# RECREATING THE PAST: Historical narratives and virtual environments of video games

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**Abstract**

Virtual environments in video games have fundamentally transformed and persistently influenced our comprehension of spatial and temporal dimensions, much like television and cinema influenced these notions in the 20th century. Similar to the connection between cinema and architecture, in the 21st century, video games not only utilize architecture as an environment or the set, but they also go beyond. In 3D video games, the purpose of space design has evolved from being a mere background to being an essential component that supports the scenario and subtext, providing as a tool for cinematographic narrative. Thus, the gaming industry becomes part of an important relationship with architecture and the history of architecture. The architectural and spatial elements found in our present reality are reproduced and transformed to create alternative, unreal environments. The user/gamer inherits the perspective of either the real or fantastic environment and events that they experience. Within the scope of the article, the transfer of space narrative, perception, and aesthetics by reference to the history of design and architecture was examined in the context of the memory of the place and nostalgia.

**Keywords:** History of architecture, video game design, memory, nostalgia

## GEÇMİŞİ YENİDEN YARATMAK: Video oyunlarının tarihsel anlatıları ve sanal mekanları

**Özet**

Video oyunlarındaki sanal ortamlar, bizim mekânsal ve zamansal boyutları kavrayışımızı, televizyon ve sinemanın 20. yüzyılda bu kavramları etkilemesine benzer şekilde, yeniden şekillendirmiş ve temelden dönüştürmüştür. Sinema ve mimari arasındaki bağlantıya benzer şekilde, 21. Yüzyılla birlikte video oyunları da mimariyi sadece bir çevre veya set olarak kullanmakla kalmaz, aynı zamanda bunun ötesine geçerler. 3 boyutlu video oyunlarında, mekan tasarımı sadece bir arka plan olmaktan çıkar, senaryo ve alt metni destekleyen önemli bir bileşene dönüşerek, sinematografik anlatı için bir araç olmaya başlar. Böylece, oyun endüstrisi, mimarlık ve mimarlık tarihi ile önemli bir ilişkinin parçası haline gelir. Mevcut gerçekliğimizde bulunan mimari ve mekânsal unsurlar, alternatif, gerçek dışı ve gerçek tarihi mekanları yeniden oluşturmak için üretilir ve dönüştürülür. Kullanıcı/oyuncu, oyundan gerçek ya da fantastik ortam ve olayların deneyimlerinin perspektifini devralır. Bu Makale, mekân anlatısı, algısı, estetiği kavramları ile video oyunları arasındaki ilişkileri mekân belleği ve nostalji kavramları bağlamında tasarım ve mimarlık tarihi özelinden incelemektedir.

**Anahtar Kelimeler:** Mimarlık tarihi, video oyun tasarımı, bellek, nostalji

# 1. INTRODUCTION

The video game industry has seen significant expansion in contemporary culture, offering users diverse experiences in many time periods and locations. Without a doubt, the spectacular developments in three-dimensional game engine technology are responsible for these achievements. Enabling the digital gaming industry to respond to the rising demands of its customers by transitioning its primary attention from game mechanics and scripts to include more elements that enrich the narratives of the video games.

In 2022, the world population is estimated to be around 8.0 billion people. The worldwide number of gamers was over 3.0 billion, which was slightly lower than the highest recorded number of 3.2 billion in 2021, when the epidemic was at its pinnacle (Gilbert, 2023; Stojanovic, 2023). Comparative evaluations demonstrate that the video game industry surpasses both the worldwide book publishing and newspaper and magazine industries. Also, in the last 10 years, the gaming industry has surpassed the film industry in terms of financial success, with the global videogames industry producing an unprecedented $180 billion in revenue in 2021. Significantly, the video game industry surpasses both the Hollywood and music industries in terms of overall size (Clement, 2023). The total expenditure by American consumers on video games in 2022 reached $56.6 billion (The Entertainment Software Association, n.d.). The gaming industry within the media market is expected to have consistent and substantial growth in worldwide revenue, with a projected gain of %54.31 between 2023 and 2028. As for the sixth consecutive year of expansion, this trend is anticipated to reach a new peak of $626.78 billion in 2028 (Rawa Games, 2023).

