Exploring History through Video Games:

A Journey into the Ancient World.

By

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the requirements for the degree of

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Declaration

It is hereby declared that.

1. The thesis submitted is my original work while completing my degree at Brac University.

2. The thesis does not contain material previously published or written by a third party, except

where this is appropriately cited through full and accurate referencing.

3. The thesis does not contain material accepted or submitted for any other degree or diploma at a

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Approval

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Abstract

Studies in fields like cognitive learning and Bandura's social learning theory indicate that people learn and acquire knowledge in various areas of life. This idea could include historical knowledge gained by video game play. Consequently, playing video games with historical themes is a common way for people to learn about history. This study looked into which genre, ESRB classification, and kind of video game platform contains the most historical content to gather valuable information for the next studies on using video games to teach history. In October 2023, information from the top ten video games ever made in each genre as stated on three different video game websites www.ign.com, www.gamefaqs.com, and www.gametrailers.com was analyzed through content analysis. The study's findings indicated that the category of video games with the most historical material was sports. E for Everyone was the ESRB classification with the most historical content. Lastly, the greatest amount of historical content was found in computer games. Researchers and educators who work in the fields of education, learning, or video games may find it easier to locate games that meet their requirements with the help of this information.

Keywords: History, Video Games, Genres, Cognitive Learning, Historical Content

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Chapter 1: Playing with Purpose

<u>Introduction</u>

Some people might question the value of studying the past, especially if it is an attempt to study the past through video games. Why does learning history matter to us? Historical knowledge, according to the American Historical Association, is "no greater or no less than a carefully and critically constructed collective memory"(AHA, 2013). On the other hand, a person who lost their memories would also lose their identity and relationships. They would have to adapt to live with others instead of their way. This is the rationale for the importance of knowing one's past. The value of historical knowledge supports the teaching and learning of the subject. Historical events and their aftermath can serve as helpful manuals for navigating and getting past challenges that people encounter today.

According to Greg Dening and Adam Chapman, "Even if traditional history is a valuable field of study, it shouldn't be forgotten that everyone engages in historical research, or "historying". Because, at its core, history is essentially the past communicated through the media" (Dening, 2006; Chapman, 2016). When it comes to historical information, academic historian's books and textbooks are the most traditional sources. Even when used to teach essential subjects like history, some people believe traditional teaching methods to be dull or useless in other ways. Nowadays, many different kinds of media and information could amuse these people more than, say, reading a history book. Playing video games is one of these fun pastimes. In addition to enjoying themselves while playing, players occasionally discover that they have learned something.

Therefore, video games can be used as a medium to make learning about history engaging and motivating for people.

Research on using video games in education provides information on their impact and efficacy on students. Video games can be a valuable teaching tool for history teachers. Games have the potential to capture the interest of students who might not otherwise be interested in studying history and to motivate them to do so on their own. Engaging students in an exercise like this can help them learn things they wouldn't otherwise have to, which can keep them interested and engaged.

Despite this, it is a difficult task for historians and educators to make a video game on their own. It is realistic to suppose that few people, in general, possess the knowledge, abilities, and creativity required to build and produce a successful, compelling, and instructional video game on their own and that few history instructors and scholars also possess these qualities. It is possible to find and hire a game designer to create a video game for experiments and classes, but most history scholars and teachers would find this to be prohibitively expensive. It would be simpler and more useful for scholars and educators to use video games that have already been published on the market when experimenting with employing them in historical education situations. However, given the wide variety of video game genres, target markets, and platforms, educators and academics may have trouble locating games with historical themes or may not even know where to begin their search.

This study will add to the collection of knowledge regarding the effects of video games on individuals and how they can be used in the classroom, particularly when teaching history. Next, it will look at the most popular video game genres, ESRB ratings and platforms with historical

material. Future scholars and history teachers who use these kinds of games in their research will be able to use the results as a frame of reference.

1.1 Rationale

Previous research has shown that people tend to learn and gain knowledge from playing video games. Video games have the power to motivate players to engage and have positive thoughts while playing and learning. Therefore, it is reasonable to assume that people can learn history from playing video games that contain historical content. However, it is important to note that there are various genres of video games, such as action, simulation, and sports games, which may or may not contain historical elements. It would be beneficial for current educators and researchers to gain more knowledge about video games with historical material if they plan on using games that have already been launched on the market as research and teaching tools. It would be beneficial for upcoming educators and researchers to gain more knowledge about video games with historical material if they intend to employ games that have already been launched on the market as research and teaching tools. Researchers and educators can determine whether the material of video games with historical themes is suitable for the ages of their students by looking into the ESRB ratings of those titles. Lastly, researching video game platforms can help researchers and teachers determine which platforms to use for their studies. From October 2013 to 2023, the best 10 video games ever made in each genre were examined in this study on three different video game websites: www.ign.com, www.gamefaqs.com, and www.gametrailers.com. It concentrated on video game genres, platform kinds, and the Entertainment Software Rating Board (ESRB) rating.

1.2 Methodology

Dependent Variables: Content related to history was the dependent variable. The researcher's opinion on the game trailers and reviews found on websites like IGN, Gametralier, Gamefaqs, and YouTube was used to establish whether or not a particular video game featured historical material. Video games were considered to have historical content if they featured characters or events from any historical era or nation. Furthermore, since they did not feature real-life historical events or characters, video games featuring warriors like knights, samurais, ninjas, magicians in general, or any other elements that appeared to come from an earlier era were not considered to have legitimate historical content.

Independent Variables: The first independent variable was the type of game. The researcher classified video games into nine genres for this dataset: Actions, Adventures, Action-Adventure, RPG, Action-RPG, Simulation, Strategy, Music, and Sport due to the nature of each game site's classification system and its variations. Physical challenges are emphasized in action games. Reaction timing and control of the hands and eyes were required of the players. Shooting, platform, and fighting games fall under this category. The main feature of adventure games is an interactive story. The player explores the game's setting and solves riddles in the role of the protagonist. Action and adventure games are combined to create action adventure, which includes stealth and survival horror. Players can assume the roles of characters in role-playing games, or RPGs (including strategy RPGs), and develop their characters through systematic making choices or character development processes. Combat in role-playing games is typically choices or turn-based. Action-Role Playing Games, sometimes known as Action-RPGs, retain the aspects of role-playing games but substitute direct control over the character for turn-based or menu-based combat. Playing

simulation games allows users to engage in a variety of activities that are replicated from real-world activities (including racing games). The emphasis of strategy games is on the players' ability to make decisions. Players of music games must rhythmically interact with the music. Finally, video games that simulate traditional sports are available.

The second independent variable was the ESRB rating. The ESRB rating system, which separated video games into seven categories: Early Childhood, Everyone, Everyone 10+, Teen, Mature, Adults Only, and Rating Pending was followed by the researcher. Video games that were either unrated by the ESRB or could not be located were confirmed to be absent. The third independent variable was the type of video game platform. In terms of platforms, video games were categorized into six categories: numerous platforms, computer, handheld, console, phone, and unknown platforms. Console games are played on gaming systems like the PlayStation, Wii, and XBOX, which send video game signals to an external television for display. Nintendo 3DS, Gameboy Advance, and PlayStation Portable are examples of lightweight, portable gaming systems having built-in screens, controllers, and storage for games. Phone games are played on smartphones, such as iPhones and Android devices, that provide gaming features to their users. Video games played on computers with general functions are referred to as computer games. The term "multiple platforms" describes video games that have been released on more than one platform. Finally, the phrase "unknown platform" denoted a video game whose platform was uncertain.

Action (including fighting, platform, and shooting games), adventure, action-adventure (which includes stealth and survival horror), action-role playing game or action-RPG, role-playing game or RPG (such as strategy-RPG), simulation, strategy, music, and sports were the nine genres from which the researcher gathered data on the top ten-rated video games. There were thirty video games

in total in each genre. Names, rankings, platforms, the Entertainment Software Rating Board (ESRB) rating, trailers, and reviews were gathered for every video game. Some video games appeared more than once in the data set throughout the data gathering procedure since they were ranked as one of the top ten in the category on various websites. When compared to a video game that only once appeared in the dataset, a video game with many recordings could have double the impact on the statistical analysis.

To avoid this issue, the researcher retained the data on video games gathered from the IGN website and removed any duplicates that surfaced throughout the data collection process from the Game FAQs website. Instead, information on the video games that came in second place following the top 10 was gathered from Game FAQs. Next, using the information gathered from Game trailers, the researcher carried out the elimination process once more. Video games that were ranked higher than the top ten were gathered when needed and duplicates were removed. Taking into consideration the popularity and ranking methods of each website, the researcher removed duplicate video games from Game FAQs and Game trailers but kept the data gathered from IGN websites. On their website, IGN (2014) made it very apparent that "Their ranking and review underwent a strict editing process to maintain fairness, transparency, and accuracy before being released on the website"(IGN, 2014). Game FAQs obtained their score from Metacritic.com, which uses a wide panel of the most reputable critics in the world to generate ratings. Unlike IGN, Metacritic does not disclose the method it uses in as much detail. The Gametrailers grading system's explanation was not found on the website, according to the researcher. The researcher also discovered that the three websites' grading systems differed from one another. In contrast to Game FAQs, which had a rating scale of 1-100, both IGN and Gametrailers had a scale of 1-10.

To resolve this problem and place the rating from Game FAQs on the same rating scale as IGN

and Gametrailers, the rating was divided by ten according to a scale of 1-100 on a scale of 1-10.

Chapter 2

Literature Review

Compared to earlier times, when individuals were merely passive consumers who took in information from media providers, the world we live in today is very different. Our culture is now one of participation. "A culture with a few obstacles to artistic expression and civic engagement, strong support for creating and sharing one's creations, and some type of informal guidance by which what is known by the most experienced is passed along to novices" (Jenkins, 2012, p.3) is the definition of a collaborative culture as discussed by Henry Jenkins. In other words, this is a society where individuals participate as well as consume. Membership connections, their expressions, cooperative problem-solving, and circulation are necessary for a participatory culture to flourish and offer chances for education, the arts, civic participation, and financial success. It encourages experimentation and offers informal learning cultures or affinity spaces as optimal environments for learners, ignoring variations in people's experiences and allowing them to participate in different ways while being experts in their specialized areas. According to James Paul Gee and Elizabeth Hayes (2009), "Affinity spaces can be either real-world locations or virtual worlds on the internet" (Gee & Hayes, 2009). Gee, and Hayes also add "People in affinity space relate to each other in terms of common interests, endeavours, goals, or practices"(Gee & Hayes, 2009). Everyone is encouraged to learn new things, share what they already know, and create content for others in affinity spaces because factors like ethnicity, gender, socioeconomic class, and even experience are not relevant. People become more motivated to learn when they live in a participatory culture, which may be its greatest advantage.

Since motivation encourages us to take action, accomplish our goals, and influence how we live our daily lives, it plays a significant role in our existence. According to Marin Petkov and George E. Rogers, "Learning occurs when students are motivated, and motivation explains behaviour that is oriented toward a certain objective" (Petkov & Rogers, 2011). Building students' motivation is a crucial responsibility for educators since it encourages students to exercise their abilities and learn new information. Activities that increase student motivation ought to be built into the educational system to maximize the effectiveness of the learning process.

It is not always simple to spark students' interest in academic material or inspire them to pick up new skills, though. David Buckingham (2000) asserts that "Popular fiction such as soap operas, dramas, comedies, and cartoons is more likely to capture the interest of young people than non-fictional content, such as news and other current events" (Buckingham, 2000). Younger people typically think that non-fiction material, such as history, is dull and unrelated to their daily lives. If the information does not amuse them, they will probably become disinterested in the topic. Therefore, to grab students' attention and inspire them to learn, teachers need to strike a balance between "informing" and "entertaining".

Jessica Clark, a user of the Media 2.0 era, introduces us to a new concept which is according to her, "In a world where media is undergoing a transformation and offers novel instruments to both amuse and educate the inquisitive minds of the younger generation" (2009). By enabling people with different viewpoints to share their experiences, pose important issues, and shape ideas, Media 2.0 has revolutionized communication technology and opened up the sharing of information. Digital natives, individuals who were raised in a multi-media-rich environment, now live in a world where social networks, interactive mobile devices, and gaming platforms have come together to produce an ecosystem that requires participation. The distinguishing feature of these

gadgets is how they demand user participation, inviting people to plunge headfirst into a world of interaction. The search for knowledge goes beyond a single field of study and encompasses one's resolve and capacity for problem-solving as well. In all their diverse power, video games encourage learners to extend their brain function skills and take on obstacles with unyielding will.

