

HISTORY AND VIDEO GAMES (preprint)

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Abstract: The aim of this chapter is to highlight some of the constraints present in the development of games with historical settings, and to explain why historical fallacies are sometimes included in games, even though the authors most often know that these are mistakes. Such choices are strongly dependent on gameplay traditions (what we have learnt to play, and how) as well as technological restrictions carried by the gaming platforms (computers, consoles, mobiles) and the game engines (the tools used to create games).

Keywords: 3D modeling, game design, game engine, game studies, modding, narrative design, simulation, world building

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Videogames and historical accuracy

Following their apparition around the 1960s in universities, digital games have been sparsely studied prior to the emergence at the turn of the millennium of the field of game studies,¹ which was interested in the art of creating video games, storytelling and aesthetics of such a nonlinear medium, and the act of play, among many other topics.²

¹ Frans Mäyrä, *An Introduction to Game Studies* (SAGE Publications, 2008).

² James Newman, *Videogames* (Routledge, 2013 [2004]).

Developing a video game is a complex and expensive task. Large projects need a team with many different skills.³ In this context, history “has much to offer [to] video game developers, including ready-made settings that can activate players’ prior mental schemas to provide a sensation of verisimilitude.”⁴

Video games integrated historical events quite early on, not only as narrative backgrounds, but also for educational purposes. This is the case of *The Oregon Trail*,⁵ released in 1971 for schools as the student project of a young teacher.⁶ Its goal was to help pupils realize how difficult it had been for American colonists to follow the nineteenth-century Oregon trail.

In recent years, studying how history is depicted in video games has been a recurring topic both in the fields of history and game studies.⁷ Like any cultural object, a video game might influence a player’s interest in history but also raises the question of historical accuracy.⁸ “Similarly to film advisors, historians have to decide whether the distortions in video games change the overall understanding of the past they wish to convey.”⁹

Should game developers fictionalize history, or should they respect what we know of the past? To debate these questions, I focus here on two case studies highlighting this tension over historical accuracy. In *Assassin’s Creed Origins*,¹⁰ the historical past is virtually reconstructed in the narrative. In the case of *Sniper Elite 4*,¹¹ curators from the Royal Armouries Museum in Leeds were consulted. They documented their

³ Katie Salen Tekinbaş, “Game Development,” in *Debugging Game History: A Critical Lexicon*, ed. Henry Lowood and Raiford Guins (Cambridge, MA: The MIT Press, 2016), 185–198, 195.

⁴ Metzger and Paxton 2.

⁵ Minnesota Educational Computing Consortium, *The Oregon Trail* (Minnesota Educational Computing Consortium, 1971).

⁶ “Classic Game Postmortem: Oregon Trail,” Games Developer Conference 2017, accessed March 5, 2020, <https://www.youtube.com/watch?v=vdGNFhKhoKY>.

⁷ Here are a few references in historical game studies. On this topic in general, see Kapell and Elliott, ed., *Playing with the Past*, Chapman, *Digital Games as History*, and Alexander von Lünen, Katherine J. Lewis, Benjamin Litherland, and Pat Cullum, ed., *Historia Ludens* (Routledge, 2019).

⁸ Tara Jane Coplestone, “But that’s not accurate: the differing perceptions of accuracy in cultural-heritage videogames between creators, consumers and critics,” in *Rethinking History – The Journal of Theory and Practice* 21.3 (2017), <https://doi.org/10.1080/13642529.2017.1256615>.

⁹ Thomas Cauvin. *Public History: A Textbook of Practice* (New York, NY: Routledge, 2016).

¹⁰ Ubisoft, *Assassin’s Creed Origins* (Ubisoft, 2017).

