Open Access | Research Article

Video Game, Not Just a Recreation Way

Qianlong Li*

Department of Computer Science and Technology, Hong Kong Baptist University, Kowloon Tong, Hong Kong

ABSTRACT

In recent years, video games have surged in popularity worldwide, sparking diverse opinions. While the younger generation perceives them as an art form, older individuals often regard them as a vacuous pastime. This study redefines traditional art and identifies corresponding features in video games, exploring their potential meanings beyond recreation. Data collection involved online surveys and interviews. The findings propose that video games could be seen as an art form in theory, carrying various positive social implications. However, as not everyone is receptive to this idea, it seems premature to solidify this viewpoint. It appears that video games still require more time for widespread understanding.

Keywords: Video game; The ninth art; GTA; Recreation way; Virtual Reality; Generation gap; Emerging art; Human-computer interaction

INTRODUCTION

On December 4, 2023, the release of the Grand Theft Auto VI (GTA6) trailer by Rockstar Games took the gaming world by storm, breaking records and setting new benchmarks within 48 hours of its debut. With an astounding 121 million views on YouTube, by December 5, the trailer had been viewed more than 65 million times on YouTube. This one-and-a-half-minute video confirms the 2025 return of one of the most successful video game franchises almost a decade after the last installment. This highly anticipated trailer has not only captured the attention of millions but has also secured its place in the annals of gaming history. Surpassing previous records and establishing itself as a trailblazer in the industry, Grand Theft Auto VI (GTA6) has demonstrated the enduring power and influence of the franchise. As fans eagerly await the game's official launch, the overwhelming response to the trailer is a testament to the unwavering popularity and impact of the Grand Theft Auto (GTA) series [1].

Following the highly anticipated release of the GTA6 trailer, a multitude of bloggers-both in the gaming industry and outside of it-took part in extensive discussions or posted videos related to the game, as it quickly became the talk of the town. These bloggers and content creators went to great lengths to uncover every aspect of the game, from its story and characters to the technicalities involved in its development. They meticulously analyzed the techniques used in the game, scrutinized the relationships between the characters, and even counted the number of creatures that were shown in the trailer. It was evident that anything related to GTA6 garnered immense attention and viewership as the hype surrounding the game continued to grow.

While the young generation, video gamers, and people in the game industry got into a carnival of gaming, many of the older generation and non-gamers don't understand why a game can be so hot, they couldn't imagine a virtual product can sweep the world. In their eyes, playing games is a plaything that lose

their ambition. Some think video games can cause minors to engage in aggressive behavior. When video gamers explain that this is the ninth art, they turn their noses up, and sometimes, the discussion ends in a quarrel, causing disharmony in the family or a group.

This study aims to delve into the possible significance of video games, determine if they deserve the title of Ninth Art, and explain that video games are more than just a simple form of recreation. It seeks to show those who still view video games as mere entertainment that they represent the newest way to have fun in this century. Just like poker and chess were once popular games, every generation has its own way of seeking entertainment and there should be no bias between different groups of people. Justifying the name of games, giving a voice to gamers, and playing games does not mean that video games have lost their ambition.

The argument begins by examining the definition of art to determine whether video games can be classified as such. Video games often have a negative reputation due to the addiction of many teenagers, and some use the statement "video games are not a form of art" as a justification for playing them, while others disagree (**Figure 1**).

Figure 1: The definitions of art.

The figure provides a comprehensive definition of art encompassing three essential features: Mimesis, formalism, and Expression. Mimesis refers to the ability of art to imitate reality, while formalism deals with the formal elements of art like line, color, and composition. Expression concerns the emotional and psychological impact of art on its audience. However, while these three features define traditional visual art, they cannot be directly applied to video games. Instead, video games have their unique features that reflect the video game industry.

Video games have aesthetics and visual design, they present a unique blend of graphics, sound, and animation that appeal to the player's senses.

Video games have a significant cultural impact and influence, as they are a popular form of entertainment worldwide. They often reflect contemporary issues such as politics, social justice, and environmental concerns, and as such, they have become a platform for social commentary.

Video games offer interactive narratives, where players can influence the outcome of the story through their choices and decisions. This feature makes video games a unique form of art that offers players an immersive and engaging experience.