In some countries like America, Australia, and some parts of Europe teachers are now concentrating on video games and investigating how they might support learning objectives across multiple domains. According to Rafael L. da Silva "A few research looked into how video games affect learning a language" (da Silva, 2013). Non-native English speakers were able to acquire the language through playing video games and taking part in extracurricular activities like creating fan fiction and having conversations about gaming-related topics. "Teachers also examined how well video games taught science and math" (Stansbury, Munro, 2013, Merle-Johnson, 2013). Students enjoyed learning in class while improving their math abilities and expanding their biological understanding. According to Paul J C Adachi, "Video games have been used to study how general academic success factors like perseverance and problem-solving abilities might be improved" (Adachi, 2013). Children perceived a sense of challenge and motivation to acquire knowledge and resolve issues. Jorge Ballester and Chuck Pheatt said, "Additionally, studies have looked into how physically demanding video games affect players' physical health" (Ballester, 2012; Pheatt, 2012). Xbox 360 Kinect and other game systems pushed gamers to interact with people and get exercise.

Numerous earlier research on video games concentrated on the potential behavioural effects of the genres. Numerous studies investigate the potential impacts of playing violent video games on players' aggressive and violent thoughts, emotions, and behaviours. Based on earlier research by Tobias Greitemeyer, Ivory A. Toldson, and Christine E Kaestle "Playing violent video games influenced participants' perceptions of what was aggressive and increased their likelihood of

experiencing hostile expectancies, aggressive thoughts, and aggressive feelings" (Greitemeyer, 2013; Ivory, Kaestle, 2013).

While much research and discussion on the psychological effects of video games focus on violent games, individuals can also develop normatively positive traits from playing games. According to earlier research, social learning theory and cognitive learning are the two main ideas that can explain how people learn by playing video games. Social learning theory was created by Albert Bandura (2009) and addresses how learning occurs in a social setting and how techniques like modelling and observational learning help people learn. "Personal agency functions within a broad network of sociostructural influences because human self-improvement adaptation and change are rooted in social systems" (Bandura, 2009, p.95). Which external events, meanings, emotions, and motivations are recognized by the human brain depends in part on cognitive elements. As a result, while working symbolically on a plethora of knowledge gained from both direct and indirect experiences, humans can comprehend casual connections and acquire new knowledge. According to Bandura (2009), "There are four main subfunctions that control observational learning and are significant factors: motivation, attention, retention, and reproduction" (Bandura, 2009). People often learn from both personal and observed experiences, according to this notion. Information, particularly historical events, may be easier to remember when playing video games for enjoyment purposes because of the mediated events that are portrayed and experienced throughout these demanding, compelling activities. According to Bandura's theory, playing video games can teach people about history.

According to Kurt Kraiger (1993) and Lee Wilson (2009), "Cognition is a class of factors about the kind and quantity of knowledge as well as the connections between different knowledge items" (Kraiger & Wilson, 2009). They clarified that the cognitive learning process consists of three phases. First, knowledge must be acquired by the learners. There are three types of information: procedural knowledge, declarative knowledge, and tacit or strategic knowledge. Once students acquire this information, they need to organize it by creating mental models. These models are stored in long-term memory and can be retrieved anytime. The final phase involves applying the previously acquired and arranged knowledge. In their investigation of the purposes and pleasures of video games, John L Sherry and his companions (2006) made use of Bandura's theory. They hinted at the importance of understanding the processes determining how people are affected by video games. They explained that "Social learning took place as viewers imitated a role model contained within the media when they heard media messages" (Bandura, 1994).

Valérie Erb, Seyeon Lee, and Young Yim Doh (2021) investigated health-related video games that were created with the dual goals of entertaining players and changing their behaviour about their health. They mentioned Bandura's social-cognitive theory from 1986 as one of the ideas providing mediators for media that focuses on entertainment. According to their research, "Goal-setting, role-playing, and skill development are examples of behavioural change endeavours that are defined by social cognitive theory. The importance of feedback in guiding and shaping behaviour throughout the transformative process was also highlighted" (Erb, Lee, Doh 2021). They also said, "Players received messages from in-game characters during their interaction with the video games that were used in the study" (Erb, Lee, Doh 2021). Players' views of the characters' persuasion, trustworthiness, attraction, and likeability were impacted by these messages. Video game players observed how in-game characters performed and absorbed the same behaviours,

effectively adopting video game characters as role models. Humans learn behaviours by watching others perform them and receiving both internal and external rewards.

Ute Ritterfeld and Rene Weber (2006) examined any potential educational benefits that might result from playing video games. When seen through an educational lens, playing video games might help players develop their cognitive and metacognitive skills. Cognitive faculties include knowledge acquisition, decision-making, problem-solving, and visual and language abilities. According to Ritterfeld and Weber (2006), "Metacognition refers to the capacity of humans to be self-aware of their cognitive processes, enabling the selection, evaluation, and adaptation of strategies for information acquisition, problem-solving, or other learning processes. The ability to learn how to learn is supported by metacognitive skills, and the more these skills are developed, the more learning is enhanced" (Ritterfeld & Weber, 2006).

Chapter 3

The Categories of Video Games

Despite some obstacles, earlier studies suggest that video games can be used as a supplementary teaching tool for learning history.. How many different kinds of genres exist? What category has the Historic content? What types of video games are suitable for use in history lessons? Colum McCann claims that "There is no recognized system for classifying the genres of video games" (McCann, 2009).

In this paper, the genre of video games is divided into nine categories. Genres that are dependent on how players interact. It is important to know about these genres for a learner who wants to explore the gaming world. For example, if a student or a teacher wants to visually learn about the history of World War II through video games, they need to search and look into the category of Combat games.

The first genre is Combat games, which include fighting games, platform games, and shooting games like *Super Mario Bros*., *Street Fighter*, and *Call of Duty* which demand rapid reactions, timing, and decision-making abilities. The next type of game is an action-adventure game, which combines combat and fast actions with puzzles and stories. It can be broken down into two categories: stealth, which emphasizes stealth and strategically planned attacks, and survival horror, which features spooky, gruesome, and horrific scenes. Adventure games are the next genre which is included in this paper. Text-based computer games in this genre are compared to books with "choose-your-own-adventure" plots like *King's Quest*. The categories of Massively Multiplayer Online Role-Playing Games (MMORPG) are the following. Real-time gameplay and a huge number of players are features of this genre. The genre of Role-Playing Games (RPG) is

also recognized by many gamers. RPGs are video games where the player controls a character via a tale while improving their strength, gear, skills, and abilities. Fantasy settings are frequently used in works in this genre.

The musical style is another genre that is popular among the younger generation. It has memory-based, pitch-based, and rhythm-based components. Some music-themed video games may require accessories like a dance pad or a controller made to look like a guitar. "Simulator games are the future category" in Colum McCann's (2009) opinion. In this type of game, players can develop and run cities, among other aspects of the planet. In addition, simulation games let players control the lives of the virtual inhabitants in a god-like manner. Vehicle-based games are also included in this genre. With varied degrees of realism, the sports genre simulates the real world of professional sports. Strategy games are the final genre. Strategy video games, which are either turn-based or performed in a live environment like board games, demand careful thought and planning. Many card games like *Pokemon, Yu-Gi-Oh, Digimon,* and more are examples of them. Even in South Asian countries especially Bangladesh and India board games like *Ludo, Carrom,* and *UNO* is popular.

<u>3.1 Gadgets of Video Games</u>

When using video games to teach history in educational settings, selecting the appropriate gaming system is crucial. Whether using publicly available video games or those made specifically for educational purposes, instructors must be aware of the different types of video game platforms before choosing the best one for their needs. There are several video gaming systems available today. Nolan Bushnell and Ted Dabney, the founders of Atari, Inc., invented the first arcade game, Computer Space, which was published in 1971. The following year, the business released Pong in response to its success. They are regarded as video gaming systems of the first generation. They have evolved to produce better gaming experiences and boost profit. System development for video games has reached its eighth generation. Jeffry Babb and Neil Terry claim that "The popularity of the first Magnavox system marked the beginning of the first generation" (Babb & Terry, 2013). Having Atari, the 8-bit graphic console holding the lead, the market for home video games began to explode. Most top-selling video game arcades were imitated or comparable to this generation's video games. Video games began to gain genre classifications in the second generation, much like novels and films. Home computers' popularity increased, becoming a crucial platform for playing video games. During this generation, portable LED and LCD gaming consoles also made their debut.

The Famicon/Nintendo Entertainment System (NES) and GameBoy were introduced during the third generation which was in 1983 and 1989. The trend of abandoning arcade-style games and toward physical and interface features was altered by these 8-bit systems. With its Super NES, Sega, and Genesis systems, Nintendo continued to dominate the video game industry in the fourth generation. Most CPU processors improved their graphics and audio quality to 16-bit. By

introducing the PlayStation in the fifth generation, Sony retaliated. Nintendo replied by introducing the Nintendo 64. In this generation, 3D-accelerated graphics became typical in PC and console games. Numerous well-known consoles, including Sega's Dreamcast, Sony's PlayStation 2, Nintendo's GameCube, and Microsoft's Xbox, were released during the sixth generation. This generation's consoles have an online feature that allows you to play online. During this generation, other controllers including steering wheels and stepping pads were also developed.

There were numerous developments in the seventh generation of game consoles for video games. Players must move their bodies to engage with some gaming interfaces, such as the Move controller for the PlayStation 3 and Xbox 360's Kinect. With their capabilities to connect to other electronic devices, access internet networks, and even function as a disc player, such as the PlayStation 3's capacity to play Blue-Ray discs, game consoles also became the focal point of family entertainment and theatre systems. The PlayStation Portable (PSP) and Nintendo's DS, which later evolved into the PlayStation Vita and Nintendo 3DS, were popular hand-held gaming systems. By using special glasses and modern 3D technology, gamers may now enjoy 3D images on 3D televisions and can even play 3D games straight on the Nintendo 3DS screen. In addition to handheld gaming consoles, this generation also utilised mobile devices including smartphones, Android devices, iPads, and tablets.

Kevin Ohannessian says, "The eighth generation of gaming consoles, which has just started, will focus even more on online gaming, high-quality graphics, and innovative interfaces" (Ohannessian, 2014). Players on the PlayStation 4 can share the gameplay video they are watching by using the "Share" button. Xbox One has a multitasking feature that enables users to simultaneously video chat, interact with others on social media, and play video games. The Wii U gamepad features an integrated screen to continue playing the game without a television.

3.2 Entertainment Software Rating Board (ESRB)

The gameplay of video games typically draws gamers in, but the content also keeps them interested and encourages them to keep playing. The plot and material could involve anything from rescuing a princess who has been kidnapped in a palace to surviving a zombie apocalypse, yet not all of the stuff is appropriate for children of all ages. For instance, a graphically violent military shooting game like *Battlefield 1* which was set during World War II was inappropriate for young children. Teachers should carefully select video games that do not have age-inappropriate content if they want to use them as extra teaching resources in the classroom. Children's social and emotional development may be impacted by materials that contain violence, drug usage, sexual themes, and strong language. In this situation, teachers must consider the game rating systems developed for parents to consider as an example when selecting video games for their kids and prohibit the sale of video games to prevent children from accessing problematic games. The ESRB rating is one of many rating systems that is employed in the US.

There is a popular criticism made by people about ESRB which is, "The Entertainment Software Rating Board (ESRB) is a non-profit, self-regulatory organization that provides ratings for video games and applications so that parents can make educated decisions. Age-appropriateness and content are all covered under the ESRB rating system. Under its Privacy Online initiative, the ESRB supports safe web and mobile security measures in addition to enforcing industry-adopted advertising norms as a part of the organization's voluntary role in the video game industry" (About ESRB, 2014). After conducting research and contacting academic authorities and parents, in the United States and Canada this system of ratings was developed in 1944 by the Interactive Digital Software Association (IDSA was renamed Entertainment Software

Association in 2004). Three parts make up ESRB ratings. Each one includes interactive features that indicate interactive components of a product, content descriptions that outline the video game's content, and rating categories that suggest acceptable ages for each category.