¹¹ Rebellion Developments, *Sniper Elite 4*, (Rebellion, 2017).

collaboration with Rebellion, the video game development studio, on the weapons represented in the game, and which had to be as accurate as possible.¹²

Two case studies

1. *Assassin's Creed Origins*

At the time of writing, the *Assassin's Creed* series franchise,¹³ developed and published by Ubisoft between 2007 and 2020, is composed of 11 main episodes in different historical periods (Italian Renaissance, American Revolution, Paris during the French Revolution, nineteenth-century London, etc.), a few secondary episodes, downloadable contents, reissues, books, a live-action movie, etc. They take place in various historical eras. Substantial budgets allowed historical contexts to be recreated based on consequent archival fieldwork that were used as backgrounds for the conspiracy-inspired narratives of the games. Most of the episodes in the series tell fictional stories, yet they include historical facts in extra-diegetic vignettes that the player can activate optionally, making the *Assassin's Creed* franchise a recurring example in the debates on historical video games.¹⁴ One year after the release of *Assassin's Creed Origins*, in 2017, a game situated in Ancient Egypt, Ubisoft separated fiction and history in the game by including an educational extension called the *Discovery Tour by Assassin's Creed: Ancient Egypt*.¹⁵ This extension is standalone and not accessible from within the original game. The player can choose to either enter a fictional (and violent) universe or a pacified world, with historical guided tours about Ancient Egypt. Such a *Discovery Tour* is presented as an educational program, even if the player still incarnates a fictional character in a virtual environment and follows a trail like playing a game (Fig. 1), or a serious

¹² See Lisa Traynor, and Jonathan Ferguson, "Shooting for Accuracy. Historicity and Video Gaming," in *Historia Ludens*, ed. Alexander von Lünen, et al (Routledge, 2019), 243–254.

¹³ A *franchise* is a "general title or concept used for creating or marketing a series of products, typically films or television shows" according to Oxford Dictionary of English (2017).

¹⁴ See for example Adrienne Shaw, "The Tyranny of Realism: Historical accuracy and politics of representation in *Assassin's Creed III*," *Loading* 9.14 (2015): 4–24, <http://journals.sfu.ca/loading/index.php/loading/article/view/157/185>, Alexandre Joly-Lavoie, "Assassin's Creed : synthèse des écrits et implications pour l'enseignement de l'histoire," in *McGill Journal of Education / Revue des sciences de l'éducation de McGill* 52.2 (2017), 455–469, <https://doi.org/10.7202/1044475a>, Aris Politopoulos, Angus A. A. Mol, Krijn H. J. Boom, and Csilla E. Ariese, "'History Is Our Playground': Action and Authenticity in *Assassin's Creed: Odyssey*," *Advances in Archaeological Practice* 7.3 (2019): 317–323, <https://doi.org/10.1017/aap.2019.30>, and Lisa Gilbert, "'Assassin's Creed reminds us that history is human experience': Students' senses of empathy while playing a narrative video game," *Theory & Research in Social Education* 47.1 (2019): 108–137, <https://doi.org/10.1080/00933104.2018.1560713>.

¹⁵ Ubisoft, *Discovery Tour by Assassin's Creed: Ancient Egypt* (Ubisoft, 2018).

game,¹⁶ a term used to describe games aimed at teaching or communicating narrative contents, often at the expense of gameplay.



Fig. 1. The player is invited to follow a trail in the «Discovery Tour» (screenshot).

In both modes, players can move an avatar embodying a third-person point of view, in the 3D environment modelling Ptolemaic Egypt. In the story mode, history is used as an environmental and narrative background aiming at purely fictional adventures, in which the player needs to fulfil objectives, often by murdering fictional or historical characters. In the discovery mode instead, “players can freely explore the interactive 3D reconstruction of ancient Egypt [...] without violence, narrative plot and gameplay constraints.”¹⁷ It is intended as a means to learn/teach history (Fig. 2).

¹⁶ Minhua Ma, Andreas Oikonomou, and Lakhmi C. Jain, *Serious Games and Edutainment Applications* (Springer, 2011).

¹⁷ Own translation of Ubisoft press release titled “Le Discovery Tour d'Assassin's Creed transforme l'Égypte antique en un véritable musée vivant,” February 20, 2018, email.