In order to verify the three features, a semi-structured interview was conducted in public, mostly at the university. The interview was conducted with two groups-video game players and non-video game players. The purpose of the interview was to gather personal viewpoints about those three features. Additionally, an online survey was published on social media platforms, facing two groups of people as well. The survey quantified general data, while the interview collected more detailed and private information. These two types of data complement each other, enabling us to prove the conjecture and identify any new affecting issues. The world is not perfect and video games are no exception. The results of this study will objectively show the final outcome, even if it adheres to the initial purpose of this study.

MATERIALS AND METHODS

Interactive entertainment software, known as video games or computer games, utilize various input devices such as joysticks, controllers, keyboards, or motion sensing devices to generate visual feedback on display devices like computer monitors, television sets, flat-panel displays, or touchscreens on handheld devices. These games often feature auditory elements delivered through speakers or headphones and sometimes include haptic technology for tactile sensations. Additionally, certain video games enable in-game communication and live streaming through microphone and webcam inputs [2].

The history of video games dates back to the early 1950s when computer researchers began developing basic games. However, it wasn't until the 1970's that video games gained widespread popularity, thanks to the release of arcade classics like Pong and Space Invaders. The 1980's saw a surge in home gaming consoles with the introduction of iconic systems like the Atari 2600 and the Nintendo Entertainment System (NES). These consoles brought video games into households worldwide, captivating players with titles such as Super Mario Bros and The Legend of Zelda.

The 1990's marked a period of rapid advancement in video game technology, with the rise of 3D graphics and immersive gameplay experiences. This decade saw the emergence of iconic franchises like Final Fantasy, Sonic the Hedgehog, and Doom, further solidifying the cultural impact of video games. In the early 2000's, the gaming industry underwent a revolution with the introduction of online gaming and Massively Multiplayer Online Role-Playing Games (MMORPGs) like World of Warcraft. This era also saw the release of groundbreaking titles such as Halo and Grand Theft Auto III (GTA3), which pushed the boundaries of storytelling and gameplay.

Educational Use

Today, video games have evolved into a multi-billion-dollar industry, encompassing various genres and platforms. From mobile to virtual reality experiences, video games continue to captivate players of all ages and backgrounds, shaping popular culture and entertainment in the digital age. Sometimes, the publishing of a game represents the cognition of the whole society of the game developer and designer. They perfectly integrate the creator's aesthetic standard with vivid scenes, lifelike sound effects, game levels, storylines, and interpersonal and human-computer interactions, forming a cultural work expressing the era. For example, Ubisoft, a French game company, is famous for generating the actual world, regardless of the past or today's view. Many of their games are called tour imitators by players. Because they can restore an ancient city that only appears in the history books. And the most precise 3-D model of a historical building.

An American teacher was playing Assassin's Creed Odyssey in the middle of class in front of all his students. To teach them about the Battle of Thermopylae [3]. As a way of educating his students about Greece, this undoubtedly aroused their interest. "So, right there, that's going to be the entrance to Thermopylae. That's a very narrow passageway in order for the Persians and the Greeks to fight." This teacher told his students a key location of the Battle of Thermopylae with a well-designed and made scene in the game. After that, the course video was uploaded to the internet, which received over 700,000 views and many positive comments on the platform.

In China, a history teacher used the Assassin's Creed video game to teach his students in class. The teacher was impressed by the realistic 3D modeling and accurate historical scene restoration in the game in 2013. He wrote an article to express his belief that video games provide an engaging way for students to learn about history. Students can actively participate in the learning process by immersing themselves in historical events, meeting historical figures, and exploring real-world locations. The visual and interactive features of video games offer a unique and effective learning experience that traditional teaching methods may not provide. Finally, in 2023, the teacher got a chance to use video games as a teaching tool.

In recent years, video games have emerged as a promising tool for education. When chosen and used with care, video games can provide a fun and interactive way of learning that caters to different learning styles. By incorporating video games in classrooms, educators can take lessons to a whole new level and make them more engaging and inspiring for students.

