. Not only the online world, but she also received threatening phone calls and had to run away from home for safety reasons. Quinn's experience highlights the serious consequences of online harassment and the need for better protection against cyberbullying. Since then, many other cases of cyberbullying have emerged in online games. Gaming companies and online communities need to take steps to prevent cyberbullying and support victims.

*Case II – Race*

One of the negative situations found about race is to cater to the trend of diversification. Some game companies forcibly add a large number of characters to the game regardless of the game's era, history, setting, and other backgrounds. A 2019 research shows that among global

game developers, 81% of them are White, Caucasian, or European (IGDA, 2021). Games are based on personal experience, and with the high ratio of whites, the game tends to involve less of black society's history. A particular game promotional video contains symbolic content, such as black people and female characters who do not meet the aesthetics of some players. For example, Activision Blizzard company have a very famous game, World of Warcraft. They change a lot of NPCs' skim colors in one update. One of the announcements for World of Warcraft is about a tool called "Diversity Space Tool." This tool allows the user to customize the in-game from sexual orientation, gender, size, age, etc., which would help developers eliminate unconscious bias and exclusion when creating game characters or content (C Anna, 2022). From how Activision Blizzard addresses the tool, there are no significant problems. However, the cause of this news release is more intense criticism among players and netizens (Totilo, 2022).

*Case III – Gender*

From a gender perspective, there is a stereotype in the gaming world that boys are better at playing computer games than girls. In some shooting games, community players are still hostile to women and think female players are incompetent (Cross, 2022). It is often believed that female characters in certain video games may be overly sexualized, objectified, and portrayed as weaker than male characters. This can send harmful messages to young people, especially girls, about their worth and capabilities. For example, in most games, female characters always wear short skirts and low-cut clothing, which conveys a pornographic look. This incorrect thinking contributes to a culture of violence and disrespect for women.

*Case IV- Violence*

Another notable example of a negative video game is the controversy over the "Grand Theft Auto" (GTA) series. GTA is an open-world action-adventure game that allows players to engage in various criminal activities, such as stealing cars, engaging in shootouts, and other violent acts (Shouse, 2021). The argument that most people have is that this game has a depiction of violence, sexual content, and drug usage. Those negative behavior in the game would eventually impact players, especially younger people. Some studies suggest that playing violent video games like GTA may increase aggression and desensitization to violence (Steven, 2003). From Kenneth Chen's prospectus paper, we know that playing video games affects our minds and behaviors (Chen, 2020). In this case, there is a chance for people who play GTA to act in the real world the way they are in the gaming world. However, this is a stereotype. Games have nothing to do with violence. People with violent tendencies can still commit atrocities even if they don't play violent fighting games.

*Case V– Disability*

Gaming brings happiness to those with a disability, but that is not true for everyone with a disability. Research shows that among 1,000 disabled people, only 47% think gaming provides them with happiness, and others think they are the leading group experiencing discrimination from other players (Gardner, 2021). Then what have we done to make online gaming more accessible and inclusive?

One of the tools is easy mode. By offering an "easy mode" option to specific disability groups, games are now more accessible for those people. The "easy mode" may include features such as slower gameplay, fewer enemies, or extra checkpoints to make the game less challenging. Some games now offer specific accessibility features that make the game more accessible for players with disabilities. For example, a game may include closed captions, audio

descriptions, larger fonts, or customizable controls to make it more accessible to players with hearing, visual, and vision impairments (Shin). Another fantastic tool for disability is adaptive controllers. These controllers can include features such as larger buttons, customizable controls, or joysticks that can control by the player's chin, foot, or other body parts (Randell, 2023).

However, it's important to note that there is still much work to be done in this area, and many games still lack the necessary accessibility features to make them fully accessible to players with disabilities. It's important for us, as developers, to continue to prioritize accessibility and inclusion to ensure that all players have equal access to the gaming experience.

*Section Summary*

Personally, all of the above negative views are false. We should prevent cyberbullying, Doxxing, and violence. We should not discriminate, exclude, or treat different races, colors, genders, or even people with disabilities. From a legal point of view, discrimination is a crime. According to all the news I have seen, in today's society, with the rapid development of the Internet, many people choose to give up their lives under the circumstances of these negative comments. Maybe video games have many disadvantages, and we can't give up because of choking. Learning to identify various social problems in the game, stop negative actions, and improve them is what we should do.

*Positive Viewpoints*

Despite many negatives, video games also provide players with multiple benefits, including opportunities to develop problem-solving, decision-making, critical thinking, and social skills. Video games also offer players the opportunity to escape reality, explore new worlds, avoid lonely life, and challenge themselves in a safe and controllable environment

(Kowert, 2014). Understanding these positive impacts can help us appreciate the value of video games beyond their entertainment value and recognize them as a tool for personal development and growth.

*Case I – Learning through entertainment*

One example of the positive impact of video games is their potential to improve cognitive abilities, particularly in problem-solving. "Minecraft" is a game with widespread recognition for its positive effects. It is a sandbox game where players can create and explore virtual worlds, build structures, farm agriculture, breed animals, fight monsters, and manipulate the environment. The educational setting of this game allows users to learn subjects such as mathematics, science, programming, agriculture, reasoning, creativity, and development skills. According to Katherine Hewett, children playing "Minecraft" in a group setting shows a significant improvement in their ability to work together and communicate effectively (Katherine, 2016). To the gaming company's pride, "Minecraft" helps children with autism spectrum disorder develop social skills. Games that require players to solve puzzles or complete challenges can help build critical thinking and analytical skills and enhance creativity and imagination.

