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Rats, Plagues, and Children, Oh My! Multimodal Representations of the Past in Historical Games

Visuality Design in and for Education

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Abstract

Since their inception, Game Studies and its sub-discipline Historical Game Studies have stressed the pedagogical potential of (historical) games for learning. Today, popular off-the-shelf historical digital games such as *Assassin's Creed: Origins* (2017), *Total War: Three Kingdoms* (2019), and *Red Dead Redemption* (2010) have achieved period-faithful and authentic interactive representations of elements of history that possess pedagogical value distinct from written accounts. To substantiate this claim, the authors forward a multimodal account of the varied ways in which historical knowledge is present in both game design and the gameplay experience. Their approach is illustrated with an under-investigated (yet valuable) mode of historical exploration – 'Imaginative History.' Using video and/or screen captures from several sequences of recorded game footage taken from *A Plague Tale: Innocence*, the authors present a case example from the game's fantastical portrayal of the Black Death plague. The game's value for teaching and learning is examined in relation to its re-mediation and subversion of past pre-modern folklore imaginations and beliefs concerning the Black Death. The authors also account for the relevance of the way games achieve a specific mode of engagement that is experientially based and structured within gameplay.

Keywords

visuality design – folklore – plague disasters – multimodality – historical video games
– historical fantasy



FEATURE This article comprises a video, which can be viewed [here](#).

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1 Introduction

Users and consumers alike have become accustomed to engaging and interacting with a wide range of multimedia content and interactive contexts for entertainment, learning, and skill acquisition. In the case of history, the consumption of historical games has extended the possibilities for experiencing the past. *Total War: Three Kingdoms* sold over one million copies in less than a week from its initial release date (Brown, 2019). Since its first release in 2007, the critically acclaimed *Assassin's Creed* game series had reached sales of 155 million copies as of October 2020 (World Today News, 2021). *Red Dead Redemption 2* (2018), a game set in America's wild-west period, sold 38 million copies as of June 2021 (Walker, 2021).

The popularity of historical games has initiated scholarly interest in the pedagogical value resulting from research conducted as part of design processes

during the production of commercialized representations of history (Schott and Redder, 2018). Specifically, there is increasing robustness to these historical research processes leading to accurate representation of “forms of knowledge, interactions, ecologies, social and cultural activities, and other experiences” (p. 7). The primary research conducted as part of game design processes has led to a wider range of historical research practices that can also be evaluated within the emerging field ‘Historical Game Studies’ (Chapman, Foka, and Westin, 2016). Scholarly work at the intersection of games and history is currently concerned with the ‘historical game form’ (e.g. Chapman, 2016; Kapell and Elliott, 2013; Elliott, 2017; and Urrichio, 2005), the nature and impact of ‘counterfactual storytelling’ (e.g. Apperley, 2007; Chapman, 2016; Morley, 2020), as well as analyzing gamic representations and discourses with a specific focus on “questions regarding the historical ‘accuracy’ and/or ‘authenticity’ of these games” (Rollinger, 2020, p. 5) for historical games set in particular periods of history and/or culture (e.g. Shaw, 2015; Kline, 2014; Rollinger, 2020).

In spite of these important developments, the benefits and gains from research-infused game experience remain to be fully explored. Scholarly examination of historical games like the *Assassin’s Creed* series mainly convey their faithful historical contexts and interactive experiences focusing on “representation as aesthetics” (Schott and Redder, 2018, p. 8). In this video article, our area of historical game research deviate from this approach by introducing a specific group of historical games that facilitate, utilize, and create animative experiences that translate research scholarship (e.g. Spring, 2014; Houghton, 2018) found in both academic history and fantastical or folkloric accounts of history. A key focus of this article is the coalescing of modes of representation with performativity in a game that employs the modality of ‘Imaginative History.’ The aim is to demonstrate the experiential and interactive affordances of games and how they bring us closer to the life and tribulations characteristic of another age. Before beginning to address the value of engaging with imaginative history, we first define what historical games are, and capable of.