The Social Value of Games

Assassin's Creed Unity is a video game developed by Ubisoft Montreal and released in 2014. It is an action-adventure game set in the French Revolution in Paris. The game features a stunningly detailed recreation of Parisian landmarks, including the Notre Dame Cathedral, showcasing the game's attention to detail. In April 2019, the tragic fire that devastated the Notre Dame Cathedral in Paris captured the world's attention. Ubisoft pledged to donate € 500,000 to aid in the cathedral's restoration efforts. Furthermore, they provided their intricately detailed 3D model of the cathedral to architects, engineers, and designers who were involved in the restoration project. This unexpected partnership between a video game developer and a cultural monument has gained widespread recognition and admiration. The 3D model of the cathedral was the result of a painstaking effort by Ubisoft's team of experts, who spent years studying and recreating the cathedral's intricate details. The game's developers used a process called photogrammetry, where thousands of photographs were taken of the cathedral's interior and exterior to create a detailed 3D model. This model was used in the game so that players could explore the cathedral in virtual reality. Ubisoft's decision to donate to the restoration of the Notre Dame Cathedral has been widely praised for its generosity and vision. It highlights the potential of technology and art to bring people together, preserve cultural heritage, and contribute to society. The collaboration between a video game developer and a cultural monument has shown the power of technology to help preserve our history and bring people together [4]. According to Dr. Kate Sheppard, an associate professor of History and Political Science at Missouri University of Science and Technology, and Dr. Chris Naunton, a writer, broadcaster, and Egyptologist, video games can offer a highly realistic and engaging experience of a reconstructed past that is accurate and credible. They believe that this can help to demonstrate to the egyptological community the potential of video games in this regard.

There are certain video games that are not just about the gameplay but also offer an immersive social experience. These games incorporate social elements that allow players to interact with each other and form communities. These interactive exchanges include requesting resources, visiting another player's realm, or sending invitations through social networks. For instance, First-Person Shooters (FPS) and Multi-User Online Battle Arenas (MOBAs) are two popular genres that feature such social elements. In FPS games, players can team up with others to complete missions or compete against each other in timed matches. These games often have chat features that allow players to communicate and coordinate their strategies. Similarly, MOBAs also allow players to engage with each other in a social setting. Players can form teams and compete against each other in fast-paced matches, where communication and strategy are key to victory. These games also have features that allow players to add friends, join groups, and share their game progress on social media.

World of Warcraft and other similar games are a popular form of entertainment among game players because they offer a unique social experience. These games allow players to form groups and work together to complete challenging missions, creating a sense of camaraderie and collaboration among players. In addition to role-playing games like World of Warcraft, sports games are also considered social games because they provide a common way for players to make friends and meet new people. Traditional sports games like

soccer or basketball can be played with friends in person, while sports video games like FIFA and Football Manager allow players to connect with others online and build lasting friendships through shared interests. The multiplayer aspect of these games allows players to develop a sense of common identity, which can be a powerful tool for building relationships and creating a sense of community.

The social aspect of these games is a key reason why they continue to be popular among players of all ages and backgrounds. Some games with sociality as a design goal could build pathways for inclusivity and tolerance, facilitate reciprocity, and encourage players to be compassionate.

An Opportunity to become a Game Role

Video games offer players a distinct opportunity to actively participate in the game's content, gameplay process, and various in-game roles. In contrast to other forms of art, where the audience is typically relegated to a passive role, game design revolves around the players and the crucial roles they undertake within the game [5].

When it comes to gaming, players can assume the role of an avatar in a virtual world, which is essentially a digital representation of themselves. The avatar can interact with its environment in various ways, allowing players to do things they may not be able to do in real life. One of the most famous open-world game series is Grand Theft Auto (GTA), which has gained immense popularity worldwide. In GTA, players have the freedom to drive cars without any restrictions, unlike in real life where speed limits, traffic rules, and other driving laws must be followed. They can also cause damage to vehicles, buildings, and even citizens without facing any legal repercussions. Players can even commit murder, which is obviously illegal in real life, without facing any consequences. If the avatar is killed during gameplay, players can simply restart the game or load a previously saved game to continue playing. This allows players to explore the game's world without the fear of permanent failure or consequences.