The ESRB made seven categories including "Early Childhood, Everyone, Every person 10+, Teen, Mature, Adults Only, and Rating Pending are used to categorize ESRB ratings" (About ESRB, 2014). Early Childhood ratings indicate that a video game's material is appropriate for young children. For games with age-appropriate content, everyone's rating applies. The content is more violent and has provocative themes in Everyone's 10+ classification, which is similar to Everyone's rating. For people 10 and older. Video games intended for players aged 13 and up are awarded a teen rating. The game's content includes strong language, suggestive themes, harsh humour, little blood, and violent acts. Ages 17 and up are appropriate for mature-rated games. The games have more graphic and violent content, as well as explicit sexual content than is appropriate for a Teen rating. Adults 18 and older are eligible for the adult-only rating. The material may contain extended scenes of brutal violence, graphic sexual imagery, and real-money gaming. Finally, video games without a final ESRB rating are given the "Rating Pending ". "The video game package often has an ESRB rating symbol on the front cover with a description of the material on the reverse" (About ESRB, 2014). The ESRB rating is displayed before downloading the online version of the video game that gamers can download instantly to the gaming consoles.

Chapter 4

What types of historical events are portrayed in historical video games?

If we look in-depth analysis at these categories of video games, we will find many aspects of history inside them. Adam Chapman states, "Realist and conceptual representations of the past are the two main focuses of these games" (Chapman, 2016). Realist representation of the past is used in multidimensional first and third-person shooting games like *Call of Duty*, *Battlefield One*, and the *Assassin's Creed* series. Their designers present the past as it may have appeared at the time as a world that a player can explore through the game's protagonist. Similar to historical books, these video games centre on fictional people acting in historically accurate settings while maintaining the authenticity of more widely acknowledged tales of history. In the *Assassin's Creed series*, for example, the protagonists Assassins during their adventures do not change the course of the French Revolutions in *AC Unity* or Cleopatra's partnership with Julius Caesar in *AC Origins*. The actions of *Call of Duty: World War 2*'s protagonist Red Daniels do not produce a different timeline without the Allied Push in western France. Instead, the player character creates their own fictional story against the context of the almost historically accurate scenario. However, players cannot alter the greater historical narrative while controlling some of the in-game protagonist's actions.

1   Figure 1. Call of Duty: WWII, screen capture from the game (Activision, 2017).

The conceptual simulation method is the other primary method for creating historical video games. Games like those in the *Civilization* series, *Total War* series, and grand strategy videogames from Paradox like *Europa Universalis IV, Crusader Kings II, and Hearts of Iron IV* place more of an emphasis on explaining how the past's structures and procedures worked than on portraying how they appeared. Chapman states, "They (video games) achieve this not through visually realistic landscapes that immerse the player, but rather by communicating basic rule sets and concepts to the player using stylistic and occasionally abstract symbols and images" (Chapman, 2016). Therefore, *Civilization*, for instance, focuses less on depicting what historical civilizations looked like and more on explaining how geography influences the evolution of civilizations. *Crusader Kings II* describes the political division of medieval Europe rather than illustrating the lifestyle of medieval nobles. In these types of games, players can make decisions that profoundly affect historical results, such as controlling ancient Egypt to become the most powerful nation on Earth by the Renaissance, avoiding the collapse of Rome, defeating the Crusaders, etc. However, these methods are not mutually exclusive, and many games contain elements of both. For instance, the *Total War* games combine the more realistic authentic portrayals of single soldiers and battlefields rendered in 3D with the conceptual-style massive grand plans on campaign maps and city-management screens.

Figure 2. Europa Universalis IV, screen capture from the game (Paradox Interactive, 2013)

These historical video games portray what types of histories? According to Jeremiah McCall, "The majority of historians present the past as several historical challenges, regardless of whether their historical perspectives are realism, conceptual, or a blend of both" (McCall, 2018). In other words, video games often depict the past by assigning the player's character as the main agent. The character has different responsibilities and goals within a virtual world, which includes an atmosphere, geography, and a variety of elements. These elements may include AI-generated characters who are not players, and who can assist or restrict the player's path depending on the situation. As a result, the player must develop strategies and make decisions throughout the game. This perspective on the past can undoubtedly be problematic because it may highlight individuals' conscious focused actions and lead to the portrayal of humans apart from the main person as tools. Yet, the historical problem area technique for video games performs reasonably well when particularly applied to the study of players who make choices in platforms like politics, trade, leadership, building, battle, and so forth. There was a lot of deliberate goal-oriented behaviour in these and other fields, occurring in physical geography with components and individuals that were able to support and constrain acts geography, weather, the physical state of players, their morale, etc. Farmers, revolutionaries, warriors, and traders all developed plans of action and made decisions to accomplish their objectives in the context of their immediate and long-term environments.

"Compared to narrative historical texts, historical games notably differ from them in how they represent historical problem-solving areas" (McCall, 2012b: 13–21). The main difference is that games allow for player interaction whereas text-based histories are fixed. Texts are fixed by the author, and while readers can undoubtedly interpret them in a variety of ways, the actuality of the actual words found on the actual pages is factual and fixed, as is the text's dramatic outcome.

For instance, each reader will encounter identical words in the same order if they read the book exactly as it was intended. In that sense, the narrative conclusions of the story are set. Interactive games include board games and video games. The player is presented with important decisions, and depending on those decisions, a variety of alternative narrative scenarios are available. distinct players that play the game as intended will encounter various scenarios and episodes in various orders, as well as a distinct overall plot. In actuality, this means that historical scenarios must contain events and results that never actually occurred but may have.
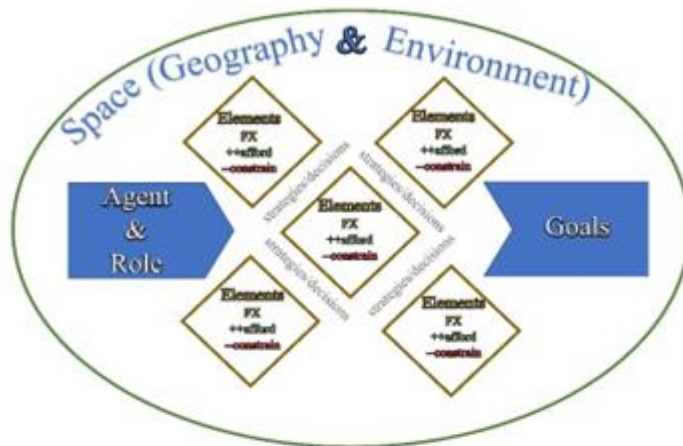
Figure 3. Diagram of a Historical Problem Space
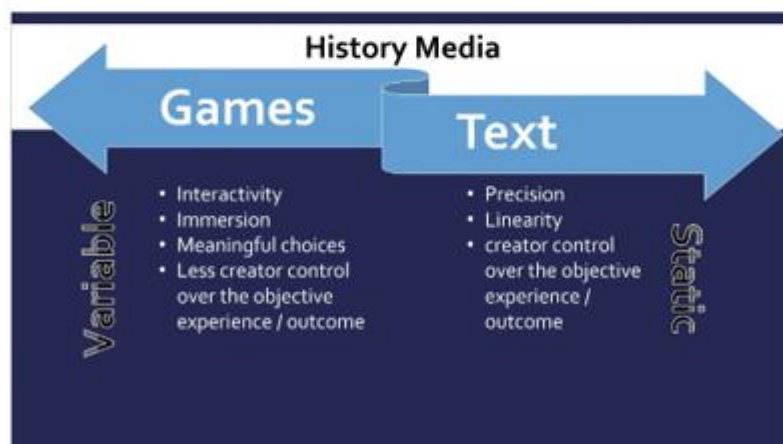
Figure 4. History media

For example*, Crusader Kings II* lets players begin their games at various points between the 9th and 15th centuries CE. From the historical data uncovered by the game developers, it is evident that the world's map is divided into regions that are governed by local kings. For example, at the start of the game in late 1066, William of Normandy is the new king of England during the European Middle Ages. The lesser nobles are usually based on documented historical figures, and the global map's political borders change to reflect the time and location's history. In addition to real kings, the game designers have also included other elements. Thus, in its many beginning positions, *Crusader Kings II* somewhat faithfully reproduces the political environment of the era The game simulates the actions of all lords, whether they are powerful or not, in a way that the player cannot control once they choose a dynasty to play. Each lord follows the game code's guidelines and standards while conducting their business. As the player has the freedom to choose, and as the decisions made by artificial intelligence (AI) characters are coded as probabilities rather than absolutes, the storyline of the gameplay will likely have some similarities to the broader historical context of the period and location, but it will not follow the precise historical chronology. McCall says in this matter, "One may lead a Mongol ruler to conquer all of Eurasia in the eleventh century, centralize England under ruler Harold rather than William the Conqueror, and so forth" (McCall, 2018: 408–409).

Figure 5. A counterfactual history: Norwegian control of England in Crusader Kings II (screen capture from the game; Paradox Interactive, 2012).

Games have the potential to be a very effective tool for examining the past because of the engagement and counterfactual outcomes that are a core component of historical games. In conclusion, historical games can be very effective at portraying the past in the form of systems and relationships, as well as the causal links that led ancient civilizations and individuals to behave in a certain way. In certain ways, they can represent the past as it appeared to the people at the time, as a framed world of options where players make decisions in the hopes of reaching or averting particular outcomes, with no guarantee as to how things would turn out in the end. Indeed, the majority of us, both past and present, experience life in this way. "Contrary to popular belief, textual history tends to describe the past as a linear series of events that were predestined to have the outcomes they did", as stated by Tara Jane Copplestone (2017). Games provide more than simply passive destiny; they also provide players with a sense of exploration, control, opportunity, and perhaps even realistic discussion. As a result, they can assist in advancing history instruction beyond its classic state of "one damned thing after another".

In general, historical games make both implicit and explicit claims to be historically accurate and follow historical data and research. In essence, all historical games imply that they contain at least some factual information. Think about this, when creating a historical game, programmers have the option of modeling it on a historical era and setting (Civilization, Call of Duty, Assassin's Creed), or not (Scrabble, Super Mario Odyssey, etc.). By choosing to tie the game to a historical setting with historical names, images, symbols, and rules, the developers informally imply that the game is historically accurate to some degree. Still, of course, this varies greatly across and within games.

Figure 6. Figure 6. Implicit claims to historical accuracy: Scrabble and Super Mario Odyssey vs Call of Duty and Assassin's Creed. Sources: Scrabble (boardgamegeek.com); Super Mario Odyssey (screen capture from the game; Nintendo, 2017); Call of Duty: WWII (screen capture from the game; Activision, 2017); Assassin's Creed Origins (screen capture from the game; Ubisoft, 2017).

Beyond these indirect claims, a lot of historical game producers make specific claims about the historical accuracy of their products. The word "historical accuracy" is problematic in and of itself because different individuals interpret it differently. According to Tara Jane Copplestone's (2017) research, "A lot of video game designers defined "accuracy" as accurately capturing real-world details like architecture and material objects. However, many players believed that the amount to which a game resembled what they had read was a good indicator of accuracy" (Copplestone, 2017). However, according to Lisa Gilbert (2019), "Some players believed video games were more realistic than historical texts to a degree that they seemed to

represent a wider range of viewpoints than traditional historical textbooks or lessons" (Gilbert, 2019). The definitions of accuracy and authenticity vary amongst those who study the relationship between video games and history. "Accuracy is the precise recording of historically accurate details, while authenticity is a more systems-based general feel that could make an error in details but produce a broader acceptable image" (McCall & Chapman, 2017, 2018). However, many people would agree that historical depictions of the past must, to a debatable amount, correspond to reliable historical facts to be historically correct or even historically authentic. Stated differently, they align with a portion of the available data. Some game makers make this explicit assertion.