2 Historical Games

Historical video games constitute a distinct genre in which gaming objectives are set within the past, determining that players also gain experiences of settings, periods, societies or cultures from key points in history. While historical games and their created lived accounts of the past are not a direct replacement of earlier forms of historical representation, such as written history and historical films, they are interactive multimodal mediums that give

players agency and freedom to explore historical spaces, places, inhabitants, artefacts, experience rituals and practices, and hear sounds and languages. That is, historical games offer more than a linear sequence of moving images structured around a narrative. They demand to be understood and appreciated for their particular formal properties (as rule systems) and affordances (as interactive). Specifically, games possess a fixed rule system that determines and guides the player's objectives and actions and how they can be achieved (game mechanics) (Crawford, 1984). The gamific quality of a 2D or 3D world comes from the puzzles and obstacles or challenges that require solving to allow further advancement and progress (Adams and Rollings, 2010). Thus, while video games are highly interactive, a player's agency remains mediated by the parameters of the game system (Aarseth, 1997, 2007).

The manner in which digital games function as both representational texts and a form of structured play that guides attention, activity and learning has inevitably created an efficient platform for a variety of histories to be presented and explored. This is evident by the vast range of histories that have been re-produced and experienced in historical digital games since their inception. Games such as the *Civilization* series (1991–2016) and the recently released *Humankind* (2021) reflect macro or global histories that involve global strategy and resource management in developing a civilization over several eras and cultural phases, characterized by peaceful co-operation or direct wars with other human or computer-controlled civilizations. Historical games such as *Kingdom Come: Deliverance* (2018) and the forthcoming *Titanic: Honor and Glory* offer character role-play systems and vast expansive worlds for players to explore that integrate and communicate either notable and popularly recognized or localized histories documented by scholarship. It is worth noting that there are games that indirectly play with the past via fantastical alternate timelines and subversions of the general rules, practices, and precepts governing history. This is highly evident in games like *Wolfenstein II: The New Colossus* (2017) which favor players fighting against high-tech soldiers of the Third Reich with laser weapons and giant mecha Nazi robots within an alternate timeline in which Germany during the Nazi regime has won World War Two and has claimed nearly the entire world (including America).

3 Learning Experiences – Multimodality

In this video article, we forward the argument that players are actively involved in and subsequently immersed in game spaces. This is made possible by the affordances of interactivity and exploration, which can support

scholarly learning. We propose that gamic treatments of games are more than a re-mediation of existing knowledge, but contains assemblages of past lore-knowledge, established scholarly knowledge, and new knowledge that exploit new modes of communication and engage users/learners in new ways. Including the potential for exploring and utilizing historical games as fully-fledged and critical works of history to teach and develop immersive student learning, including knowledge acquisition, research, and critique, of specialized historical periods, subjects, and/or imaginative and fantasized history. In order to exploit the value and application of games to history education, we propose adopting a multimodal approach (Kress & Van Leeuwen, 2001, 2006) that allows exploration of the range of communication systems employed by game media and the experience it offers.

Multimodality is presented as a useful framework for understanding the pedagogical transfer of history. Multimodality, as established by semioticians Gunther Kress and Theo Van Leeuwen, comprises the composition and interaction between multiple literacies and modes of communication and the meaning-making generated by those elements when combined and experienced as a whole (Hawreliak, 2019; Toh, 2018). Specifically, this theory actively concerns with the study of communicative languages or acts by describing and extending “social interpretation ... and its meanings to a whole range of representational and communicational modes or semiotic resources for making meaning that are employed in a culture – such as image, writing, gesture, gaze, speech, posture” (Jewitt, 2009, p. 1). In digital game studies, exploration and analysis of video games as a multimodal form of communicative representation has been increasingly engaged by prominent scholars (e.g. Tavinor, 2008, 2009; Hawreliak, 2019; Burn, 2017; Burn & Parker, 2003; Burn & Schott, 2004; and Quijano, 2019) in undertaking a more holistic approach. Namely, diverging from (but still incorporating) a purely ludic and game mechanic perspective by considering other notable components – such as “visual composition, storytelling, narrative, language use, aural composition etc.” (Quijano, 2019, p. 209) – of a video game that have been traditionally relegated as merely ‘aesthetics’. Consequently, multimodal frameworks have been contributed to carry out this incentive into video games’ employment of “medium-specific modes and modal configurations” (Hawreliak, 2019, p. 7), such as the ‘Modality in Games’ and ‘Metamodel Kineikonic’ models developed by digital game scholar Andrew Burn (2017).¹

1 For the layout and discussion of these aforementioned models, see Andrew Burn’s chapter ‘Games, Films and Media Literacy: Frameworks for Multimodal Analysis’ (2017) for more information.