One research pointed out that there is a positive relationship between violent video game exposure and attitudes toward violence. This means that violent behavior in the game could affect the player's attitude in real life [6]. A few years ago, a teenager committed a crime after playing the video game Grand Theft Auto (GTA). The teenager attempted to recreate an action he had performed in the game, which led to public scrutiny of GTA and its developer, Rockstar. Many parents and governments began to boycott violent video games like GTA, believing that they are not deserving of the label "art" and should be strictly banned.

Over the years, there has been a lot of debate surrounding the effects of violent video games. However, a recent opposing view has emerged that has helped in restoring the reputation of video games. According to this view, playing violent games can actually have a cathartic effect on players, decreasing feelings of hostility and aggression in the short term. This phenomenon has been supported by several studies that suggest that violent video games can provide a safe space for individuals to express their aggressive impulses and repressed frustrations that they may experience in real life. Furthermore, long-term studies have shown no direct connection between playing violent video games and actual criminal behavior. This suggests that the notion that playing violent video games leads to violent behavior is a myth. The cathartic effect of violent video games can help players relieve pent-up emotions and frustrations, which can potentially prevent them from acting out in real life [7].

Recruitment

The questionnaire was deployed through an online questionnaire platform, www.wjs.cn. Social media, such as WeChat and WhatsApp, were the main channels for spreading the questionnaire. The participants' IPs were from worldwide, and the whole process was held in anonymity. Initially, the expectation of the number of participants was 70 to 90, and the final amount was 83; 80 questionnaires were valid. Among 80, there were 63 game players and 17 non-game players. Most of the participants were between 18 and 30 years old. Meanwhile, the interview was conducted, and 12 interviews were made eventually. The majority of the participants were from Hong Kong Baptist University (HKBU). Before the questionnaire and the interview, participants read the participant information sheet and the informed consent form. The process could be continued only with their agreement. The HKBU University ethics committee had approved all of this. The data that were collected have been well-protected to prevent any personal information of the participants from being leaked, ensuring their privacy. These data were only used for the purpose of investigating this study, which has been presented in this paper. After the study had concluded, the data were securely and permanently deleted [8-13].

Online Survey

The online survey faced different kinds of respondents. Not everyone wants to participate in this study, but most of them should want to participate when they scan the QR code of the questionnaire. The first question concerns the agreement of this study's informed consent form. There was a second chance to refuse to join the study; the questionnaire would end if they chose the 'disagree' option, and that would be an invalid questionnaire. The questionnaire contains two parts. One is for game players, and another is for non-game players. The number of questions in each part was not many, each part would be completed in 5 minutes. This would not cause boredom in participants, and the questions were not complex. It is easier to do post-processing than that long question [14]. The survey questions were scale-type questions that could convert qualitative feedback into quantifiable data. This allowed for statistical analysis and ensured a uniform feedback mechanism across different respondent groups [15]. Using an online questionnaire can be a useful tool for

gathering data from a large number of people. However, it should be noted that this type of data can be limited in its depth and complexity, as the questionnaire cannot ask follow-up questions or probe for more detailed information. Therefore, it is best used as a way to gain a general understanding of a user population, which can then be used in conjunction with interview data to provide a complete picture for this study.

Interview

The interview followed a similar approach to the questionnaire to keep the process short. There were two sets of questions, one for game players and the other for non-game players, each containing five questions. Before starting the interview, participants had to sign the Informed Consent Form and provide a nickname since the study wouldn't use participants' real names in the results. During the interview, each question was elaborated differently depending on the answer. When participants had no idea about a question, the interviewer gave them examples to explore their ideas or used other people's answers to collect their opinions. The interview extracted diverse and valuable information from the same question, such as a participant's original viewpoint, how their viewpoint changed, and what made it change. This made up for the disadvantage of the superficial data collected in the questionnaire (**Figures 2,3**).