The video game industry has grown rapidly across contemporary cultural contexts, providing consumers with a wide selection of experiences in different time periods and locations. The primary factor that causes the achievements observed in graphical computer and video games undoubtedly belongs to the continuous development of three-dimensional game engine technology. In response to the expanding digital game companies in consumer culture, developers have expanded their attention beyond game mechanics and scripts. They now acknowledge the significance of incorporating features that improve narrative components and satisfy the heightened expectations of users.

Academic study on video game studies concentrates on the mechanics of games as well as their socio-psychological and socio-cultural components. It also delves into the history and heritage of the subject. Until recently, there was a significant separation between academic research on the history of architecture and the video game industry. Although there is potential for cooperation, the establishment of strong connections across the disciplines of education, research, and restoration is still in its early phases. As a result, there is a lack of scholarly analysis that thoroughly examines video games in terms of architecture, spatial usage, and architectural history. The current body of research in this field is restricted, indicating a promising opportunity for further academic investigation and multidisciplinary cooperation. However, there is a shortage of research that specifically analyzes games in relation to architecture, spatial usage, and the history of architecture. The important point to bear in mind is that the influence of the architectural historian is important not only for the proficiency of architecture history but also for game design.

Most historical video games use spatial design to accurately represent historical periods through accurate modeling from archives. Additionally, they create unique and imaginative worlds that combine architectural history and components in a diverse and eclectic manner. The video game industry distinguishes itself by focusing on spatial design in 3D video games, allowing gamers to not only observe and experience places but also modify them. Therefore, the systematic development of three-dimensional models of environments becomes essential for game designers, especially when it comes to developing the storyline of a game that involves the creation of new worlds, frequently inspired by historical periods. Hence, the game industry is obligated to collaborate with specialists like historians, architectural historians, architects, interior designers, and industrial designers while developing games, game environments, and especially when creating historical settings.

# 2. ARCHITECTURAL HISTORY AND NARRATIVE SPACE IN VIDEO GAMES

Since its beginnings in the early 20th century, the art of cinema has developed a mutually beneficial relationship with architecture to augment the storytelling, authenticity, and emotional connection of the portrayed situations from its inception. Similarly, in the early 21st century, the video game industry has been actively striving to establish itself as a legitimate form of artistic expression. As part of this effort, it has begun to develop

connections with the area of spatial design (Güntan, 2015). The ongoing correlation between cinema and architecture has endured throughout history as both disciplines draw inspiration from the realms of art, science, and technology. They are morphologically linked in terms of their spatial planning approaches. According to Sezen (2011), digital games encompass a wide range of interactive media. This includes activities like playing games, using interactive software, using visual and auditory tools, engaging with fictional works that have different levels of storytelling, and participating in social sharing settings. To clarify, the wide range of perspectives seen in digital games also extends to their structural elements (Sezen, 2011). Cinema and video games employ several methods to convey narratives that involve location and time by developing and presenting artificial environments to their viewers or gamers. It is crucial to evaluate the correlation between digital games and space in today's context, considering several dimensions. These encompass the technical aspects of gaming, the understanding of spatial dimensions, the storytelling components, and the interpersonal and psychological factors of spatial depiction.

The term "environment," commonly known as the "set" in cinema, includes the meticulously crafted script that outlines the narrative, spatial and temporal components, and interactions between characters. Within the field of cinematography, surroundings are deliberately planned or built to align smoothly with the intended cinematic narrative. These locations have a crucial function in strengthening the plot, improving audience understanding, and enabling attractive storytelling, going much beyond being just ornamental components. Therefore, what matters most is not the ornateness or showiness of the atmosphere, but rather its relevance and harmony with the developing storyline. Schaal argues that the linkage between environment and scenario is emphasized, with the introduction of the idea of "psychological spaces" as a method of architectural research. This analytical approach explores the evaluation of the conditions and depictions inherent in a certain setting. In these spaces, the interaction of features like walls, lighting, and shadows produces a sensory domain where every aspect holds deep relevance and meaning (Schaal & Kinemathek., 2013).

The cinematic images are deliberately crafted, incorporating the utilized settings, and are intended to communicate the creator's vision through the predetermined actions of the characters within a coherent environment that meets the script's requirements and is situated within a specific temporal context, whether it be historical, contemporary, or idealistic. The notion of time, referred to as tempus, carries substantial importance in the realm of cinema. Although it does not follow actual time, it effectively prepares the spectator to understand the film's intended message, even before the storyline and characters are introduced. The use of cinematic spaces, whether they follow stereotypical conventions or increase their symbolic attributes to improve the development of the characters or even the imagined components of idealized situations, can help in understanding space by presenting the cinematic image in a visual context. The image's materialistic representation of nature necessitates a diverse understanding. This method includes understanding the physical configuration, social function, cultural norms, and historical and memorial representations. This technique offers a solid basis for comparing and analyzing variations in spatial structures, including dimensions, use, timeframe, symbolism, and other factors (Georgiadou, 2016).