For historical games then, a multimodal approach encompasses the entirety of the game experience itself, including in simultaneity the impact of its ludic and procedural elements such as game mechanics and rules, as well as the visual, performative, narrative, verbal, aural, and many other communicative modes and styles. Using this approach has potential as an analytical function that aids identification, examination, and discussion of different modes of historical representation co-located within a game system. In striving to demonstrate the capacity of multimodality to disentangle contemporary media engagements with history, this article focuses on the potential value of ‘imaginative history.’ This mode of history engages with figurative or poetic imaginations of history, including genres or modes of historical fiction, that express imaginative re-mediations pertaining to the past, while still containing elements of period-accurate visual and material history.

One prominent mode of imaginative history covered in this article is ‘historical fantasy’ referring to gameplay animations of vivid and/or subtle fantasy elements that are authentically representative of or characteristic to past beliefs, ideas, and fantasies from old folktales and legends, mythology, religion, visual art, and literary and dramatic works. Historical fantasy provides commentary on the “mentalités of past cultures ... [such as] the fusion of history and myth into one diegetic world” (Chapman, 2019, p. 92), while exhibiting metaphorical, metonymic, and re-constructive utilities that embody poetic meanings about the past. In learning about history through gaming, imaginative histories exhibited via historical fantasy experiences constitute traces or remnants of socio-cultural, folkloric, and poetic literacies about the past, which are vividly illuminated.

4 Case Study (Method)

Recorded gameplay footage taken from the Medieval historical game *A Plague Tale: Innocence (APT)* (developed by Asobo Studio, 2019) is used as a case study to illustrate the pedagogical value of engaging with imaginative history. A case study of the game allowed “an in-depth exploration of a bounded system (e.g. an activity, event, process, or individuals) based on extensive data collection” (Cresswell, 2002, p. 485). In this case, the bounded system under examination is the rule system, environment, and activities of the game. Within digital game studies, it is typical for researchers to engage in text-based analysis as a ‘player-analyst.’ Researching player insights and experiences is disruptive to the play process and immersion if conducted during play. Furthermore, each play experience is driven by player actions, individual strategy, intrigue

or attention, and the uniqueness of the individual, making collective audience research methods unsuitable. Instead, digital game studies has evolved ‘researcher as player’ methods of analysis. Espen Aarseth (2007) promotes the concept of “implied player,” as the “role made for the player by the game, a set of expectations that the player must fulfill for the game to “exercise its effect” (p.132). The term accounts for the boundaries imposed on the player-subject (the person playing) by the game, specifically their freedom of movement and choice (Aarseth, 2007). A player-analyst therefore performs a two-pronged engagement. Their analysis of the game world examines the text through both a ludic lens and the lens of their respective disciplinary field which guides how the player activates the text and advances through the game.

5 *A Plague Tale: Innocence* – Historical Fantasy

APT is set in southern France during the first wave of the Black Death plague in the mid-fourteenth century. This period of history is re-told using the familiar tropes of a dark fairy-tale and children’s adventure story, with the player experiencing a Medieval world via two children – Amicia and her little brother Hugo of the De Rune family (see Figure 1). The siblings journey through a plague-ridden France in order to search for medical help and intervention as Hugo is exhibiting signs of the sickness. Adding to the context with drama and urgency, the siblings are being pursued by the Inquisition. The Inquisition are portrayed as a branch organization of the Catholic Church and currently hold jurisdiction in dispensing with heresy, including those afflicted with the plague. Agents of this organization and their forces are currently searching for



FIGURE 1 *APT*’s player protagonists Amicia and her little brother Hugo. Recorded in ‘A Plague Tale Innocence I Pilot’ (Redder, min 3:46:54).

Hugo as he is believed to be somehow connected with the emergence of rats that spread the plague.

Among the handful of imaginative histories found and analyzed within *APTI*, the most notable of them is the personification of the Black Death. Micro bacteria disease carried by parasitic fleas on rodents is transformed into a darker and menacing supernatural animal plague consisting entirely of flesh-eating rats referred to as 'The Bite'. This particular imaginative history is discussed for its potential to explore pre-modern expressions of plague via the use of gameplay footage in both screen image and video formats.