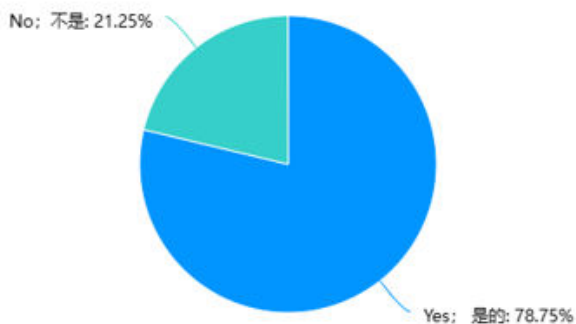## RESULTS AND DISCUSSION

Numerical Result from the Survey

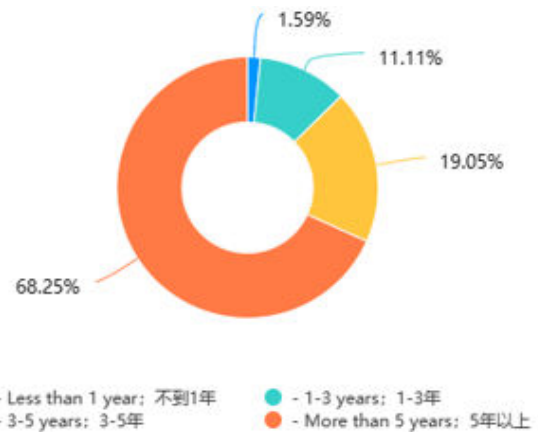**Figure 2:** Sample distribution of gamer and non-gamer.

Figure 3: Distribution of how long to be a gamer.

According to the results of the online survey session, almost four out of every five participants (78.75%) reported that they were video game players. This high percentage indicates the immense popularity of video games among the general population. Further analyzing the data, it was found that most of the video game players had been playing for a considerable period of time, with a majority (over 68%) having played for more than five years. This suggests that video games have not only become a widespread form of entertainment, but also a long-term hobby for many people (**Figure 4**).
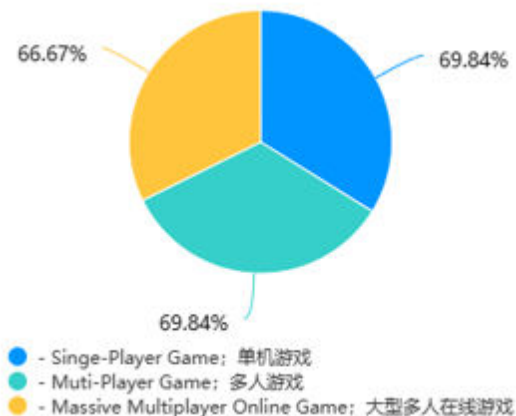

Figure 4: Distribution of game kinds they play.

According to the results of the online survey session, almost four out of every five participants (78.75%) reported that they were video game players. This high percentage indicates the immense popularity of video games among the general population. Further analyzing the data, it was found that most of the video game players had been playing for a considerable period of time, with a majority (over 68%) having played for more than five years. This suggests that video games have not only become a widespread form of entertainment, but also a long-term hobby for many people.

The survey results indicate that out of all the participants, approximately a third of them prefer to play single-player games, another third enjoy multi-player games, and the remaining third are fond of massive multiplayer online games. Furthermore, it has been observed that some of the

participants are avid gamers and tend to play more than one type of game, commonly known as double or triple-type players.

From the game player's perspective, a majority of game players 78% to be exact-believe that video games should indeed be recognized as an art form. Among these participants, 71% strongly agreed with this sentiment, indicating a significant level of conviction in their belief. Interestingly, the remaining participants did not express their disagreement and instead opted to remain neutral on the issue. Then, over 78% of players believe that aesthetics and visual design, narrative storytelling, and sound design and music are the way to show video games' artistic value and the expression of creation. 60% of players occasionally explore complex themes or emotions through gameplay and storytelling of the video game. This is a notable shift in how people consume and engage with media, as previously, such exploration was primarily reserved for literature and film. This trend is indicative of the growing recognition of video games as a legitimate medium for exploring complex ideas and emotions. Additionally, video games offer a unique interactive experience that allows players to immerse themselves in the narrative and become active participants in exploring these themes.

When it came to the impact that video had on popular culture and society. Over half of the players surveyed believed that video games have a positive influence. They are viewed as a source of entertainment and a way to relieve stress. The survey also found that one in five people thought that the positive influence of video games was stronger than what was initially believed. They also believed that games have the potential to challenge societal norms and inspire social change. This suggests that video games have a significant role to play in shaping society. However, the survey also revealed that 38% of the players had a neutral attitude towards the impact of video games on society. They neither agreed nor disagreed that video games have any influence on society. This indicates that there are still many people who are uncertain about the impact of video games. Furthermore, only a few people believe that video games have some negative influence on society, but it is not too bad. It also has no ability to provoke the thoughts of society. This suggests that some players do not see video games as a major issue, but they do acknowledge that there may be some negative effects associated with playing video games.