For instance, the *Civilization IV* handbook boldly declares:

"The most recent version of Sid Meier's Civilization series, which debuted in the early 1990s, is called Civilization IV. The Civilization series, praised for its amazing complexity of play and extraordinarily addictive nature, has been recognized since its start as the first and best world history simulation". (2K Games, 2005)

Furthermore, according to store.steampowered.com (accessed on 04/Apr/2019), Paradox Interactive's game *Europa Universalis IV* lets players "Rule [their] nation across the centuries, with unmatched freedom, depth, and historical accuracy". "Our teams at Sledgehammer and Raven captured the enormous scale and authentic surroundings of the most brutal war ever fought", was boasted by David Jones from Activision, the developers of the 2017 game *World Battles II shooter*, *Call of Duty: WWII* (Jones, 2017). The historical *Total War* series' creators, Creative Assembly, have been known to toy around with language, but despite this, a representative for the company

Fraser Brown stated that "Authenticity is probably more accurate than accuracy, and that's what we aim for" (Brown, 2013) and that their historical games follow historical accounts.

Figure 7. Total War: Rome 2, screen capture from the game (Sega, 2013).

In addition to bringing players closer to the true past, historical games also promise all the classic video game features that influence the kind of history they provide. Apart from the desire to portray players as goal-oriented participants in a problem domain, video games frequently aim to satisfy players' power fantasies in which they have choices that affect the game world's destiny, decisions that are both exciting and significant. Games tend to focus on subjects that are more easily portrayed in heroic terms because they attempt to satisfy this need to make significant judgments. This explains, at least in part, why there are a wealth of games about conflicts and politics but very few regarding the history of peasant agriculture or herding flocks, despite the significance of these occupations in human history.

It is important to note a few other typical biases of the medium. Historical games tend to cut down on the subjects they cover to make them easier to understand and, consequently, more enticing to customers. This is in addition to portraying agents as powerful goal-seekers who must

make fascinating decisions. Transforming soldier's health into hit points, describing diplomatic relations as positive or negative numbers, considering human nutrition as a single, all-purpose food product, and quantifying player-agent experience in terms of levels. MacCall thinks, "All of these are instances of abstraction and simplification" (McCall, 2012).

A game's historical portrayal is influenced by the designer's perception of the past, in addition to gameplay and framework. Fundamentally, when a designer tries to recreate the past, the components of the game operate based on the designer's perception of the historical period. The Civilization series, to name a few recent examples, continues to highlight the creators' understanding that favourable landscape and the advancement of Western branches of technological advances are the main factors in a civilization's success, a measurable accomplishment that is frequently described in terms of militarization. The player's success can be measured by their happiness level, which may be thought of as their level of material comfort, in the Roman city-building game (Civ City: Rome) from a decade ago. Stated differently, the game advocates for the "bread and circuses" model of governance, which posits that providing physical presents and entertainment to the people would lead to their happiness. Since soldiers rarely fight until they die, according to the popular Total War series, morale is an important factor in conflicts. Instead, soldiers fight until their morale drops too low and they run away in terror. The historical record does not necessarily oppose any of these interpretations. All they do is show how game designers' perceptions of the past influence their creations.

Figure 8. CivCity: Rome, screen capture from the game (2K Games, 2006).

Historical game designers do a great deal of "historying" in the process of creating them, which is enough to make historical games an intriguing example of public history that historians should investigate. These games have a lot of potential to stimulate and improve historical research both within and outside of the classroom. Since 2005, Jeremiah McCall has argued that historical games are valuable resources for formal history education because they can "Immerse and engage using choice and multipurpose channels; provide systems-based meanings that highlight causal relationships; and present historical problem space methods for learning about the past" (McCall, 2012). This method depends on treating games as interpretations of history to be criticized rather than as factual records. To put it another way, educators and students should take a critical approach to historical video games, research historical data, and talk about how the games accurately or inaccurately portray the past. This approach combines reading historical materials, holding class discussions, providing direct instruction, having gameplay, and participating in activities that vary from critical analytical writing to discussion to get students thinking about the historical claims made by game models. By evaluating the pros and cons of the game versions, the ultimate goal is to help students gain a deeper understanding of the past. Simultaneously, researchers like

McCall have investigated the other side of the coin, "Students create historical simulations to develop the skill of historians, consider cause and effect, and investigate the decisions made by historical agents in the past. The most recent example of this is research and work done on Twine, a choice-based online text tool that enables students to do online digital history that is, to create and conduct interactive historical text research" (McCall, 2016b, 2016c). We are just starting to realize the enormous potential of historical video games as teaching tools for history lessons.

Although video games may not be utilized in formal classroom settings, historical video games serve as a valuable tool for promoting public history participation. Simply interacting with the game and engaging in play results in historical stories, players construct history. Public history theorists discuss the concept of shared authority, which holds that public and non-academic historians can collaborate to rebuild and interpret the past. In video games, the responsibility for reconstructing history is shared by both designers and players. According to McCall, "Playing the game is, in a very real way, a conversation between the player and the creator about what the past was like and how it worked because the game wouldn't work without the player" (McCall, 2018).

Gilbert says in this matter, "Although additional research is required, work has been done in this area to try to understand players' thoughts when they play and think back on a historical game" (Gilbert, 2019). Discussions in online gaming forums are a valuable and mainly unexplored resource for learning about the past motivations and travels of gamers. It is true that the majority of gamers probably refrain from posting on forums. Therefore, it is reasonable to wonder how accurate discussions on forums are of the opinions of gamers as a whole. Forums are open to almost anybody, which allows players to express their opinions about games, ranging from support to critique and criticism. This makes forums a valuable tool for understanding players' historical thinking. Forum posts provide an example of the interactions and understandings players might

have with these games. This is a crucial point: anyone who wants to offer their opinions can engage in a variety of ways with games on the forums, and even individuals who never post can still do so. To put it briefly, the forums provide insight into the types of thinking that can occur, which is important information for researchers looking into historical video games as educational tools.

It appears from posts to forums that some players analyze and critique their gaming while applying a significant amount of historical logic. Discussion points will cover the distinction between simulation and fixed portrayal of the past, conflicts between historical accuracy and captivating gameplay, the function of counterfactual history in games, and the degree to which games accurately recreate various aspects of world history, such as the political and military might of a historical state, the place of women in that period's politics, the traits of a particular religion, and the existence of slavery. Occasionally, posters merely take their historical assertions at their word. At other times, they support their claims with convincing historical declarations, or "facts". They occasionally cite texts or works by historians to support their claims. In this way, "posters exhibit a clear historical thought on a variety of critical themes, as well as consideration of the games' authenticity" (McCall, 2018). Put simply, "Historical video games influence players' perspectives and comprehension of the past" (McCall, 2018; Gilbert, 2019). They can, in fact, act as responses to significant discussions about the past and present. Now is the time to reflect on this last aspect of our investigation into historical video games as a way to experience, educate ourselves about, and reflect upon the past.

Chapter 5

Use of Video Games as a Learning Mechanism

The use of video games in educational environments seems as a formidable route for boosting learning, motivation, and cognitive growth through the keen eye of educators and scholars alike. Video games beckon as beacons of engagement and illumination as we map the educational landscape. They propel learners into spheres of investigation and discovery while ensuring that the pursuit of knowledge remains an exciting voyage into the unknown.

In 1999, Hitendra Pillay and his colleagues investigated the role of idle computer games in promoting cognitive functions. Players could analyze the information offered in the game and draw valuable conclusions from their experiences as they immersed themselves in the computer game environment and came across complex graphical and textual material. Players were required to gather knowledge while playing and exploring the game, make connections between the information, and memorize it to achieve the game's objectives. According to them, "The recognition could encompass a purely visual object level or entail a more sophisticated comprehension of rules and principles implicit in dispensing information," (Pillay, Brownlee & Wilss, 1999, p. 204). According to Pillay's further justification, "As long as players maintained to engage in the games they were currently playing, this cognitive development could grow over time" (1999). Playing casual computer games requires developing internal representations and encoding explicit information embedded in the game. According to Pillay, Brownlee, and Wilss, "Novices may first rely on surface aspects in the construction of their knowledge, which would likely transform into ordered knowledge structures with repeated exposure to particular antecedents" (1999). Pillay (2002) attempted to examine the cognitive strategies used by computer

game players in a different research project. He ran an experiment to determine how two computer games for fun affected children's performance on tasks for computer-based training later on. Three groups of participants were created. One group acted as the control while the other two groups engaged in their respective idle computer games. Pillay (2002) then gave each group a set of educational assignments to complete using software for environmental education before evaluating how well they did overall in terms of speed and accuracy of solutions. Additionally, Pillay examined the cognitive strategies used to perform the tasks. According to the results, "Playing computer games for fun can improve kids' performance on subsequent computer-based educational activities, provided that the game type and the task of the educational evaluation program are compatible" (Pillay 2002).

The capacity of computer-based video games to support children's cognitive development as contrasted to more traditional computer-assisted instruction was the subject of Tsung-Yen Chuang and Wei-Fan Chen's 2009 investigation. The instructional delivery styles used had an impact on how well the children learned. Children from third-grade classes were used in the experiment, and they were divided into two groups. The control group was given text-based, computer-assisted instruction via a web page. The computer-assisted instruction's instructional content was focused on combating fires, covering information on fire safety and fighting strategies. Participants in the experimental group, on the other hand, had to play a real-time strategy game called "Fire Captain", which delivered similar educational material about firefighting and fire safety. As part of their missions, players had to learn during a tutorial phase and then put out a fire at the end. Participants from both groups took a questionnaire to evaluate their level of understanding after finishing their respective tasks. The evaluation's findings showed that individuals who played the computer game performed better than those who received computer-

assisted training. Additionally, Pillay (2002) looked at the cognitive strategies used to complete the tasks. The findings indicated that "Children's performance on ensuing computer-based instructional assignments may be favourably impacted by their leisure computer game activity" (Pillay, 2002). However, the effect depended on how well the game genre fit the purpose of the educational evaluation program.

There are numerous arguments in favour of using video games in the classroom. First and foremost, gamers interact with the games they are playing, focusing on the gameplay but also taking pleasure in it. Video games encourage players to think critically, work through issues, and finish tasks to meet the objectives of each game. Video games have the potential to serve as a medium for providing information, entertainment, and education since they can increase players' incentive to interact with and pay attention to content. Students' interest in learning can be sparked and the learning process made more enjoyable through the use of video games in the classroom. According to Maja Pivec (2007), "Video games, a medium that younger generations have been interacting with since their early years, provide a way to connect with a new generation of learners"(Pivec, 2007). Games can be used by instructors to introduce new learning concepts, get learners involved in particular subjects, and inspire them to work toward particular objectives. Lindsay Cesari is a High School Esports Coach at Baldwinsville Central School District in Baldwinsville, New York, United States. She uses video games to teach her English class. According to Cesari, " The Students are learning the same skills in a different way" (Cesari, 2023).
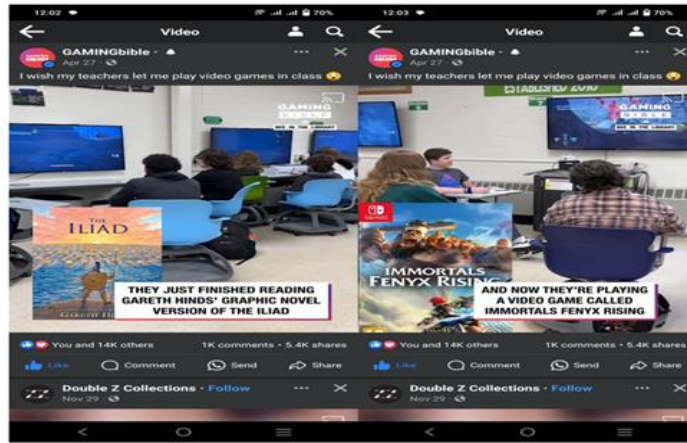
Figure 9. An English class playing Immortals Fenyx Rising after reading ILIAD (Collected from https://fb.watch/oNC3pqF7bJ/?mibextid=Nif5oz)

For instance, Bethany R. Raiff and Darion Rapoza (2012) showed how a video game could encourage smokers to give up their habit. They looked into whether video game-based contingency management (CM) could act as a spur to encourage smokers to give up. Contingency management was defined as "An intervention that involves delivering incentives, typically monetary, to smokers based on objective verification of smoking abstinence" (Raiff and Rapoza, 2012, p. 1453). The surveys they conducted as part of their research indicated a likelihood that video game-based CM may act as a motivator for smokers to quit and also indicated a propensity to refer the game to other smokers seeking treatment.