Despite the game's fantastical nature of the rat swarm, there are indeed a number of Medieval, Early Modern, and even Classical folkloric and literary plague sources detailing a fantasized expression or imagination of rats not as the vector or cause of origin of plagues, but interestingly symbolized or viewed as a harbinger, vessel, or instrument for a deadly yet invisible entity. Medieval and Early Modern European societies used plague or pestilence as a complex all-encompassing term for describing a number of sequential yet inexplicable or unforeseen disasters (Stieve, 1988). Essentially, disease outbreaks were considered as one of many symptoms classified as plague among others, including natural calamities (e.g. earthquakes), poor climate and weather conditions, spiritual and moral degradation alongside religious laxity, famines, and wars (Cole, 2016; Cooke, 2009; Crawford, 1914; Stieve, 1988). In re-framing plague and pestilence using pre-modern conventions, we see a continuation and adherence to the use of rats to imaginatively express the plague, following notable examples such as the omen of the 'Rat King' (early modern period, 16th–18th century), *Mouse Tower* (German folktale set in the mid-tenth century), and the famous tale the *Pied Piper of Hamelin* (various sources and adaptations between 1300–1700).

APTI's fantasy adaption of the Black Death is therefore a modern addition to a longstanding tradition of plague storytelling that substitute the actual Black Death with a supernatural form of pestilence, circumventing the need to provide an objective account about the cause of the Black Death. The learning opportunities made available by the game's approach include experiencing, identifying, and examining expressions of past plague symbology or motifs.

6 Plague Rat Swarm

APTI's rat swarm remediates several past plague imaginations as fantastical gameplay experiences via its supernatural pestilential powers. Rats physically devour the lives of both humans and animals in large numbers, transmit diseases through biting victims, and decimate and transform urban centers into polluted abodes through putrefaction and incessant copulation. When



VIDEO 1 A Plague Tale Innocence I Pilot. (See [here](#).)
REDDER, 2019

experienced in the game, these terrifying experiences serve as a signifier for historical learning of plague rat folklore.

The consumption of flesh by the rat swarm is its most powerful ability. By viewing the following video segment, you can fully encapsulate the particularity of this fantastical experience. The player's first introduction to the deadly rat swarm occurs at a crypt in a village monastery approximately halfway through Chapter 3 of the game (entitled 'Retribution', see also Video 1).

Amicia and her little brother Hugo are accompanied by a guide, Father Thomas, the last surviving monk of the afflicted village monastery. Together, the player (as Amicia or Hugo) and non-player characters (Thomas) arrive at the crypt of the Three Saints. Thomas is searching for another monk and colleague named Morel. Suddenly a heavy thundering noise erupts followed by a strong howling sound that blows out the candles illuminating the downward staircase of the main crypt entrance, turning the entire vicinity dark save that of Amicia's torch.

Within a split moment, a large swarm of rats suddenly become visible, entering at a frightening pace from all directions, eventually flooding the entire place until it is completely covered with these black vermin (see Figure 2). The creatures looked black as darkness itself save that of their glaring yellow eyes. Only by Thomas' fire torch is it possible to discern these ghostly vermin who approach from all directions.

In a vivid display of horror and gruesomeness, dozens of rats swarm over Father Thomas' body and completely envelop him (see Figures 3 and 4). Amicia and Hugo are powerless and watch on as the rats eat him alive.



FIGURE 2 The first ever encounter with the rats. Recorded in 'A Plague Tale Innocence I Pilot' (Redder, min 1:34:48).



FIGURE 3 Father Thomas trying to reach Amicia and the torch she is carrying before the rats overwhelm him. Recorded in 'A Plague Tale Innocence I Pilot' (Redder, min 1:34:53).



FIGURE 4 Father Thomas being consumed alive by rats. Recorded in 'A Plague Tale Innocence I Pilot' (Redder, min 1:35:03).



FIGURE 5 The Remains of Father Thomas after being consumed by the rat swarm. Recorded in 'A Plague Tale Innocence I Pilot' (Redder, min 1:35:24).

Playing as Amicia, it is possible to eventually clear away a small group of rats that remain on the body using the torch. In doing so, the skeletal remains of Father Thomas are revealed (see Figure 5). The image is horrific. Encounters with a highly vivid and fantastical representation of the plague increases, becoming more common as the game progresses. Yet, the impact and terrifying nature of the experience does not diminish or lessen throughout *APTII*.