By comparing to those traditional forms of art and entertainment. The majority of players support the idea that video games are a continuation of other forms of art, and they believe that video games have the same positive influence as other forms of art. Meanwhile, players consider video games to be more innovative and creative than other forms of art. This is because video games have the unique ability to combine elements of different art forms, such as storytelling, music, and visual art, into one cohesive experience. As a result, video games can provide players with immersive and engaging experiences that are not possible with other forms of art. Furthermore, the survey found that

players have high hopes for the future potential of video games as a medium of expression and entertainment. Players believe that video games will continue to evolve and become even more innovative and creative in the future, providing new and exciting experiences for players. In addition, the survey found that 82% of participants believe that video games can be used as a tool for socialization. Video games can bring people from different backgrounds and cultures together, creating a sense of community and connection. This is especially important in today's world, where people are increasingly isolated and disconnected from each other.

The participants from the non-video game player side mainly had limited game experience, or they had played video games in the past (**Figure 5**).
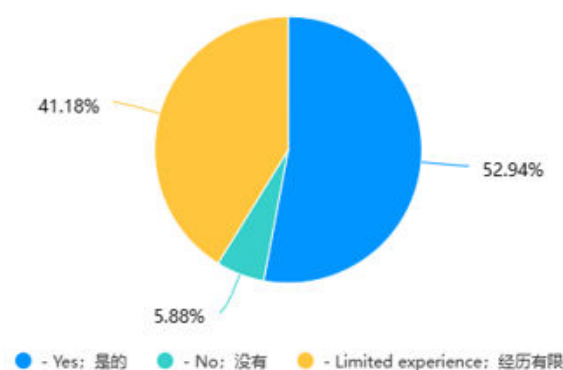
Figure 5: Distribution of non-gamers experience on video game.

When it comes to discussing video games, there is a common perception among non-gamers that it is primarily a recreational activity or something they do not understand at all. However, when the topic of video games as an art form arises, it opens up a whole new perspective. Many people who are not into gaming and who have a limited understanding of the medium tend to agree that video games can be seen as an art form, just like traditional forms of art such as painting, sculpture, and literature. They acknowledge that video games have the potential for art and creativity, and they appreciate the social impact they can have. From their perspective, video games have a unique ability to convey meaningful messages or emotions, which is similar to other art forms such as movies, music, or literature. They believe that video games, like other art forms, can express a wide range of emotions and tell stories that can be both powerful and moving.

There is a significant segment of the population that does not play video games and may not fully grasp the profound impact they have on our society. This may be due to their limited exposure to video games, which can be quite diverse and range from simple puzzle games to complex, immersive worlds. When asked about the role of video games in contributing to culture and society, a majority of participants remained neutral, indicating that they had not thought much about it before. However, among those who expressed an opinion, only half believed that video games offer interactive

experiences that cannot be found in traditional art forms. They acknowledged that video games can provide a unique level of interactivity, allowing players to explore and shape their own experiences in a way that traditional art forms cannot match. On the other hand, some participants felt that traditional art forms, such as painting, sculpture, and literature, have a richer cultural and historical significance than video games [16-18] (**Table 1**).

Table 1: Participants information form.

Name	Gamer/Non-gamer
P1	Gamer
P2	Gamer
P3	Gamer
P4	Non-gamer
P5	Gamer
P6	Non-gamer
P7	Non-gamer
P8	Non-gamer
P9	Gamer
P10	Gamer
P11	Non-gamer
P12	Gamer

The Player is the Protagonist

P1 mentioned a game during the interview, Red Dead Redemption 2 (RDR2), an open-world game produced by Rockstar Games, issued in 2018. Other participants, like P10 and P12, also mentioned this game. This game is famous for its excellent script, good portrayal of characters, and realistic gameplay. It won over 175 game of the year awards and multiple other accolades from awards shows and gaming publications. It is considered one of eighth-generation console gaming's most significant titles and among the greatest video games ever made. P1 expressed that he experiences a heightened level of immersion while playing RDR2, where he finds himself getting emotionally invested in the game's characters and their situations. He mentioned that there are a plethora of activities available in the game, ranging from fishing, hunting, hiking, and more, which add to the game's overall appeal. P1 also admitted that at times, he prefers to explore the game's vast and intricately designed open-world environment instead of focusing on the main storyline. He gave an interesting metaphor to describe his experience, stating that he feels like he retired to the United States in 1899 and is living out his life in that era. With its detailed portrayal of the American Old West, the game allows P1 to immerse himself in a world that is vastly different and yet strangely familiar [19,20].