Video games, like cinema, employ distinct components, including location, time, and fictitious storylines, to communicate a story or message. In a virtual world, a specific portion of time and personalized interactions with the players' digital characters are generated within the gaming setting. This is accomplished by using auditory inputs, visual enhancements, and spatial arrangements, all of which contribute to creating a unique atmosphere. The association between the game scenario and the conceptual design of gaming areas is highly meaningful. The time period in which the situation takes place is a significant factor in creating the emotional atmosphere of the plot. The purpose of this space is to create a fictionalized representation of time and space. It serves two main objectives: firstly, to establish the basis for the narrative, and secondly, to enhance the user's comprehension and emotional attachment to the character being portrayed (Güntan, 2015). Nowadays, the integration of environmental and architectural design in video games provides not only ornamental elements for the backgrounds and environment but also performs an essential role in the visual narrative by supporting the textual and sub-textual aspects of the game's scenario within the game industry.

François Penz asserts that both cinema and architecture use the representation of three-dimensional space inside a two-dimensional medium. Architecture is the practice of translating a two-dimensional media into a three-dimensional reality. Conversely, cinema is altering the three-dimensional setting of the cinema medium that portrays reality shows on a two-dimensional screen (Penz & Thomas, 2003). Presently, digital games have expanded beyond the limitations of a two-dimensional display and now incorporate the exploration of the third dimension in actual space, rather than being limited to three-dimensional virtual reality. Notably, certain video

games, exemplified by the narrative complexity of titles like Assassin's Creed, which was developed and first released in 2007 by Ubisoft, have made it possible to experience the fourth dimension by allowing players to travel between historical time periods in both the past and the future. The convergence of spatial design and digital gaming has become more prominent since the inception of three-dimensional video games. Furthermore, the historical relationship between digital games and spatial design is comparatively recent.

Video games have created an alternative sort of historiography in which the past is brought back to life through a scenario and narrative, and the results are saved as a visual and virtual archive in the present day. They offer a unique and comprehensive perspective on history that surpasses traditional historical depictions. Video games do not function as independent forms of storytelling; instead, they have the potential to augment and elevate established narrative structures. Historical games can serve as an alternate medium for depicting and disseminating information about the past. While engaged in a virtual world, especially in historically contextualized games, gamers may express their perceptions of historical figures, events, and eras, as well as their own thoughts and ideas. Gamers can assume, observe, or distinguish a historical character or an event according to their own perspectives and the narrative presented in the game. Their approaches in video games enable them to experience a diverse array of outcomes and understandings of the game's narrative and characters, while also contributing to the formation of alternative histories and realities. The utilization of interactive technology in reality-based historical games highlights the significant potential and impact of video games in facilitating historical contact, inquiry, and transmission within the field of history and historical studies.

## 3. LONGING FOR HISTORY

History has always been perceived as tedious, slow-paced, and antiquated. Conversely, contemporary popular history, supported by prominent media platforms such as novels, films, television shows, and even video games, attracts significant interest within contemporary society. The notion that history is only shaped by formal, institutionalized narratives disregards the significance of public and professional historians' engagement with popular perspectives, hence neglecting the fundamental nature of history as an active process of collective remembrance (Chapman, 2016). These ideas stem from worries over the historical participation that is well recognized and acknowledged. The primary problem revolves around the lack of popular interest in history. In relation to this discussion, it is more accurate to deduce that their interests extend outside the realm of academic history. Chapman refers to the concerns surrounding the current state of history education, including the insufficient number of individuals pursuing the study of history, as well as the general public's lack of interest in historical matters and limited knowledge of previous events. These worries are directly linked to the very concept of history. The aforementioned issues stem from the underlying assumption that the idea of "history" is exclusively defined by official, educational, institutionalized, and professional information, forms, and practices (Chapman, 2016).