In addition to motivating people, video games have numerous other effects on them. Jenkins (2012) asserts that "Playing provides a crucial role in moulding children's interactions with their bodies, tools, communities, environments, and knowledge" (Jenkins, 2012). Most children pick up new skills while playing and taking in their surroundings. They get to explore and experiment with their surroundings while using enjoyment as their inspiration. Playing can inspire children to learn in various ways as they get older. Playing games requires players to engage in particular abilities and practices that are required for the playful activities. Moreover, play lowers the emotional cost

of failure when it comes to learning and problem-solving. Gamers are encouraged to take chances and learn from their failures, experiences, and mistakes. Individuals learn to apply what they have independently discovered in new circumstances.

A simulation, in Jean Baudrillard's words, is "An imitation or replica that takes the place of reality. Once more, a well-exemplified example is a political candidate's manufactured speech intended only for television" (Baudrillard, 1981). Simulation education is provided by video games, which improves the learning process for students. According to Jenkins (2012), "Simulation is the capacity to comprehend and create dynamic models of actual systems" (Jenkins, 2012). People's cognitive capacities are expanded by simulation, enabling them to process vast amounts of information, experiment with increasingly complicated data configurations, formulate ideas, and test them in real-time against a variety of variables. "Simulation-based-learning approaches aim to mimic a system, entity, phenomenon, or process," according to Jonathan Lean and his colleagues (Lean, 2006, p. 228). Through simulations, a particular problem or issue's behaviour is attempted to be represented or predicted. "A simulation is a modified working model of a few aspects of the real world, especially systems and processes," according to McCall (2012, p. 09), who also researched simulation games. A rule-based, artificial conflict or rivalry that dynamically models one or more real-world systems is what he characterized as a simulation game. Simulator game research was conducted by PhD candidate Isabela Granic of Radboud University Nijmegen in the Netherlands. According to her research, "Playing with the senses develops cerebral networks that can improve one's capacity for complicated learning and attention span. To improve their cognitive capacities, young children, children with disabilities, and even elders should engage in sensory play" (Granic, 2016). One advantage of sensory play is that there are video games made specifically for stimulating your senses. Disney's *Fantasia. The Evolution of*

*Mus*ic, *Fruit Ninja Kinec*t, *Just Move Grover*, *Get Set Go*, *Sesame Street! Sweet Crush* is one video game that appeals to the senses.

"Simulator games are contrasted to other genres", claims Nancy S. Parks in her 2008 article. Unlike other game genres, simulation games force players to consider important questions that have consequences depending on their choices. Participants in simulations are put into situations where the cognitive functions of absorption and accommodation take place, promoting cognitive development. Therefore, by stimulating cognitive activity, simulations become effective teaching aids. According to McCann (2009), "Simulation games such as "The Sims," "Nintendogs," and "Grand Prix Legends" allow players to simulate a variety of tasks, including building and running cities and taking on the role of a deity in the lives of virtual residents"(McCann, 2009). Simulation systems can serve as instruments for instructing individuals in the performance of real-world tasks.

Given that simulations display dynamic qualities that are governed by logical applications of underlying theories, they are extremely useful tools for researchers to investigate the characteristics of virtual environments. Additionally, simulations encourage trial-and-error methods, enabling users to consider many options for reaching their goals. Jenkins (2012) cites Colin's claim about the key elements of simulation in learning and explains how students are more likely to make personal discoveries and find simulations more engaging than traditional knowledge presentation techniques. Moreover, because they are participatory, simulations improve memory retention.

The use of simulation games in several areas of education has been extensively researched. Hercules Panoutsopoulos and Demetrios G. Sampson (2012) researched the usage of games in math instruction. The study aimed to offer proof of the impact of a general-purpose, commercial video game on students' mastery of mathematics education standards. The tool for this project was *Sims 2: Open for Business*. A game called *Sim 2- Open for Business* explores running a business. It involves data monitoring, strategic thinking, planning, and decision-making. In the game, players can recruit workers and give them duties according to their skills and interests. They can also decide the pricing of products. Participants were split into a test group and a power group for the experiment. Each group was required to choose a virtual business and research how game choices affected it. They created predictions, verified them in the game, confirmed or disproved them, analyzed the outcomes, and then provided definitive answers to the issue. Between the two groups, there are two differences. Before being given the problem, the test group became familiar with the game. Second, a management-related problem for an enterprise issue was given to the test group. The power group, on the other hand, was given the job of a sales manager in a computer store. According to the findings, test group members performed better than power group members in achieving large educational goals.

Military education and training are a fascinating area of research about the usage of simulation games in the process of learning. In the words of U.S. Navy Reserve Captain David S. Coleman (Retired), "The Army and Marine Corps learned about the advantages of employing publicly accessible gaming software to meet their demands for tactical training and theory development" (Coleman, 2011). There are many benefits to using commercial simulation games for military training. "Full Spectrum Warrior" was released in 2004 by video game developer THQ

and the Institute for Creative Technologies, which is supported by the US Army. The Army's Science and Tech community made this initial attempt at using video games for instruction because they understood that millennials who have joined the military since 2000 grew up playing video games. Raytheon's VIRTSIM System is an open-air, immersive virtual reality training environment. The gamepad, which is the size of a basketball court, uses a weapon-mounted joystick and a rubber pad to track a soldier's motions. The troops can practice their responses to various types of incoming fire thanks to the game's restrictions and their surroundings. Even still, they are unable to dive for cover, and their fatigue in the training simulator can never compare to what it would be after many days of dismounted patrols outside. One advantage of the approach is that it helps soldiers practice for situations that the Army cannot replicate and acquaints them with the weapons and gear they will use in the field. Computer simulation games provide precise, lifelike virtual operating systems. Training becomes more effective when the features and look of military platforms, weapons, and detectors are accurately and effectively modelled. There are different gameplay levels available in PC simulation games. Users can utilize this feature to change the difficulty level and make training fun. Players from various places, such as those from a nearby network, a regional network, or a home connection to the internet, can play together thanks to multiplayer options in PC simulation games.

Figure 10. The US Army uses a shooting simulation game for their training purposes. (You have to shout "BANG!" for every shot, probably)

Another significant benefit of adopting PC simulation games for military training is that, compared to conventional training methods, doing so reduces maintenance and equipment expenses. Additionally, the ability to create, modify, and repeat tactical situations in PC simulation games supports training in tactics or practice for operations. In other words, players create virtual versions of themselves based on their own morals and what they learn from the game about the effects of their characters' actions. People who play video games are willing to perceive themselves in a different persona because of these aspects of the games. With the new identity, they can discover the type of person they might become. Additionally, pursuing these identities might serve as a motivational factor for people. In other words, players create virtual versions of themselves based on their morals and what they learn from the game about the effects of their characters' actions. People who play video games are willing to perceive themselves in a different persona because of these aspects of the games. With the new identity, they can discover the type of person

they might become. Additionally, pursuing these identities might serve as a motivational factor for people.

Jenkins' (2012) research suggests that playing video games can aid individuals in spreading their cognition, or the capacity to engage in meaningful interactions with instruments that enhance mental abilities. Which external event, meaning, emotion, and driving force the human brain can recognize depends in part on cognitive processes. Players of video games create a mental map of what transpired in the games as a result of players and non-player characters as they play. Video games have traditionally been regarded as additional resources in some educational fields due to all the chances and benefits they present. According to Glennw, "For a variety of reasons, some people find history to be challenging and unappealing" (Glennw, 2011).

Players typically need to familiarize themselves with the characters they are managing in video games, as well as learn about their personalities and backstories. Players had the chance to take on other roles, learn more about various identities, and create their own through this. In the words of Jenkins (2012), "Role performing gave individuals the opportunity to imagine and think about controlling an alternate universe, allowing them the chance to think about the issue from different perspectives, giving them the chance to develop and come up with creative solutions to difficulties, as well as offering them an opportunity to grasp it from other angles".

Jenkins also asserts that "Playing video games can provide performance as the capacity to take on several personas for improvisation and exploration" (2012). The goal of gameplay is to help players better comprehend their true selves, such as their social roles, by allowing them to experience virtual environments with fictional identities. James Paul Gee (2003) discusses identity formation and learning from video games. Video games "acquire personas" and "stimulate one's identity professions and thought on identities in straightforward yet powerful ways," according to

Gee (2003, p. 51). The characters that players created could reflect their personalities, giving them glimpses of their peculiarities and helping them to learn more about themselves. In several video games, users have the opportunity to create their own characters. Characters' personalities, backgrounds, and outward appearances can all be changed. The behaviours of players' characters in the game world and how the game environment responds to the characters will be influenced by these player-created character attributes. Each character becomes distinct from other characters created by other players at the game's conclusion after progressing throughout levels and the story's progression, revealing their identities.

Another point Jenkins mentions is, "A variety of skills that games can help in acquiring is multitasking" (2012). The capacity to scan surroundings and change one's concentration or focus to the important element at hand is known as multitasking. According to Jenkins, "People today use digital media to multitask to react to their surroundings" (2012). They must sort out background noise and narrow their attention to the most important features. When playing video games, players are bombarded with information, including images, animation, music, and sound effects. To complete a game's objective, players must keep in mind the complex connections between the information and react swiftly to changes in visual signals.

According to Begona Gros (2007), "Players of video games must divide their attention to monitor several items at once. For instance, the computer game Space Fortress demanded that players focus on numerous difficult and repetitive tasks related to components" (Gros, 2007). Players had to manoeuvre a flying ship, take out an enemy citadel, and use a radar monitor to determine whether or not nearby mines were hostile. Dan Chiappe and his coworkers (2013) ran an experiment to see if multitasking skills may be enhanced by playing action video games. Results from the pre-test and post-test were compared between an experimenter group that played action

video games and a control group that didn't. For each test, the Multi-Attribute Task Battery (MATB) was utilized. MATB was composed of a primary task that concentrated on monitoring and handling fuel and a secondary task that concentrated on communication and system monitoring. Chiappe and his colleagues discovered that playing action video games improved participants' capacity to multitask since the experimental group scored higher than the control group.

First, some people believe that learning history is all about memorization. They are not allowed to engage with the subject's material; instead, they are forced to memorize everything that is spoken to them. Second, they are not allowed to study history from a variety of viewpoints. In certain history lessons, the only source of information is the textbook; no additional media, such as instructional films, are used. Third, the instructional strategies employed in a given class may not be successful or engaging and might be considered dull from some students' viewpoints. As was said above, engaging students who live in active cultures may not be possible if only traditional teaching techniques like lectures and written assignments are used. To encourage and excite pupils to understand history, the use of technology in the form of video games should be introduced into the classroom.

Chapter 6

Video games about the past cause problems in the present Time

Video game histories spark passionate, occasionally heated discussions about the past, how it is presented, whether such representations are historically correct, and how those portrayals impact the present time learners. They still need to be finished. They can be debate-worthy subjects of interest solely to historians. This section will look at a few instances when modern debates have emerged regarding the historical accuracy of certain video games.

Some have questioned the historical correctness of video games since they are politically motivated in their representations of historical military and political forces. For instance, in the 2014 video game *Assassin's Creed Unity*, the player takes control of a fictitious Assassin situated in Paris during the French Revolution. Developed by the French business Ubisoft, the game caused a stir among French politicians, including former presidential contender Jean-Luc Melenchon. He criticized the ostensibly bourgeois portrayals of the rebel Maximilien Robespierre, the originator of the Terror, as a cruel ruler, Marie Antoinette and Louis XVI as noble victims of the revolution, and the working people of Paris as a homicidal mob. According to Dan Chibber, "Since the Revolution's inception, discussions concerning these and other key players have persisted, and these days they centre on video games" (Chibber, 2014).

Figure 11. Assassin's Creed Unity, screen capture from the game (Ubisoft, 2014).

When *Company of Heroes 2*, a strategy game played in the real-time set during World War II on the Eastern Front, was launched in 2013, some in Russia and Eastern Europe took offence. In an attempt to stop the game's sale in the Russian Commonwealth, some of the outraged parties filed an online petition. The game was "review-bombed" by critics, who flooded Metacritic, a website that reviews video games, with unfavourable comments in an attempt to lower the site's overall review rankings. The way the Soviet Army's combat effort was portrayed in the game was under question. The Soviet army is depicted in the game as fielding battalions of convicted criminals, sending soldiers into battle without rifles, and instructing officers to shoot any troops who retreated at various points during the game. Critics like Colin Campbell claimed that these components depict the Soviet regime as wicked and portray Eastern Europeans as violent and submissive to the point of self-destruction. On this matter Campbell also adds that the "Relics of the past defended its past, pointing out that there is sufficient evidence to imply that two dictatorships engaged in brutal combat on the Eastern Front and that soldiers there were frequently forced to choose between their allies and their adversaries on the battlefield" (Campbell, 2013).