P9 mentioned an adventure game called Detroit: Become human, which is played from a third-person perspective. One of the unique features of this game is that it allows players to control multiple playable characters, each with their own unique storyline and choices to make. What makes Detroit: Become Human truly unique is that the story can branch out into many different directions depending on the player's choices. The choices the player makes can lead to the death of one or more playable characters, which can significantly impact how the story unfolds. P9 mentioned that after finishing one storyline out of the many choices available, he felt like he was watching a wonderful movie where he was both the character and the director. He emphasized that this kind of experience, with its interactive method, can only be provided by video games and not by novels or movies.

Video games are a unique form of interactive artwork. Unlike traditional art forms, the producer does not create a final, completed piece of art. Instead, they create an area of activity for the players to engage with. Through their interactive actions, the players become participants, performers, executors, or even co-creators of an artwork event. This means that the final formation of the artwork only comes to life as a result of the participative behavior of the players.

Culture Media

One particularly intriguing suggestion came from P5, who pointed out that games like Assassin's Creed could be an excellent resource for teaching history. By utilizing the game's immersive 3D modeling, educators could recreate historical sites and objects that have been lost to time and provide students with an engaging and interactive learning experience. This idea had actually been previously discussed in a paper, highlighting its potential as a valuable educational

tool. Another participant, P2, shared their experience as both a player and amateur game developer. They had created a VR museum game that allowed players to explore exhibits from the comfort of their own homes. Through the use of VR technology, players could get up close and personal with the exhibits, even picking them up and examining them from different angles. This unique approach to museum exhibits provided an exciting and engaging way to learn about history and culture.

P7 and P8 do not play video games themselves, but they enjoy watching game videos. They particularly like "Honor of Kings," which has become the most popular MOBA game in Mainland China. The characters in the game are based on Chinese historical figures, and their costumes, skills, and movements are all designed using historical records. Digital games often convey national values, worldviews, and cultural elements through scenes, characters, costumes, props, weapons, and gameplay [17]. P7 and P8 think that this is an interesting and effective way to showcase Chinese culture to the world.

P3 and P4 mentioned that some classic movie IPs could be adapted to video games, or some classic game IPs could be adapted to movies, such as Super Mario, King of Fight, Final Fantasy, and Resident Evil. These classical Japanese IPs have been labels of Japanese pop culture. People think of Japan when they talk about these classic game IPs, just as they think of Italy when they talk about sculpture.

New Age Entertainment

P6, who had limited experience playing games, had always been skeptical of video games, believing them to be a waste of time. However, in 2020, the Covid-19 pandemic struck the world, and P6 and her family were forced to stay at home due to the lockdown. During this time, P6's siblings turned to gaming to pass the time, and P6 decided to join them. At first, P6 found it difficult to get into the games and understand how to play them. However, she persisted and eventually began to enjoy herself. As she played more, she realized that gaming was not just a way to kill time but could also enhance relationships between people. She found that playing games with her siblings brought them closer together and provided a shared experience that they could bond over.

P7 is a former high school teacher who has experience in teaching young students. She believes that education is paramount for students and used to advise her students not to let video games interfere with their learning. However, as time went by, she noticed that e-sports were becoming more and more popular among students, especially boys. She observed that discussions around degrees in e-sports were becoming a common topic among student groups. P7, who is not a video game player herself, realized that some students might not excel in academics but could be talented in gaming. She started to appreciate that video games are a new form of entertainment and could potentially lead to a career in professional gaming. She believes that, like basketball and football, video games were invented for fun, but they have now become global sports events. P7 recognizes that video

games can be a healthy and innovative way for students to relax and develop their skills, and she encourages them to explore all their interests (Appendix 1 and 2).