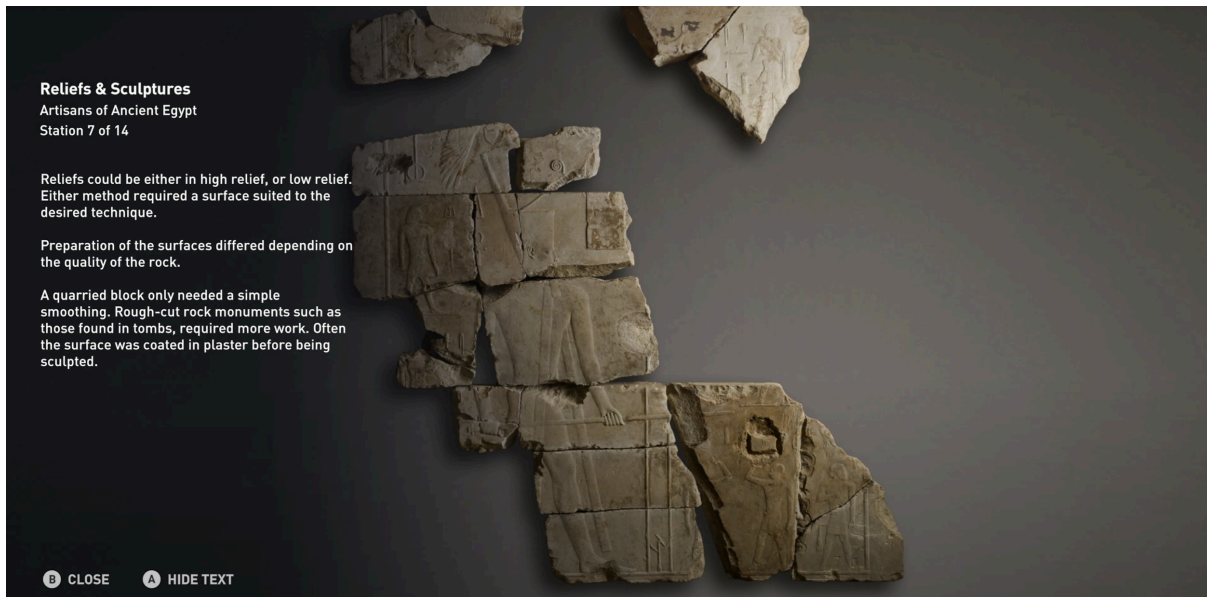


Fig. 2. Illustration and explanations in the «Discovery Tour» (screenshot).

The co-existence of these two modes highlights the existing layers of a video game: one mode favours gameplay over historical accuracy, while the other favors historical accuracy over gameplay. Is it possible to reunite both historical accuracy and gameplay?

Historians were consulted during the development of *Assassin's Creed Origins* in order to document the period and provide knowledge and expertise on language and hieroglyphs, but more generally to help simulate the daily life of Ptolemaic Egypt. During a talk at a games conference in 2018, Maxime Durand, a historian who has been working on the *Assassin's Creed* franchise for years (as a Ubisoft employee), described the role of historians in these video games and the involvement of game developers with history: "Every time, we try to work [...] with people experts in their field of research, and these are helping us to create credibility. We are not aiming at one hundred percent historical accuracy. [...] We are trying to get inspired by history to create a fun game."¹⁸

Being able to see the Giza pyramids from Alexandria lighthouse is a mistake, but it is fun at the same time. Developing a historical video game might be a more difficult

¹⁸ Maxime Durand, David Lefrançois and Marc-André Éthier, "Keynote - Beyond Gaming: How Assassin's Creed Expanded for Learning," filmed June 28, 2018 at Games for Change, New York City, NY, 1min45–3min10, video, <https://www.youtube.com/watch?v=OdROuGMNHXg>

task than it appears at first: games' creators have to develop both fictional and sound historical contexts, that can be rewritten at will by a player according to the main narrative, while vouching for historical accuracy at the same time, when possible.

2. *Sniper Elite 4*

Sniper Elite 4 is a video game set in Italy during World War Two,¹⁹ in which the player receives missions and must kill different human targets with the help of firearms and explosives. Curators from the Royal Armouries Museum, in Leeds, were consulted for their expertise on historical weapons. They provided high quality pictures, organised workshops with the game developers, and suggested improvements based on previous video games in the series.

In this context, recreating reality would ruin the game. Video games are fantasized models. Here, in a war context, with an accent on long-range weapons, the one individual incarnated by the player must be able to wipe out a whole regiment in one or two hours (Fig. 3).



¹⁹ Lisa Traynor, and Jonathan Ferguson, "Shooting for Accuracy. Historicity and Video Gaming," in *Historia Ludens*, ed. Alexander von Lünen et al (Routledge, 2019), 243–254.