While official history may not capture the attention of society, it remains intricately intertwined with the past. Individuals engage with history through many means, such as their own interests, local and familial narratives, as well as visits to museums and archaeological sites, which provide them the opportunity to encounter diverse cultures during their leisure time. Another criticism with history pertains to the lack of public interest in the historical narratives that academics deem to be accurate or relevant in terms of historical subject matter. Individuals do not acquire historical knowledge just through the use of textbooks. However, it is peculiar to attribute the lack of public interest to the study of history when historical subjects are actually seeming to be experiencing a surge in popularity. Historical films are exhibited in cinemas worldwide. According to Chapman (2016), historical books have gained significant popularity, resulting in the creation of several sequels and adaptations for both the big screen and television (Chapman, 2016). The increase in interest in historical narratives within video games is directly relevant to this predicament.

Nora's article, "In the Culture of the Past," opens with the thought-provoking statement, "History is perhaps no longer anywhere to be found, but the past is everywhere" (Nora, 2013). With the twenty-first century, the media has emerged as a powerful force in capturing society's interest in history. Through various mediums, the media plays a crucial role in the preservation, construction, archiving, and dissemination of historical narratives. Nora contends that in the face of the pervasive forgetfulness prevalent in modern society, the concept of history, as a representation of the past, serves as a means to grapple with this collective amnesia. History, in this context, acts as a request made to the past, establishing an understanding of the monumental memory it embodies by assembling

the fragmented pieces into a coherent whole (Nora, 1989).

The virtual environment in which gamers are immersed may provide insight into their perceptions of historical figures, events, and periods, as well as their subjective viewpoints. This assertion holds particularly true in games that are situated within a historical context. In the game, individuals have the opportunity to assume the identity of, observe, or distinguish a figure or occurrence from history, contingent upon their personal perspectives and the narrative conveyed within the game. The approaches adopted by players towards video games enable them to encounter diverse outcomes and understandings of the game's plot and personas, while also facilitating the development of alternative histories and realities. The utilization of interactive technologies in reality-based historical games highlights the potential and significance of video games in facilitating historical interaction, inquiry, and transmission within the field of historical studies. It is imperative that this contribution is not disregarded.

Video games have transformed these previous perceptions of historiography, reconstructing history through a fusion of scenario and narrative, with alternative results conserved as a visual and virtual archive in the present. One could argue that video games now provide a distinct and all-encompassing viewpoint of historical occurrences, surpassing traditional portrayals in their intricacy and sophistication. It is important to note that video games do not operate as a self-contained mode of storytelling; rather, they possess the capacity to enhance traditional narrative frameworks. Increasing detail in all aspects of video games creates a consumer demand towards more accurate and authentic depictions of history, complemented by thoughtful and analytical interactions with the past, with accurate portrayal, and detailed examination of historical stories, establishing video games as a powerful influence in molding cultural perspectives and recollections.

One of the most potent instruments in forging these desired emotional bonds between players and virtual realms is the concept of nostalgia, which gives rise to a distinctive cultural narrative that can be claimed to be exclusive to the medium of computer games. Nostalgia may be defined as the cognitive process of reconstructing past ideas, connections, and impacts. Yet, it is necessary to differentiate nostalgia from memory and historical consciousness. Historical consciousness comprises the activities of conducting research, sharing notifications, collecting information, developing understanding, and participating in the interpretation of events in the past. On the contrary, feelings of longing for bygone eras are what make up nostalgia, a psychological construct. There has been a notable rise in the prevalence of historical appreciation and nostalgia within society in recent times, especially since the turn of the 21st century. Nostalgia is a combination of two Greek words, νόστος (nóstos), meaning "return" or "homecoming," and ἄλγος (álgos), meaning "pain" or "suffering." Cassin (2016) defines nostalgia as the feeling of "pain of return," which includes the emotional distress caused by being physically separated from a familiar place or time, as well as the difficulties one faces in reestablishing that connection (Cassin et al., 2016). The understanding of nostalgia as a distinct concept arose among both the general public and academicians during the second half of the twentieth century. A considerable majority of college students differentiate between the notions of nostalgia and homesickness. The adjectives "warm, old times, childhood, and longing" are typically associated with the concept of "nostalgia" rather than "homesickness." (Sedikides et al., 2004). According to Galli (2013), the convergence of the expansion of the term "laity" has expedited the transformation of nostalgia into a steadfast concept that continues to persist in both written and spoken forms of communication (Galli, 2013).