Hamlet is a classic piece of art that has been interpreted in many different ways. The reason behind its success is not its content, which portrays Hamlet's quest for revenge against his father's murderer. The beauty of Hamlet lies in the fact that it allows people to have their own interpretations and opinions about the story. Similarly, when it comes to creating a video game, it is challenging to create a concept that can unify everyone's perspectives and preferences.

Some Positive and Negative Ideas

P11 is not interested in playing games. However, he has always been optimistic about advancing science and technology in the gaming industry. Video games have developed many useful technologies that can be applied in real-life situations. For instance, serious games can simulate real-life scenarios and be used for training purposes, such as flight simulators for pilots. Serious games have various application fields. These include game-based training and simulation, digital educational games that cater to students from kindergarten to university, vocational or workplace training, marketing and advertisement games, health games for prevention and rehabilitation, and social awareness and impact games. The latter covers socially relevant topics such as politics, security, religion, energy, and climate.

P11 pointed out that some video games, particularly the massive multiplayer online games, struggle to balance business with art. They design female characters or their skins in a sexually suggestive manner to attract players to spend money. This conveys wrong values and objectifies women. P9 mentioned that in recent years, some games have altered their original content to cater to political correctness, which has caused dissatisfaction among players and even sparked negative social comments. While many films have been produced with political correctness in mind, movies have already been widely recognized as a form of art. Video games are still in their early stages, and they need more positive aspects to become known and accepted by people. It will take time for people to accept video games as a legitimate art form.

CONCLUSION

This paper explores the question of whether games can be considered art and whether they can have other meanings besides entertainment. To begin with, the paper highlights three game features that can be used to define art based on the definition of art. Next, the literature review section examines previous studies on games and their potential to be considered as art. Following that, an online survey and interview were conducted to gather data to support the definition.

According to the study, most gamers and some non-gamers, particularly the young generation, believe that video games can be considered an art form. However, these individuals are

still a minority in the world. Apart from being a form of entertainment, video games can also be used for educational purposes. They serve as a means to connect people online or in person. Video games are a product of this era, created primarily for enjoyment, but there are also many valuable aspects to them. Although some people already view them as art, it may take time for the general public to accept them without bias.

REFERENCES

1. Li Q (2024) Video Game, Not Just a Recreation Way.
2. Video Game.
3. Handy K (2023) Bridging the gap between gaming and history: How assassin's creed unity is helping rebuild Notre-Dame.
4. Li Y (2017) Welcome to Game World.
5. Barlett CP, Anderson CA, Swing EL (2009) Video game effects confirmed, suspected, and speculative: a review of the evidence. Simul Gaming. 40(3):377-403.
6. Datapsylife (2023) Sorry Politicians, GTA Isn't The Cause Of Violence Studies Explain Why.
7. Rosenblatt K (2023) Grand Theft Auto VI Trailer Energizes Fans. But It's Been a Tough Year Overall for the Video Game Industry.
8. Wills K (2020) Perceptions of Gaming: The Obvious, the Misconceptions, and the Science.
9. Marder L (2019) Ways of Defining Art.
10. Xue Y (2023) Chinese History Teacher Uses Assassin's Creed as Educational Tool.
11. Voll KD (2023) The sociality of video games: Embracing games as social infrastructure. 1(1):1-3.
12. Kaye LK (2021) Understanding the "social" nature of digital games. Entertain Comput. 38:100420.
13. ShaikhM (n.d.) What is the Optimal Number of Survey Questions I Should Use?.
14. Lakshmi M (2023) The Ultimate Guide to Scale Questions Examples: 10 Proven Techniques.
15. Kluszczynski R (2010) Strategies of interactive art. 2(1): 5525.
16. Cui C (2016) A study of digital games as a new media of cultural transmission. 48-52.
17. Aaron S (2005) "Are Video Games Art?".
18. Göbel S (2016) Serious games application examples. Serious games: Foundations, concepts and practice. 319-405.
19. Bourgonjon J, Vandermeersche G, Rutten K, Quinten N (2017) Perspectives on video games as art. 19(4):1.
20. Gee JP (2006) Why game studies now? Video games: A new art form. 1(1): 58-61.