Fig. 3. The fictional city of « Bitanti » in Sniper Elite 4, inspired by Porto Venere, Italy (screenshot).

Video games with a focus on action carry these kinds of codes. This lack of realism will not surprise many players. However, the in-game contents, be it the environments, the clothes, or the weapons, are not judged in the same way. A game is built around its game design. An implicit contract is formed between the developer and the player, implying that the game must be entertaining. Players are thus tolerant of a lack of global realism in this case. However, all the graphical assets and narrative elements will contribute to their immersion in this other universe, and the tolerance threshold in this case might be lower.

The curators list how the collaboration proceeded, how they were useful, and what they could not influence. For example, historically some weapons had to be held at the hip in order to shoot, but shooter game mechanics require bringing the sight close to the eye in order to aim and shoot naturally (as a first-person viewer). Thus, in the game these weapons are manipulated like in any first-person shooter (abbreviated to “FPS”) in which the player sees through the eyes of the protagonist. Since they had let the designers and programmers manipulate the original weapons and had provided them with pictures and documents to model them inside the games, the mistakes introduced by the game creators could have appeared as a result of lack of rigor “with a risk of historical misrepresentation or misinterpretation.”²⁰ Through the use of a curator’s experience, we can learn about the process of developing video games, how choices are made, and why often they cannot be realistic.

In serious games, developers often push for the narrative to be a central element. Using or creating video games in the context of public history does not necessarily need to follow this logic. In many cases, the work done in collaboration with game developers can have a high potential for teaching/learning history or just talking about it. However, even if the historical background in a video game seems promising, the public historian should never forget first to check what works, then

²⁰ Traynor and Ferguson 247.

what does not work, before using it. One must be aware of the reasons behind the mistakes in order to comment on them.

Today, video games are popular objects well-known among younger players and many people know the language of video games. In “those digital games that make meaning out of the past,”²¹ they will be able to mentally sort what is supposed to be wrong (e.g. game design that is often unrealistic) from what is supposed to be accurate (environments, historical context): “Gamification requires that history, however useful as scenery, cannot be allowed to interfere with playability.”²²

Compared to a book or a film, a video game offers «the ability to recreate the lost worlds of the past.”²³ Video games are continuous universes: at any given moment, a player can leave the storytelling and explore the environments. Moreover, this implies a need for game developers to fill the gaps in the game world with buildings, living beings and side stories. This is history that is probable: in the absence of sources, game developers and historians determine what is the best (hopefully the most probable) scenario according to their knowledge. In this respect, video games can be of powerful assistance in teaching history and cultivating the imagination,²⁴ and complement other forms of learning. Historians who co-curate video game content contribute to create the “learning environment” of a scholarly game. As with the game design process itself, to fully assess the possibilities, a game must be put into development, and iterative research must be used to explore the best practices in translating historical scholarship into gameplay that meets the standards of the discipline. A video game thus offers far greater potential for the creation and presentation of history than any other entertainment or interactive media.²⁵

Platforms, genres and historical themes

Based on the analysis of a corpus of 1,690 historical video games, a recent study shows that the proportion of historical video games to the number of video games

²¹ Chapman 14.

²² Metzger and Paxton 25.

²³ Kathryn Meyers Emery and Andrew Reinhard, “Trading Shovels for Controllers: A Brief Exploration of the Portrayal of Archaeology,” in *Video Games, Public Archaeology* 14. 2 (2015): 137–149.

²⁴ James Paul Gee, *What Video Games Have to Teach Us about Learning and Literacy* (New York: Palgrave Macmillan, 2003).

²⁵ See Spring, “Gaming history.”

released on all gaming platforms between 1981 and 2015 is relatively constant.²⁶ We can observe a constant interest in historical video games, from the educational video game *The Oregon Trail* to actual strategy and simulation video games like *Total War: Rome II*,²⁷ set in Antiquity, *Crusader Kings II*,²⁸ set in the medieval period, and *Rails across America*,²⁹ set in the nineteenth and twentieth centuries, or FPS' like *Medal of Honor*,³⁰ set during World War Two.