Consuming humans, like Father Thomas, is not the only behaviour the rats exude. In Chapter 9 entitled 'In the Shadow of Ramparts', playing as Amicia the



FIGURE 6 One example of exposed plague bodies displaying some of the core symptoms. Recorded in 'A Plague Tale Innocence v' (Redder, min 2:22).

player visits and explores a large (unnamed) Medieval city. Moving through the city the player notes large piles of covered and exposed dead bodies filling the streets and public cisterns (see Figures 6–8). Large dug pits are also found near a public cemetery that have been abandoned. These observations suggest that the city residents are likely victims of infection, in contrast to the literal consumption by rats, as their exposed bodies display deathly-pale skin, large discharges of blood, and large black buboes and/or sores. The visual display of these symptoms of infection were earlier foreshadowed by Father Thomas' conversation with Amicia and Hugo at the crypt of the village church as caused by individual rats biting their victims when they were asleep during the night. After contracting the disease from the rat's bite, they then spread the infection to other nearby residents.

A third attribute of the rat swarm is that the pestilence also results in the putrefaction and corruption of Medieval urban spaces. For example, the state of the Medieval city experienced in Chapter 9 of the game (as discussed above) continues to worsen, so that in Chapter 16 (entitled 'Coronation') the city becomes clogged by rat nests covered with an unfamiliar and vile black substance. The city is transformed, swamped by decaying matter that has seeped through the city creating impassable chasms, ruined buildings and streets (see Figures 9–10).

APT employs rats to performatively hasten the impact of contagion and infection for players, while environmental storytelling is used to emphasize the human impact of the plague through displaying high number of dead bodies



FIGURE 7 Another example of plague bodies in an open, unburied pit near the city's cemetery. Recorded in 'A Plague Tale Innocence v' (Redder, min 12:24).



FIGURE 8 Amicia finding the bodies of an unknown parent and child who have died from the plague (bite). Recorded in 'A Plague Tale Innocence IV' (Redder, min 20:56).

indicative of communities' inability to stem the spread, prevent death, and process the dead. This effective aesthetic and procedural device positions the game as a nightmarish Medieval horror, an atmosphere that primes the player for survival-based interactivity. Unlike invisible but transmissible infections, the personal agency is given to the player to repel the disease personified or



FIGURE 9 A residential area covered with a strange black substance. Recorded in 'A Plague Tale Innocence VI' (Redder, min 30:51).



FIGURE 10 The cathedral representing the heart of the city's pestilential corruption. Recorded in 'A Plague Tale Innocence VI' (Redder, min 48:53).

hosted by the rats. By using light and varying sources of fire the player is able to maintain life and health and avoid succumbing to the plague rats in their intent of consuming the children protagonists (see Figure 11). The rat clusters thrive and are most active in the night or in dark spaces bereft of daylight. These ghastly fictional depictions of death are not whimsically ahistorical



FIGURE 11 Amicia using the light from the torch, a core game mechanic to both illuminate the room and more importantly repel the rats. Recorded in 'A Plague Tale Innocence I Pilot' (Redder, min 1:35:29).

representations. In fact, they have educational value as modal resources for knowledge transfer on plague history in folktales and literary documentations.

In encountering and surviving rats as the deadly devourer of both human and animal lives, the game echoes the way rats and their carnivorous behavior were used in tales as a manifestation or a poetic imagination of plague as famine and mass starvation caused by human wickedness and corruption, as evident in Medieval folktales like the *Mouse Tower* and *Popiel*. To use the example of *Mouse Tower*, this tale accounts for the corrupt and cruel actions of German Archbishop of Mainz Hatto 11.² Set in the late tenth century, the tale begins with the provinces in Germany suffering from a terrible famine with the archbishop controlling the majority of the granary food reserves (Dawson, 1925). The starving peasants became angry and threatened open revolt, so the dishonest bishop first enticed the peasants into a large barn under the pretext

2 While the villain in this Medieval tale references to an actual historical figure (Hatto 11), scholar Warren Dawson warns that the tale should not be seen as an authentic presentation of this figure, and that the villainous Archbishop is likely a conflation of Hatto 11 and an earlier predecessor Hatto 1 (c. 850–913), the latter recorded to have been a highly power hungry and cruel individual. Furthermore, the popularity and cultural significance of this tale and its overarching themes were not simply confined to Germany but were re-told in other European countries under different versions. One of these variations is the popular Polish tale *Popiel* involving the corrupt proto-Polish prince Popiel and his power-hungry German wife, exhibiting the same plot-structure of a swarm of rats that consume this royal couple as punishment for their evil deeds.

of promising to bring food, and then ordered his servants to lock and set the barn on fire, burning its hungry occupants alive. As judgment for his cruel and wicked deed, a large swarm of rats appeared to torment and subsequently consume Hatto, who fled for safety in a boat to his stone tower refuge, which stood in mid-stream, to escape his doom. The vermin, however, swam after him and afterwards devoured him alive in his tower.