Boym defines nostalgia into two main categories. Two different types of nostalgia have been widely discussed in academic literature: restorative nostalgia and reflective nostalgia. It is important to recognize that these categories are not inherently definitive; instead, they function as inclinations that impart organization and importance to the intrinsic desires of individuals. Restorative nostalgia focuses on nostos, the yearning for home, and suggests the task of reconstructing the lost home while simultaneously trying to fill in the gaps in one's memories. This occasionally entails methodically restoring historical landmarks and may entail the utilization of conspiracy theories. Contrary to this, the concept of reflective nostalgia is frequently observed in the condition of Algia, which is characterized by feelings of longing and absence, as well as in the imperfect act of remembering. It often combines imaginative and contradictory components to address the grief caused by what has been lost. Boym associates restorative nostalgia with a conservative, right-wing ideology, while regarding reflective nostalgia as embodying a progressive, distant, and educated political perspective (Boym, 2008). Batcho (2013) suggests that nostalgia is constructed and reconstructed within certain social, cultural, and historical contexts, resulting in changes to the vocabulary used to explain and connect it to other phenomena (Batcho, 2013). However, recent studies question the belief that nostalgia is exclusively a way of escapism, highlighting its mostly positive and

adaptable qualities. It is seen as a motivating element that promotes a feeling of optimism for the future and promotes behaviors that are beneficial to others (Sedikides et al., 2004, 2008).

Historical knowledge is stored within the spatial dimensions. There is a significant correlation between our memories and the locations we have visited. The smell, sound, and visual information within the environment are retained inside a person's memory, together with the spatial characteristics of the location. Due to our experiences, space and its objects lose their individual identities and instead transform into extensions of the identities we hold within our memories. As a consequence, the environment retains and stores personal memories and the feeling of being connected to the environment. The environment serves as a repository for memories and also performs a role in preserving and reinforcing the immersive characteristics of the events that take place inside it. Architectural elements are the most permanent components inside the space. The visibility of protection is mostly seen within the built environment. Therefore, the intersection of memory and the physical environment is closely linked to feelings of longing for the past in the fields of architectural history, cultural heritage, and museums. The memories within these environments change as they dismantle the authorized narrative, even while the actual environment and architectural design do not show any preference for previous recollections (Nora, 2013). In general, the information given to visitors is presented impartially, with a certain viewpoint. The locations do not provide or improve a narrative, as well as they serve as a background within the narrative. Historical locations possess a complex and diverse nature, marked by several layers of historical importance and linguistic diversity. This occurrence is defined by its dynamic and constantly evolving nature. These narratives not only exist independently, but they also actively evolve into narratives themselves. Architectural structures possess cultural, historical, and chronological importance. The work of art itself functions as a manifestation of the time period in which it was produced. That's why historical architecture is intrinsically linked to the past and cultural heritage.

Nostalgia, referring to the preservation and remembrance of past events within a culture, has experienced a significant increase in the 21st century, regardless of its veracity in relation to history. This specific circumstance has been accelerated by recognizing the value of visual and digital media, which is a valid assertion. Nostalgia acts as a consideration of the influence of mediation, media, and other related technologies. The importance of media practice in relation to nostalgia has increased due to recent developments in communication technology (Niemeyer, 2014). Nostalgia, especially for historical periods that individuals have not directly lived through, has become deeply embedded in the popular culture of the 21st century. This is sometimes expressed through the popularity of the "Good Old Days" rhetoric. During the last century, our bodies became the primary way by which spatial and architectural experiences were seen and interacted with. Niemeyer asserts that the development of 21st-century technology has made it more accessible to interact with virtual environments that simulate physical sensations. The media, including new technologies, can serve as platforms, spaces for projection, and vehicles for expressing nostalgia. Also, it is common for media to express an overwhelming sense of nostalgia toward their own history, including their structures and contents. The rapid and constant development of media causes a sense of nostalgia among individuals who yearn for a past when certain media formats were absent (Niemeyer, 2014).

The previously considered impossible concept of time travel is now within the limits of possibility. Virtual reality (VR) technology has already made substantial progress in simulating several sensory modalities, such as visual, aural, and even olfactory sensations. The emergence of video games as a relatively new medium has contributed to an increased level of interactivity and immersion for users. This is especially apparent in the field of historical games, where users actively participate in the narrative and involve themselves in the process of rebuilding the past.