By comparing the video game genres and the platforms on which historical video games were released, it appears that “strategy” and “simulation” genres are significantly more represented on personal computers than on consoles because of their interfaces (the need to use a keyboard and a mouse in order to select large groups of persons and pick orders in the menus). Examples of such video games include the *Total War*,³¹ *Civilization*,³² *Age of Empires*,³³ and *Hearts of Iron*³⁴ series. All of these are strategy games, or even wargames, and digital versions of the tabletop wargame tradition.³⁵ In the meantime, there were as many action historical video games released on computers as on home consoles, especially with FPS, third-person shooter, and platform games, a genre which gained popularity on consoles too.³⁶ Eventually, among the many historical settings that we can trace in video games, we can identify periods or events: World War Two is invoked in 30% of “historical video games” in the database. For a given topic, the availability of games is usually not related to the gaming platforms. However, global simulation games are better represented on computers.

²⁶ Yannick Rochat, “A Quantitative Study of Historical Videogames (1981–2015),” in *Historia Ludens*, ed. Alexander von Lünen et al (Routledge 2019).

²⁷ The Creative Assembly, *Total War: Rome II* (Sega, 2013).

²⁸ Paradox Development Studio, *Crusader Kings II* (Paradox Interactive, 2012).

²⁹ Flying Lab Software, *Rails across America* (Strategy First, 2001).

³⁰ Published by Electronic Arts (1999-2012).

³¹ Published by Electronic Arts, Activision, and Sega (2000–2018).

³² Published by MicroProse, Activision, Hasbro Interactive, Infogrames, and 2K Games (1991-2016).

³³ Published by Microsoft Studios (1997-2018).

³⁴ Published by Strategy First, and Paradox Interactive (2002-2016).

³⁵ Jon Peterson, *Playing at the World: A History of Simulating Wars, People, and Fantastic Adventure from Chess to Role-Playing Games* (Unreason Press, 2012).

³⁶ Michael Hitchens, “A Survey of First-Person Shooters and Their Avatars,” *Game Studies* 11.3 (December 2011).

Game engines

This section is focused on game engines, which are tools frequently used to develop video games in projects aiming at recreating the past, resorting to a game engine allows access to 3D modelling technologies.

Today, many of the bigger game studios use their own, private and regularly iterated game engines. Nevertheless, many game engines are open to game developers, artists, scholars and amateurs,³⁷ either as open source software (e.g. *id Tech 1 to 4* developed by game company id Software), with a unique license fee, or with progressive license fees.³⁸ It is not mandatory to create a new video game when it comes to displaying historical content. Certain games allow the practice of modifying their content (i.e. “modding”), which gives birth on several occasions to vibrant communities exploring historical sources and scenarios together.³⁹

Through modding the game, players challenge its authority as a text that represents the official version of history. By producing a version of history that is a dialogue between the official history of the game, their own understanding of feasibility and verisimilitude, or their counterfactual imagination, players contribute to an understanding to the past as plural and contingent. In this sense, *Europa Universalis II* encourages players to mod the historian’s code by challenging the authority of the hegemonic and linear official history.⁴⁰

This practice is frequent in historical video games and allows for some levels of shared authority for the players, a concept that is central to digital public history methods. Video games might be also useful to teach/learn history, but they are more relevant as simulations of the past.

³⁷ Kirk Woolford and Stuart Dunn, “Experimental Archeology and Serious Games: Challenges of Inhabiting Virtual Heritage,” *Journal on Computing and Cultural Heritage* 6.4 (2013):1–15.

³⁸ Epic Games, Inc. Accessed October 17, 2018 <https://www.unrealengine.com/en-US/faq>.

³⁹ Gareth Crabtree, “Modding as Digital Reenactment: A Case Study of the Battlefield Series,” in *Playing with the Past: Digital Games and the Simulation of History*, ed. Matthew Wilhelm Kapell and Andrew B.R. Elliott (Bloomsbury Academic, 2013), 199–212.

⁴⁰ Tom Apperley, “Modding the Historians’ Code: Historical Verisimilitude and the Counterfactual Imagination,” in *Playing with the Past: Digital Games and the Simulation of History*, ed. Matthew Wilhelm Kapell and Andrew B. R. Elliott (Bloomsbury Academic, 2013), 185–198, 195.

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