Figure 12. Company of Heroes 2, screen capture from the game (Sega, 2013).

In its sixth edition, Sid Meier's *Civilization* series, which was first released in 1991, has drawn criticism for both its harmful dialogues to players and its questionably accurate historical depictions of Rulers. In this hugely successful series of strategy games, players assume control of a "civilization." Though supposedly historical country leaders, these individuals are deities who served as their civilizations' guiding minds. Beginning with the establishment of their initial city in 4000 BCE on a global map consisting of earthly or fictional geographic features, players travel terrain while engaging in competition, cooperation, and conflict with competing civilizations in an attempt to establish the most superior civilization. "The game's mocking depiction of historical characters and cultures has drawn criticism from some gamers and scholars. Some have argued that replicating the historical colonial path of Western Civilization's military and technical advancement is the most certain way to triumph and possess the "best" civilization" (Kacper Poblocki, 2002). Others, however, have drawn attention to the game's negative portrayal of the advancement of industry and technology. In the majority of playthroughs, it is possible for a civilization to genuinely spread around the globe, utilizing an increasing amount of land and

resources without posing any environmental risks. Kanishk Tharoor said, "It is interesting to note that the early *Civilization I* (1991) and *Civilization II* (1996) video games did not consider human-caused global warming or its impact on sea levels to be all that controversial. From *Civilizations III* through V, the phenomena vanished" (Tharoor, 2016). The creators of *Civilization VI* (2016) most recently released an addition called "Gathering Storm" (2019), which includes anthropogenic climate change among other man-made catastrophes. Others were unhappy with how some historical figures and cultures are portrayed in *Civilization*. The Cree Nation recently blasted *Civilization VI* for adding Poundmaker, their historical chief, and the Cree people without their consent. "It promotes this myth that Native Americans had similar values to the colonial culture, whose focus is why they were conquering other cultures and accessing their land," stated Cree Head Milton Tootoosis (Andy Chalk, 2018). Tootoosis went on to say, "That is completely at odds with our conventional practices and worldview. For a business to continue promoting an ideology that contradicts reality is a little risky. Certainly, Chief Poundmaker did not share the colonial powers' mindset (Andy Chalk, 2018).

Figure 13. Chief Poundmaker, from Civilization VI, screen capture from the game (2K Games, 2005).

Figure 14. A 10-year (real-world years!) game of Civilization II, screen capture from the game (MicroProse, 1996). Image extracted from Biessener (2012)

This worry over historical authenticity takes a dark turn when some claim that a game hides historical facts to be "politically correct" and inclusive of diversity even despite historical evidence. For instance, since its release, *Assassin's Creed Origins* (2017) has sparked discussion and a significant number of racist memes and rants on Steam forums and other online spaces over the skin tones of ancient Egyptians, ancient Mediterranean peoples, and so forth. A significant portion of this conversation concerned whether Ubisoft's depictions of ancient Egyptian race accuracy were true to history. According to Paul Tamburro, "A check of the Steam forums for *15* Assassin's Creed Origins will show that, while not always, a large portion of this conversation smacked of explicit efforts to further racist ideology in the present by trying to apply it to the past" (Tamburro, 2017).
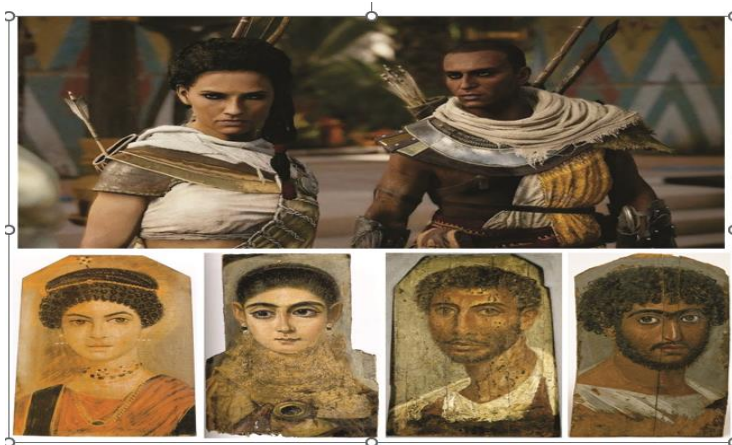

Figure 15. Assassin's Creed Origins screenshots (top; Ubisoft, 2017), compared to some Roman Period Fayum mummy portraits (bottom; Wikimedia Commons)

In recent years, similar discussions among feminists concerning the portrayal of female characters in historical video games have emerged. In March 2018, an update was released for Creative Assembly's strategy game *Total War: Rome 2*, which allows players to take control of an ancient state and its soldiers. Nathan Grayson said, "The update significantly raised the likelihood that certain states will have female generals as possible recruits. These changes were made in parallel with the Desert Kingdoms Culture Pack by Creative Assembly, which included Kush and Nabataea in addition to other new playable nations" (Grayson, 2018).

Figure 16. Total War: Rome 2, Desert Kingdoms Culture Pack, screen capture from the game (Sega, 2013).

In the end, the modifications gave certain historical nations in the game a 10-15% probability of potentially obtaining female generals as recruits. Some were given more opportunities. For example, the ancient Nubian state of Kush had a 50% chance of representing a higher percentage of women in military and governmental positions. There was little prospect that recruitable female generals would emerge in the most historically patriarchal societies like Rome, Greece, and

Carthage. A few months later, in September 2018, Creative Assembly replied to forum posters that disapproved of the inclusion of women in a tweet.

Figure 17. Creative Assembly's tweet from 25/Sep/2018.

The creators' language showed that they were interested in history and wanted to portray the past in general, workable terms. They maintained the alterations. *Total War: Rome 2* got review-bombed by reviewers on the Steam reviews section almost immediately after the tweet. The presence of women in the game was criticized by several protestors as being historically wrong. According to Grayson (2018), "A significant portion of the criticism also implied that Creative Assembly was falling into the so-called "SJWs", or Social Justice Warriors, a mocking term frequently used in forums to refer to people who are overly engaged in promoting diversity and equality" (Grayson, 2018).

Figure 18. Steam customer-review graph for Total War: Rome 2

A similar discussion centred around the famous first-person shooter game *Battlefield V*, which was set during World War 2. In May 2018, a trailer for the game was released, featuring a prosthetic-armed female shooter participating in a team battle. According to Luke Plunkett, "The game's playable female characters were criticized by some for being historically incorrect, and frequently using strong, misogynistic language" (Plunkett, 2018).

Figure 19. Cover art for Battlefield 5 (EA DICE, 2018).

The most notable aspect of the debates surrounding *Total War: Rome 2* and *Battlefield 5* is not so much that the people criticizing these aspects of the game that is, the presence of more female characters in militaristic historical contexts and political contexts as much as the fact that they frequently use strong language to attack "the politically correct" and "Social Justice Warriors", as fascinating as that may be. What is most startling is that these critics argue that because these elements render Creative Assembly and EA DICE's games "historically inaccurate", they are thus in error. In actuality, though, fundamental aspects of both these games and the more extensive *Total War* and *Battlefield* series fall short of the historical accuracy standard when it comes to being in keeping with the well-examined historical data that is currently available. In a perceptive essay

titled "Accuracy vs. Inclusivity: Women in Historical Games", Jordin Lukomski (2018) brought this to light, "Indeed, there is historical proof that women were involved in state politics and military engagements as generals, monarchs, or even mere fighters in various societies" (Lukomski, 2018). Other critics like Brynn Holland and Arbuckle said, "The same is true for World War II when women did participate in combat, particularly in the Soviet armed forces, which are renowned for having female snipers and an all-female aviation unit called the Night Witches" (Arbuckle, 2016; Holland, 2017). To put it briefly, it seems that some users have used historical accuracy to justify arguments that are fundamentally sexist and racist to restrict inclusion and diversity in video games.

Caterina Sforza, the Countess of Forlì and Lady of Imola, was an Italian noblewoman born in 1463, who lived until May 28, 1509. Despite being in a position traditionally held by men, Caterina possessed several portrait medals that showcased her negotiation skills and political influence as a successful regent. During that time, portrait medals held great significance in the nobility, as they were used to display a person's achievements, characteristics, and self-representation. Caterina's first medal symbolized her beauty, feminine purity, and adherence to the expectations of a respectable wife and mother. In the video game *Assassins Creed II*, she is portrayed as an important figure. However, there is a scene where two army generals threaten her by stating they will harm her children if she does not cooperate. In response, Caterina defiantly lifts her skirt and exposes her genitalia to them, exclaiming, "You want my children? Take them! I have the instrument to make more!" (*Assassins Creed II*, 2009). While this scene is presented humorously, many historians doubt its accuracy and believe it may be a product of misogynistic rumours created by Italian soldiers seeking to undermine her authority. The story's fame is attributed to Julia L. Hairston (2000), according to the historian and philosopher Niccolò

Machiavelli, who treats the events overly imaginatively in his discourses. She says wryly that "He creates a version in which she [Sforza] no longer responds to the political dilemma she finds herself in" (Hairston, 2000). Political analyst Michelle Tolman Clarke supports this conjecture but attributes Machiavelli's motives to the desire to spread propaganda for Sforza and not against her. According to Clarke's assessment of events (2005), his description "effectively cements Sforza's character for generations". Clarke also states, "She is expected to value her children above all else as a lady and to honour her obligations as a noble. Without hesitation, she seizes these chances to ensure her independence, the independence of her city, and Machiavelli's unwavering respect" (Clarke, 2005). Despite these claims, Ubisoft Montreal, the company that developed *Assassins Creed II*, did not portray Sforza as she was portrayed in historical records, which caused a lot of criticism from many Italian writers and historians.

To conclude this investigation on the situation of *Kingdom Come: Deliverance* (2018, henceforth KC:D) is particularly intriguing due to a role reversal: rather than a game developer, like in the cases of Ubisoft, Creative Assembly, and EA DICE, the creators of KC:D offered a largely completely white, patriarchal, Catholic vision of Medieval Bohemia that caused some to question how historically accurate this un-diverse depiction of the Middle Ages was. This included diverse people, increasing representations of diversity, and igniting outcries of historical inaccuracy. The guest blogger at People of Color in European Art History looked into the game's Kickstarter campaign and brought up concerns about the game's stereotypical depiction of medieval inhabitants in Bohemia in response to a reader's inquiry. After a heated debate on the Internet, Daniel Vávra, the chief designer of KC:D, finally tweeted, "Could you kindly explain to me what's [sic] racist about expressing the truth? Bohemia in the Middle Ages was devoid of Black

population. Period" (Vavra, 2018), a problematically dualistic and vague term. This doubling has sparked a great deal of discussion on the Internet over whether or not there were people of colour in this tiny region of medieval Bohemia. Blogger Robert Guthrie pointed out that Vávra's arguments were misleadingly selective in his reply to the following flame war. Despite the game designers' claims of accuracy, Guthrie (2015) points out that many of the elements in KC:D are not historically true. Guthrie's title, "When historical accuracy is used to deny agency," sums up the conclusion rather well (Guthrie, 2015). KC:D effectively erases people of colour and women from history, preferably from the players of their game, by asserting that these groups' exclusion from anything apart from roles is a requirement of a historically realistic game.

For historians and history instructors hoping to make use of historical video games which, like all historical sources, have limitations in terms of scope and depiction of individuals and issues all of this presents intriguing questions. For history educators, historical accuracy is undoubtedly a reasonable value, and game creators should strive to create historically accurate games. But what happens if an argument of historical authenticity is used to marginalize people instead of providing an opportunity for respectful debate about the past and how it is portrayed? This is a crucial aspect. Whether in a history book, lecture, or video game, the exclusion of entire groups of people from narratives about history and analyses has the effect of almost wiping them out of the record. Naturally, this issue is not limited to older video games. Even the most accomplished historians have prejudices of their own and must be cautious in the subjects and approaches they take on. The frequently complex issues of historical authenticity in video games require careful, rational debate and discussion. The classroom is undoubtedly an environment for those thoughtful and solid discussions. According to MacCall, "The success of using games to promote learning in history classes will depend on how well teachers and students can base their debate and analysis

on historical data. Ultimately, a game that is highly wrong in terms of history, however, that may be measured, may still help teach history because of its defects, which offer material for criticism" (McCall, 2010, 2011).