Video games are a growing cultural sector and provide a significant way to get relaxation from the stressful conditions of modern life. The level of interest and excitement for this developing media platform is consistently growing on a daily basis. Nevertheless, in modern times, popular nostalgia has evolved into a phenomenon that affects those with a strong fascination for history and fighting, as seen by the depiction of past conflicts. The depiction of past conflicts is not historically accurate but rather focused on visual elements. Hollywood films have a significant role in generating widespread nostalgia by portraying and reconstructing the past, especially the parts of history that are frequently disregarded, and transforming them into a commodity for consumers (Boym, 2008). The incorporation of fast-paced storytelling in Hollywood movies may be linked to the current issue of decreasing emphasis on consumer nostalgia. In contrast, video games have the capacity to prolong the duration of consumer nostalgia by allowing gamers the opportunity to repeatedly relive past experiences and by actively engaging them throughout the story of the game.

The increase in popular culture's growing fascination with history is apparent, whether labeled as nostalgia, a yearning for the past, or escapism, a method of evading contemporary issues. The extensive incorporation of historical topics into other media formats, including movies, novels, cartoons, and video games, has significantly contributed to the growing popularity of the discipline. The rising prevalence of historical games in the context of video games may be attributed to people's need for nostalgia and their increasing fascination with historical subjects. Historical video games have gained popularity and profitability, establishing themselves as a means for connecting with popular history. Video games, like other forms of media, including movies, literature, and animations, employ comparable portrayals of historical events and storylines. Historical games offer a unique opportunity for users to not only navigate a three-dimensional representation of a certain time period's environment but also to enhance their experiential scope by enabling them to freely travel between other points in time.

## 4. ASSASSINS CREED - INTEGRATION OF ARCHITECTURE INTO THE GAMEPLAY

The concept of 'space' plays a significant role in the challenges presented by video games. Gameplay often requires an in-depth understanding of a game's spatial representation, whether it involves navigating a complicated 3D scene or strategically utilizing space as a tactical resource. These environments often involve "evocative narrative elements" (Nitsche, 2008) that depict the game world as a fictional environment where specific events may occur or have already occurred. The roles of spatial representation are frequently interconnected. Game space can function as a 'proto-plot', working both as an engaging representation and attempting to cue the player into realizing the affordances of the game (Chapman, 2016). The Assassin's Creed series might be the best example, with an emphasis on reaching historical accuracy and creating a genuine audiovisual immersion in video games. The representation of events in history in the game series demonstrates components through the intentional incorporation of nostalgic concepts and thorough consideration of accuracy.

The Assassin's Creed (2007–2023) is a video game series developed primarily by its studio, UbiSoft Montreal, and published by the French video game publisher, UbiSoft Entertainment SA. The video game series is designed as an open-world, action-adventure, and stealth game that portrays a fictitious conflict spanning thousands of years. This conflict features two sides fighting each other, one side representing the quest for peace and individual freedom, and the other side desiring to achieve peace through order and control. The game brings together historical fiction, science fiction, and fictional personas with authentic historical events and figures. In general, gamers take on the role of a historical "Assassin" and try to achieve the game quests. UbiSoft merges historical settings with a cinematic narrative approach, invoking a feeling of longing for gamers within a highly developed and visually impressive game universe. Each Assassin's Creed series features an adventure set in a different historical era and location. While the main narrative plays an essential role in guiding the player's exploration and consuming a significant amount of their time and emotional investment, it is the discovery and exploration of environments teeming with various missions and objectives that form the bulk of the gameplay experience in these games. They also carefully represent the clothing, architecture, surroundings, conversation, and accents of characters. The series tries to reach historical accuracy by simulating the behaviors of goods, characters, and social groupings in the many rebuilt settings of each time period. The series received generally positive feedback for its aspirational graphics, game design, and storytelling (Champion & Hiriart, 2024; Fang, 2023). Additionally, they have become an important topic for extensive academic research in the fields of game studies, historical narrative, memory, and the history of architecture. Assassin's Creed is particularly examined as a primary research subject due to its utilization of cultural heritage within a three-dimensional video game environment.

## 5. ANALYSIS AND DISCUSSION

Pierre Nora (1989) discusses the concept of the "Acceleration of History" in his work "Between Memory and History: Les Lieux de Mémoire" that intentional endeavors are essential in maintaining the ongoing existence of historical events, which is seen as a momentous occurrence in contemporary culture. This tendency occurs because of the persistent need of modern civilizations to change and their subsequent desire to organize and understand the past. The reason for this tendency is based on the recognition that past events serve as symbols, arousing self-awareness and a sense of affiliation. The process involves the replacement of memory environments, sometimes referred to as Milieux de Mémoire, with the deliberate development of memory places, or Lieux de Mémoire, resulting in erosion. These settings are precisely intended to objectify the past, collecting fragmented memories by deliberately rearranging historical consciousness (Nora, 1989).