*Case II – Math within Gaming*

Mathematics plays a vital role in online games, and players can learn math through entertainment. When playing a complex game, players can learn mathematics and strengthen their minds while having fun. For example, a small number board can have infinite possibilities in the most straightforward and, on the other hand, complex Sudoku game. Studies have shown that Sudoku can cultivate players' mathematical thinking and improve number sense, develops

children's sensitivity to numbers, improve logical thinking, focus players' attention, and enhance reasoning ability (Patil Ashlesh, 2020). Different games would provide different experiences to the players, but most importantly, games offer a place to learn things through entertainment.

*Section Summary*

According to both cases, I agree that games can be effective learning tools. Games can provide immersive and interactive experiences that allow players to explore new concepts and ideas, practice problem-solving skills, and receive immediate feedback on their performance. They are designed to cater to different learning styles and preferences, which can help make learning more accessible and enjoyable for a broader range of learners.

### Politics in Gaming

Politics can be inherent in the nature of gaming. Although games are entertainment, politics are mostly solemn, and they seem distinct from each other. However, we can not say that they are incompatible. Many games have political connotations, explicitly or implicitly. Incorporating severe, heavy, and cruel political topics into seemingly light and superficial games is a common practice in game design and the industry. So, when a designer turns a burdensome political event into a game theme, what does he mean? In addition to ideological considerations, there are two rather essential motives. One is the future and planning, and the other is the memory and commemoration of the past.

Is memorizing history helpful to politics? The answer is yes. Politics without history is equivalent to a house without a foundation, which is always in a state of collapse. By putting the past into the game, the players who play the game are more likely to remember the history. Historical games such as Age of Empires, Civilization, Assassin's Creed, and Europa Universalis

allow players to explore various time periods and historical events and offer players a chance to experience history in a unique way.

Moreover, the future and planning are significant for any political organization. All politics needs support from people, and now the way of propaganda politics varies. Putting future plans into the games can introduce players to the subsequent political developments in an unambiguous and detailed manner. That means a clear and solid political implication of video games is unquestionable. It is incredibly effective and vivid in the close connection between future political planning and the daily life of the present. Politics in the game not only makes every player feel that they can control the gaming world with only a mouse and keyboard. But also inspires a sense of responsibility and even a sense of mission that the rise and fall of the world is the responsibility of everyone.

Politics can also be consolidated through the use of gaming. Even though the characteristics of some games are multithreading parallel narratives and multi-character interchangeable identities, they still have an apparent persuasive orientation in the end. One example is war confrontation games. Players choose a camp to join and then use the firearms and weapons in the hands of game characters to compete with players from different camps. Those games are also a direction in which ordinary people can learn combat knowledge. War is definitely about politics, which shows that learning the knowledge of the war in the game is a branch of politics. Once we enter the game, we start to stay away from life and do not care about the world, but politics is the opposite. It always requires us to intervene in reality and even change the world. That is why, logically speaking, linking games and politics is not only exciting but also meaningful. As Langdon writes, "By 'politics,' I mean arrangements of power and authority in human associations as well as the activities that take place within those

arrangements" (Winner, 1980, pg 123). Politics happens only within human power and authority, and gaming is just one way to express human politics.

## Future of Video Gaming

Under the circumstances of rapid progress in games, the future of video games has an exciting evolving landscape. One of the most interesting improvements of future video games is expecting Virtual Reality (VR) and augmented reality (AR) to become more widespread and immersive. So they can provide players with even more realistic and engaging gaming experiences.

Many science fiction novels depict future gaming equipment, gaming helmets, and gaming cabins, such as Ready Player One (using headset), Snow Crash (using full-body suite), and The Diamond Age (using helmet and gloves). The helmet includes many sensors that detect brain electrical signals without interfering with human brain waves so that human thoughts, expressions, and the use of emotions to control and influence game programs. Players wear helmets and experience the game cabin's most realistic and comprehensive virtual world. Controlling computers with thinking activities is the ultimate pursuit of human-computer interaction. Combining this technology with games, virtual worlds, and other simulation environments profoundly impacts user experience. With the progress of the times and the development of science and technology, the combination of virtual reality technology and games is getting closer and closer, bringing fresh blood to the game. The future of virtual reality technology expects to characterize by more immersive, realistic, and accessible gaming experiences driven by advancements in technology and changes in consumer behavior.

## Conclusion

Video games offer a range of genres and gaming experiences that cater to different preferences. Video games are engaging, immersive and can help players unwind and escape from the stress of everyday life. Games can also be educational, improving players' cognitive skills, enhancing problem-solving abilities, and promoting creativity. Educational games can help players learn new skills and concepts interactively and engagingly. In a social manner, video games offer an opportunity for players that allow them to socialize and connect with others. The development of multiplayer games provides a safe and controllable environment for the players. Since video games are co-related with the economy, the video game industry generates significant revenue, providing jobs and supporting local and global economies. Video games also offer players a way to earn money through gaming. Lastly, video games also advance the technological world by pushing the boundaries of the possibilities in gaming, such as computer graphics, artificial intelligence, and more.

In summary, although people have both positive and negative opinions about video games, we can only confirm that video games influence human civilization. Combining all cases, I argue that the impact of video games on people is still positive. The impact of video games is a complex issue, and it is essential to balance gaming and other aspects of life, such as physical activity and social interaction. Ultimately, the impact of video games depends on how the user plays the game and the individual player's behavior and personality. As such, it is essential to monitor the impact of video games on players and take measures to address any negative effects while capitalizing on their positive aspects.

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