6.1 Possible Barriers to Using Video Games as a Method for Teaching and Learning

The market for video games is overflowing with games that are set in a historical context. However, not every game that uses historical material can be effectively used as a teaching tool for history. Several challenges need to be considered while using video games as teaching tools. Factors like the genre of the games, gameplay, the duration of the game sessions, the accuracy of the historical knowledge, the amount of historical material in the games, the acceptance of using video games as teaching tools among instructors, and other factors make it difficult. This article investigates the obstacles faced by previous scholars while using video games as a method for teaching and learning history.

As previously mentioned, Rachel Godfrey and Margaret Waddingham (2013) also had an issue with the game Pharaoh. They discovered that information acquisition was less regulated than traditional instruction, making it challenging to figure out whether playing the *Pharaoh* would increase historical knowledge. In traditional education, teachers virtually control the historical subject matter that pupils are taught. Godfrey and Waddingham had limited control over the information that study participants were exposed to, as they used a video game that was designed for the market and not intended to support players in a learning environment. This made it difficult to monitor the content and ensure that participants were receiving accurate information, in a way that teachers in a standard school environment would have been able to do.

McCall (2012) noted issues with video games, particularly those in the simulation category, as a teaching tool for history. Firstly, the majority of simulation games available on the market are designed to entertain players and generate income from sales. Most games are designed primarily for enjoyment and, to a greater extent, to generate money for the businesses that create and distribute the games. To make the action more interesting or enjoyable, historical subjects in video games may not go into great depth or may be purposefully wrong. Even game creators who want to use their games to teach history must take playability and comprehensibility into account, as these factors may negatively impact educational value. According to McCall, "Video games frequently exaggerate historical content and exclude complexity and complicated issues to create engaging and enjoyable gameplay" (McCall, 2012). For instance, *Civilization IV* concentrates on creating cities but ignores social factors at the city level and how each town fits into the civilization. Video games occasionally present a wide range of possible endings for historical events that never materialized.

By using a scene from the video game *Rome: Total War*, McCall (2012) demonstrated the inaccurate components of the game. Players attempted to become emperor by capturing 50 provinces while assuming the roles of one of three Roman noble families with their respective military divisions. If they take on the roles of the other two families who lost the war, players may in this situation have a different understanding of the story than what occurred in reality. The game's inaccurate portrayal of its advantages and disadvantages may encourage pupils to ask questions about historical events.

According to McCall (2012), "The characters themselves have greater authority, responsibilities, and roles than their actual, historical counterparts did"(McCall, 2012). For instance, a military

general in the game may zoom in and out whenever they want and have a 360° view of the battlefields, which would have proven not possible to military leaders at the time.

According to Stefan Bulboaca, "Entertainment has taken on various meanings and interpretations over the past five centuries. Today, it broadly refers to activities that interest, amuse, and satisfy the consumer" (Bulboaca, 2022). One significant aspect of entertainment is video games, which can be categorized as either interactive or non-interactive. The level of control that a customer has over the experience determines the difference between the two. Non-interactive entertainment, such as watching a movie, series, or documentary, listening to music, or reading a book, allows for a greater degree of relaxation because the viewer can simply absorb the experience without actively participating. Interactive entertainment gives customers a degree of control over the activity they participate in, such as video games or board games, which can increase enjoyment and excitement. Unlike non-interactive entertainment, where the amount of information is predetermined, participants in interactive entertainment can choose which information they want to see. Some games also allow players to actively participate in the decision-making process, giving them a sense of accomplishment. For instance, in 3D games, users can observe a landscape from any angle. This is not possible in a movie, TV show, or book, where the scenes or action have already been shot or written, leaving no room for further exploration or curiosity.

Simon Reynolds' book *Retromania* explores the impact of our obsession with the past on music and fashion trends. Reynolds argues that "Contemporary experimental music is struggling to produce fresh and captivating ideas because its practitioners are too fixated on the past"(Reynold, 2011). Reynolds is concerned about how this trend will affect music and culture going forward. On the other hand, theoretical investigations into the interactive entertainment

sector have revealed potential psychological impacts on video game players. These psychological phenomena and impacts may also extend beyond video games and affect consumers' cognition, emotions, and behaviour. Stefen Bulboaca says, "In the entertainment sector, management policies and tactics need to be in line with the primary psychological phenomena because they meet psychological needs" (Bulboaca, 2022). In this regard, the "Yerkes-Dodson" law researched by Robert M. Yerkes and John Dillingham Dodson in 1908 can be modified specifically for the interactive entertainment sector. The law explains how a low level of excitement generated by an event result in low consumer pleasure because the experience is deemed uninteresting and insufficiently fascinating. This means that the experience might not live up to its potential as a part of the entertainment sector. It is also possible to be misled into thinking that excitement at its peak cannot possibly have negative repercussions. However, the reality is different, since a high degree of excitement can also lead to high expectations for the experience's action. In this sense, consumer dissatisfaction results when expectations are higher than what the experience delivers. As a result, the consumer's level of discontent is directly correlated with the gap between expectations and reality.

The process of learning about history has been affected by the various tale narratives in video games. Action, simulation, and adventure were the three primary game genres Kevin Kee (2011) examined in terms of the narratives found in video game storytelling. Action games' narratives are distinguished by clear conclusions. This story's clear objective is to transform the characters and events to create something entirely different. Since simulation games offer, "Variations of a single scenario or multiple uses for the same rule" (Kee, 2011, p. 432), its narrative can be referred to as ideological. In simulation games, players have more freedom to choose their

objectives and can explore many scenarios. Last but not least, learning more about the game environment is the objective of adventure games. In this story, there is a progression from ignorance to knowledge, which is the acquisition of knowledge and the realization of significance. According to McCall (2012), "We should consider historical-themed simulation games to be representations of the past". Depending on one's perception of what is significant or unimportant, one's interpretation will vary. Simulation games with historical content often have biases. According to their interests, sense of relevance, and exposure to historical material, historians and game creators frequently focus on just one historical period or event.

Additionally, there is an argument for bias. Based on the period in which they lived and the details of their biographies, game creators may exaggerate the clarity of goals, options, and choices for historical figures. Alan Isler (2009) investigates how Israel and Palestine were imagined, depicted, and built-in video games. He discovered that portrayals of Palestine and Israel in popular video games frequently use cultural stereotypes and cliches without media criticism or scholarly analysis. Particularly, Middle Eastern cultures are portrayed as exotic, ageless, and historical in American and European video games. For instance, according to Isler (2009), "Arabs and Muslims are portrayed in *Assassin's Creed* (2007) as the cultural outsiders who personify stereotypes". Furthermore, Arabs and Muslims are frequently represented in video games as controlled by computer foes like terrorists. In most cases, players have no option to select any of these characters. Most of the time, the narrative and plot fail to mention civilians or explain the causes of the wars. Another obstacle to learning historical knowledge from video games is how much time gamers spend playing the game. Today's video games are highly sophisticated, and it can take players 10 to 200 hours to complete one. Players must spend a considerable amount of time learning historical concepts before they can complete a game and gain a substantial quantity of historical knowledge.

The views of the instructors on how to make use of video games as a teaching method for history could potentially be a barrier. According to Godfrey and Waddingham, "Some teachers have not given video games' potential as a teaching tool even a passing thought" (Godfrey & Waddingham, 2013). Teachers should consider utilizing modern media like video games in the classroom to engage students in history lessons and make learning fun. To ensure that learning using video games produces the best outcomes, instructors must play a crucial role in guiding students, providing in-depth historical knowledge, and facilitating class debate.

Chapter 7

Reviving The Past

"They always forget how they lived in the past", these statements were taken from an interview with Cliff Bleszinski and were about games that attempted to reflect the future while leaving no trace of the past. According to Bleszinski, Epic Games design director, most games with a futuristic scenario operate as if "The entire world would just explode and be rebuilt in this super-futuristic style. I still see vintage cars from the 1930s and 1940s parked next to items that appear to be from the year 2000. It's the combination that keeps things interesting"(Bleszinski, 2012). Although Bleszinski's conversation is about the development of *Gears of War*, a game set in the all-too-familiar fantasy world of Sera (The main city of *Gears of War*), he wanted artists working on the game to design a metropolis based on a "hybrid of Washington D.C. and London".

It is becoming increasingly popular for best-selling video game series to combine futuristic or fantasy themes with historical elements. Game producers like Square-Enix and Bioware, whose games are predominantly fantasy or science fiction, utilize historical works to create mythology or themes within their games. In his book *Extra Lives*, Tom Bissell cites, "He has seen a big library full of volumes ranging from Jared Diamond's *Guns, Germs, and Steel to The Complete Idiot's Guide to World Religions* during a tour at Bioware" (Bissell, 2010). Although historical and real-world knowledge can be used to inspire new characters or storylines, it can also be employed as a pre-built backdrop for new fiction. Historical research has a wide range of applications in video game genres, from games with entirely fictional plots to very precise historical reconstructions. While games based entirely on historical facts seem more practical, some of the most popular fantasy video game franchises continue to use history to shape their storylines, giving players a

reason to consider the impact of historical events on both the world they are playing in and the real world. Developers can obtain the necessary information from various resources such as past references and experts to present an acceptable experience.

7.1 Fusing Fantasy and History

Developers can put their stories into real-life circumstances, change the course of events, and create their timelines by placing their games in realistic replicas of real places. Some video games, including *Resistance: The Fall of Man* and *Turning Point: Fall of Liberty*, significantly alter the historical order of the years following and after World War II. In *Turning Point*, the Second World War is portrayed as one that occurred without Winston Churchill, who was killed in New York City after being struck by a taxi, despite Churchill's survival. Thanks to the United States' neutral and imperialist policies, Japan and Italy also achieved success and new empires in the game, where Hitler's Germany conquered Great Britain and Russia in the war. Germany and Japan launch a two-sided assault on the United States after establishing their newfound power, leaving the protagonist of the game a New York construction worker to repel the German army.

By setting an extraterrestrial invasion on Russia and then the entire world in the early 1900s, the *Resistance* franchise pushes the concept of altering history even further. The plot of the game includes a few minor historical deviations to set the scene for specific events. For example, the Bolshevik Revolution was put down by Tsar Mikhail, who, in contrast to his historical counterpart, accepted his position as Emperor of Russia after his brother, Nicholas II, gave up the throne, and the War of 1898 never happened after Spain granted Cuban independence in response to the military threat from the United States. The United States was kept out of the First World War by

continued isolationist policy, but the outcome was almost the same. Following the defeat of the Bolshevik Revolution, Russia shuts itself off from the outside world and is soon invaded by the mysterious Chimera, an extraterrestrial species driven to annihilation. Developers can vary the appearance of the world without depending solely on the science fiction fantasy that they incorporate in later stages of the game by switching between two significant historical events. Russia closed its borders to the outside world out of fear of social turmoil and uprisings, particularly from foreign influences. Because of their seclusion, the Chimera force has more time to develop into an invincible force, while the outside world is kept in the dark about everything that happens inside Russian territory. Within the updated historical context of the game, American isolationist policies gained popularity following the country's avoidance of the Spanish-American War. This prevents the US from meddling in European matters until the alien Chimera takes over the continent as a whole. The developers can provide a different, totally convincing story of historical events by merely changing two actual records. The *Resistance* franchise highlights the impact that a certain moment in history may have on the entire globe, even though the entire plot revolves around an imaginary alien invasion. By doing this, it can challenge players to think about the effects of history on future generations.