Virtual reconstruction projects have proven to be a highly effective approach for providing global digital access to historical and archaeological sites, encompassing both existent and vanished locations. Video games leverage historical context as a valuable resource that players can easily identify with via their own experiences. This enables them to engage with the gameplay and provides incentives for further immersion in the game.

In today's global world, the process of promoting and disseminating cultural heritage values, both at a local and international level, involves the deliberate creation and dissemination of past narratives. Virtual worlds in video games may serve as an innovative and memorable structure for improving and expanding cultural heritage components, such as the versatility of the technology, which permits the replication of audiovisual styles from many creative epochs. They can accurately or creatively depict the past, providing players with a chance to interact with history according to their own preferences. Also, players have the option to either passively experience the storyline or actively explore the cultural implications and symbols linked to a certain region in order to have a deeper understanding of it.

On the other hand, historical video games can often face criticism or dismissal for their failure to accurately portray "authentic history" and the deflections caused by their narratives. The growth of the industry has brought with it growing user demands for more accuracy and detail in all aspects of these created virtual worlds. At that point, it is still important to remember that games are meant for fun and entertainment. Consequently, while some game designers may prioritize historical accuracy, games don't have the objectively transmit it to the user, their primary focus being the game's narrative and playability. The intrinsic narrative structure of video games enables the modeling of several fictional genres, derived from both film and literature. Furthermore, the participatory element of gaming offers a platform for the exploration of power dynamics and self-reflection.

The complex and diverse nature of game worlds allows for a significant potential for conveying narratives, resulting in the development of a cognitive framework known as a story. In contrast to traditional forms of narration like literature or cinema, the narrative within gaming environments develops spontaneously and continuously, becoming an integral part of the whole experience. The addition of narrative components is not an unnecessary improvement, similar to cut scenes in traditional media; instead, it is an inherent and fundamental component of the gameplay. In the context of video games, the environment assumes the role of narrators, directing gamers through the unfolding storylines and encouraging them to craft their own narratives. This act of incitement, encouraging players to explore, interact, and make choices within the game space, is accomplished through a myriad of methods. Thus, the environment of the game—game spaces—becomes an integral part of the storytelling process.

Perhaps one of the most notable accomplishments of the Assassin's Creed game series was its ability to increase public interest in historical games. The Assassin's Creed game allows gamers to revisit specific historical periods and immerses them in a virtual setting where they may experience the cultural and social narratives of those times. The game's multi-temporal nostalgia takes the player from the present to another era in history while effectively immersing them in the game through the use of recognizable architectural settings and the cultural memory they evoke (Chapman, 2016; San Nicolás Romera et al., 2016). Today, historical video games have been widely popular and successful, establishing themselves as a prominent kind of popular history. Perhaps one of the most notable accomplishments of the Assassin's Creed game series was its ability to increase public interest in historical games.

## 6. CONCLUSION

Video games can choose to accurately re-create historical periods or use well-recognized historical images and narratives derived from several genres, including films, novels, and cartoons. Their chosen historical material, along with their capacity for substantial impact, makes them especially effective in everyday circumstances. Whether the game designers are aiming for historical accuracy or designing completely new environments, the creative process cannot be separated from the field of architecture. Consequently, developers started collaborating with experts in video game design, such as architects and architectural historians. Moreover, well-known game design companies started spending considerable financial resources to form partnerships with related universities for in-depth academic research consultancy.

These interactions between video game studies and architecture studies are a significant occurrence, which includes the incorporation of architectural concepts in game design as well as the use of three-dimensional engines

for modeling and responding to the needs of the end user. Video games have also shown us how an understanding of the history of architecture increases the comprehension of virtual space, spatial perception, nostalgia, memory, and the method of re-modelling the past. As a result of these developments, architecture as a whole, especially the area of architectural history, which had recently become more known for the theoretical study of issues, has new and unexpected opportunities for applicable cooperation with the growing field of the game industry.

**Declaration of Research and Publication Ethics:** This study which does not require ethics committee approval and/or legal/specific permission complies with the research and publication ethics.

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