Another series of video games, the *Fallout* series, takes place in the last decade of the twenty-first century and imagines a future where a lack of resources leads to worldwide riots and wars, which eventually end in the "Great War" between China and the United States and a nuclear holocaust. In *Fallout* 3, the player takes on the role of a young person living in Vault 101, an underground nuclear refuge. The player finally exits the vault and joins the Capital Wasteland after experiencing moments such as the character's birth and tenth birthday. There are scattered colonies of nuclear survivors scattered throughout this otherwise desolate region, including Washington,

D.C., a major metropolis that lends the wasteland its name. According to Mike Musgrove, "The Lincoln and Washington Monuments are only two of the many famous sites included in this recreation of Washington, D.C. The story's main points are these locations. By using these sites, the creators can take advantage of Washington, D.C.'s historical relevance to let gamers relate to the horrors of nuclear war in a familiar or even real-world environment" (Musgrove, 2008).

The *Assassin's Creed* game series is one example of a video game franchise that creates a whole new plot within a historical background. In these games, the player takes part in a made-up conflict between the Assassins and the Knights Templar, two hidden groups. Although the Assassins and Templars are based on real-life groups, the game sets them in a fictional conflict that existed before both the Crusades and the birth of Jesus. The Assassins oppose the Templars by assassinating leaders who support them, while the Templars seek to establish a New World Order that they can control through force. The locations and historical periods that these games are situated in are well-known, even if the tales in the games are all made up. These places include Constantinople, Renaissance Italy, and the Middle East during the Third Crusade and the American Revolution. One of the series' most notable features is how well the Assassin's Creed games replicate the historical settings and eras they take place in. In an attempt to imitate the architectural style, designers inserted several actual sites and historical characters into the games' storylines. The game altered various historical characters' deaths to match the plot by using real-life historical figures like Rodrigo Borgia (also known as Pope Alexander VI, former head of the Catholic Church) and Robert de Sable (a knight and Grand Master of the Holy Church) as the targets for assassination. That being said, "The fact that a large number of the game's characters are based on real historical people and that real historical events like Washington's troops at Valley Forge or Cesare Borgia's battle and eventual death in Viana, Spain are recreated for the player to witness

allows the game to provide a wealth of information that may help increase the player's awareness of a variety of historical figures and events" (Matt Miller, 2012). Every game features famous buildings and other landmarks, with brief information windows explaining each location's historical significance when the player first arrives.

7.2 Reenacting History

In an essay for Gamasutra.com, a website devoted to all facets of video game production Bruce Shelley stated that "Realism and historical information are assets or accessories we use to add interest, story, and character to the problems we are creating for the player"(Shelly, 2001). This is not to argue that historical precision and realism are unimportant; they are simply not given priority. As a creator, Shelley contributed to the success of numerous historical strategy games, such as the video games *Age of Empires* and the original *Civilization*. Including historical references, almost all of the most well-known video game series correspond flawlessly to Shelley's concept. Games set in World War II aim to cash in on the enthusiasm of fans of history for the era and the general public who, upon viewing war games, can instantly identify specific characteristics of the conflict. In Shelley's words, a player somewhat familiar with the game's theme "has a few expectations of what should be going on and thus has some ideas about how to play" (Shelly, 2001).

Ironically, the development of increasingly sophisticated technology has been a major contributor to the popularity of video games that are based on real historical events. With today's graphics nearly reaching life-size, players expect their games to seem as authentic as possible. When players reenact a war, they want the weaponry to behave and appear like they would have

in the Vietnam War or the Crusade of the thirteenth century, for example. Few games, including those in the *Red Orchestra* series, give players an even more authentic feeling of battle in addition to assembling a realistic scene, such as the Eastern Front of World Battle II complete with re-created tanks and weaponry. There is no information provided to players that is usual in other games, such as the number of rounds held or an aim-assist crosshair (marker icon that helps players to aim) on the screen. While other wounds need to be wrapped to prevent the player from bleeding to death, bullets to critical places can kill the player in a single strike. The *Red Orchestra* series increases the likelihood of trying to just survive much like in real war while decreasing the likelihood of extraordinary heroics. These days, games also feature lifelike digital recreations of metropolitan landmarks that players might anticipate seeing in specific locations. *Crysis 2*, for example, uses Wall Street and Times Square in New York.

The Creative Assembly created the first game in the *Total War* series as a result of the popularity of real-time strategy games like *Command & Conquer* and *Warcraft* in the 1990s, as well as historical strategy games like *Civilization*. In the original game, *Shogun: Total War*, players took control of one of the numerous emperors that ruled Japan during the Sengoku period, to become the supreme shogun of the entire country. As previously stated, this included both a turn-based section where the player could move soldiers and negotiate trade, as well as a real-time section where the player could actively manage the tactics of his army during combat. Since then, the series has expanded to include the rise of the Roman Empire and the Napoleonic Wars; however, *Total War: Shogun 2*, the most recent update, returns to the Sengoku era with improved graphics, a deeper understanding of clans and soldiers, and new tactics like naval combat and stronger castle sieges.

According to Mike Fahey, "Members of The Creative Assembly gathered materials, such as images of Japan's landscapes and precise topographical information about battlegrounds, for months while researching characters and stories from the era to produce the game. Researchers examined Japanese films set in the era, such as *Seven Samurai* and *Kagemusha*, and read a variety of books on the subject, such as *The Art of the Edo Period, The History of Japanese Armor*, and *The Japanese Art of War: Understanding the Culture of Strategy*" (Fahey, 2010). The artists at Creative Assembly spent over a year researching Japanese *ukiyo-e ink* and *woodblock* techniques to successfully combine Japanese art styles. The team delved into the financial history of the period, which included first-hand reports of payments made by leaders to support their forces. They even had a conversation with the current head of the Tokugawa family to learn about their family's past. Additionally, Stephen Turnbull, a professional historical advisor with expertise in samurai warfare, provided valuable insights to the game's researchers.

The notion of utilizing video games to teach history has been investigated by earlier researchers. In his 2007 study, Brian Rejack examined how video games and history interact, using a first-person shooter game as an example of reconstruction. He quotes Agnew (2004) as saying, "Reenactment might provide a different form of historical knowledge than what is taught in conventional historical studies" (Rejack, 2007). Reenactment allows for a physical or simulated through video games, experience leading to historical comprehension; however, writing history provides a cognitive engagement not rooted in reality. The audience gains a deeper knowledge of body-based testimony through reconstruction, which reveals more about the individual than the group's collective history. According to Rejack (2007), "Playing a video game has become more and more like a reenactment due to the ongoing advancements in gaming technology"(Rejack, 2007). Then, he concentrated his research on a game that immerses the player in historical events

by simulating World War II battlefields in 1944 *Normandy*. He discovered that the game involved a difficult balancing act between keeping to historical details and gameplay norms. If the game tries too hard to be true to history, its own story and cast of characters may not be able to captivate gamers.

Rachel Godfrey and Margaret Waddingham (2013) investigated how well computer games particularly strategy games work to promote enjoyment, knowledge, and historical education. They make use of Piaget's (1967) discovery that "Infants need real experience for absorbing new information into their preexisting schema"(Godfrey and Waddingham, 2013). Since computer and video games require the players' whole focus, engagement, attention, and energy, they can provide them with this experience. They encourage participants to contribute to the educational process. Children are also encouraged to take charge of their education, which makes them fewer passive students. In the experiment, students from an urban lower school who had previously studied Ancient Egypt were divided into two groups - Group A and Group B. At the beginning and end of the experiment, all the participants from both groups were required to take pre and post-tests to assess their level of factual historical knowledge. Following the completion of the pretest, students in class A played the strategy game *Pharaoh* (1998) in pairs, which was focused on ancient Egypt. During the research project about ancient Egypt, class B participants worked in pairs to finish the task. They also had to give an oral presentation about their findings. Godfrey and Waddingham conducted interviews with the children before and during the experimental session. They also conducted pre and post-tests to assess the children's understanding of the topic. The results showed that class B participants enjoyed the session considerably less than class A participants. This suggests that class B members preferred the strategy game to traditional classroom instruction. Regarding knowledge, the majority of the learned historical information was taken in by

participants in both courses. Nevertheless, they were unable to expand or enhance their pre-test history knowledge in a brief amount of time. Despite the post-test score showing no progress, the majority of participants agreed during the discussion that their knowledge had grown. Teachers who helped with the experiment felt that the information that had been developed might have covered more ground than what was included in the post-test. According to Godfrey and Waddingham, "The game allowed players to examine historical events from the inside out and they used their historical imagination to fill in the blanks in a story" (Godfrey and Waddingham, 2013).

Kurt D. Squire, Ben DeVane, and Shree Durga (2008) conducted another intriguing experiment. They looked at using a simulation game as a substitute teaching method for history. They claimed that learners are immersed in global representations through video games, which may also offer interpretive data to help comprehend history. Simulation games encompass historical details as well as beliefs or conceptions of the world's functioning. They produced new social arrangements that demonstrated the scattered informal, and fragmented characteristics of network communities. Open access, meritocracy, distribution, adaptability in schedules, and little to nonexistent activity restrictions are some of its characteristics.

Through the game, players can investigate the connections between geography, politics, economy, and history in Kurt D. Squire's (2008) study. It might aid pupils in becoming more proficient in world history and improving their problem-solving abilities. The majority of the participants, who were African-American students in grades five and six, were also from lower socioeconomic families. They were invited to take part in a year-long program that used the game to connect students' identities both within and outside of the classroom within a network of gaming professionals. As they attempted to alter and construct their unique games, researchers discovered that by the end of the year, participants had established both academic skills and creative identities

as students and makers as well. A scenario based on the American Revolution, the Iraq War, ancient Greece, and Rome, for instance, was developed by a few participants. To implement this change, participants invested a great deal of effort in gathering and analyzing historical data from many sources to construct a comprehensive geopolitical model.

One way to interpret the practice of having participants recreate historical settings is as a correction of David Bolter and Richard Grusin's research (1999). A portrayal of one material in another is called restoration. In another way, the content of one medium is appropriated and used in another, often resulting in little variations from the original or creating a new version through a novel approach. To deal with the mainstream, Mark Deuze (2006) emphasized that "Instantiation a manipulation of the prevailing understanding of things motivated by an individual's interests should also be taken into account"(Deuze, 2006). According to the study by Squire, DeVane, and Durga (2008), "Since participants had the opportunity to collect and learn about those historical details from multiple sources of information before restoring their versions of historical scenarios, it appeared that the remediation practice helped participants grow and enhance their historical knowledge"(Squire, DeVane and Durga, 2008).

Chapter 8

Conclusion

History-based games can be realistic or fictional, closed or open, problematic or intentional; but they all have a connection to history. Video games convey their designers' perceptions of the past in terms of what they believe is crucial to comprehend, participate in, and keep in mind, in addition to the designers' opinions about the past. They provide the opportunity to explore historical problem spaces, engage in games, set objectives, make decisions, and observe the effects of those decisions in causally coupled systems. As such, these games provide enough opportunities for students to learn about history while also refining their critical analysis skills of today's media and expanding their understanding of systems and problem domains. Overall, there are still unexplored areas in using video games for teaching history. As we gain more knowledge regarding the usage of video games in education, we may observe instructors utilizing these tools more frequently in the classroom and a greater level of student engagement with historical subjects. They convey historical messages to a sizable audience whether or not they are utilized in traditional history education. Those who are interested in the way the past is viewed, played and presented should not overlook them.

For people to truly understand how video games can have a significant impact on society, they need to recognize the industry's widespread appeal and the various ways in which they can be utilized. This study aims to demonstrate the potential of video games to influence and improve different fields of study by showcasing their increasing popularity and acceptance as a form of media, as well as their use as educational or training tools. Additionally, many video games have been developed to accurately depict historical events or eras, highlighting the importance of

authenticity and realism in the industry. Many video games attempt to recreate historical events in a virtual world as accurately as possible. While some games may not prioritize complete accuracy, they still draw heavily from historical influences. *Making History* is a free educational game that has been included in over 150 school curricula. It is one example of how video games are being used to educate and change players' perspectives on historical events. With advancements in technology, the potential for video game depictions of history to improve is constantly expanding. This innovation allows educators and historians to present their material in new and creative ways.

Games can transcend all other forms of art, and they are increasingly being recognized and appreciated, much like movies. American video game designer Warren Spector, in a statement given to *GameInformer* magazine, expressed this sentiment:

Games are a unique form of media and art. We are not books, movies, or TV shows. We should not try to imitate them. Instead, we have our unique abilities that no other media has ever had before. Therefore, we should focus on these distinctive qualities that set us apart from other forms of media. (Spector, 2012)

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