The rat swarm transmitting diseases through their bite represent illustrations of several similar symptoms pertaining to the combination of bubonic and pneumonic trends exhibited by victims of the real Black Death plague, as subjectively witnessed and documented by Medieval writers living in the time of that plague such as Louis Sanctus, Giovanni Boccaccio, and Michele da Piazza (Aberth, 2017). However, it can also introduce students to how past European societies used fiction in order to cope with and create a physical substitute not merely for the trauma of enormous death counts that epidemics like the real Black Death inflicted, but also the nature of these diseases which came to its victims rapidly unseen, silent, and usually unexpected, irrespective of one's social rank, age, and gender. Indeed, this historical exploration into the materialization of concepts or topics like death through imaginative fiction bears similar functional resemblance to past Medieval and Early Modern societal constructs of the universality of death in its swiftness and capricious nature prior, such as notably the Medieval 'Danse Macabre' (*Dance of Death*) imagery which personified death as skeletal figures hovering over various individuals, and often in the performative manner of a folk dance (Schott, 2017). Moreover, this artistic and folkloric correlation of plague deaths between past and present (*APTI*) renditions has extensive significance for student learning in their thematic familiarity to the changing normalcy of life under the rising scale and severity of death from this global outbreak of Covid-19, in which individuals are similarly succumbing to a deadly disease that is invisible to the naked eye and has disconnected many familial and communal relationships while stifling political divisiveness. *APTI*, a game released prior to Covid, provides an early impetus for this trend of presenting death in a more serious tone within a fictional zone. Specifically, coalescing the similarity of the ludic function of death (in which players can lose the game and have to restart after getting killed by the rats or hostile humans due to either making mistakes or wrong choices) with the underlying representational meanings or symbolisms these occurrences and observations of death tell us about the brutality and hardship plagues brought to ravaged societies while intensifying violent conflicts and atrocities (Schott, 2017).

Traversing through hellish rat-infested cities and its buildings covered with breeding nests with strange black substance also offers a useful historical

supplementation of pre-modern plague expression and beliefs in several ways. For instance, teaching students how societies used body metaphors to depict the impact and destruction of plagues not only in their violent infliction of morality but also as cultural signifiers of social and urban degradation (Jones, 1996). For example, the manner in which people became infected with disease has found correspondence with the fetid and unsanitary conditions within certain large urban centres at the time. Seventeenth century English playwright Ben Jonson's poem *On the Famous Voyage* (1616) turns London into a "corrupt pestilential body" via phrases such as London as a "muddy ... womb ... its sewers as ... [its] entrails", and as a "concealed gut clotted with stench, diseases, and old filth" (Gilman, 2009, p. 47). In the case of *APTl*, its depictions of urban environments as pestilential bodies subverts Medieval motifs of cities as bastions of order, security, light, and civilization (Youngs and Harris, 2003). This particular subversion also has correlation to the metaphorical role of plague in Early Modern France explored in historian Colin Jones' article (1996). Jones significantly highlights that Early Modern French writers, such as Maurice de Toulon's account of Genoa in *Le Capucin Charitable* (1668), utilized the ravaging power of the plague disease not merely in describing its grotesque effects of twisting the human body, but more importantly in documenting the transformation of vibrant and cosmopolitan cities, in all of its political, spiritual, and social bodies, into ghastly, lifeless, and silent wastelands whose status, prosperity, and social and religious rituals were disrupted or decrepit by plague outbreaks terrorizing its inhabitants (Jones, 1996).

The subject of *APTl*'s rats and their pestilential powers within the pedagogy of historical plague discourse does not simply follow the way many pre-modern tales like the *Mouse Tower* used rats in plague as divine punishment or retribution against a single corrupt individual. There are benefits, educationally, to draw upon modern literary sources around plague to address the extension and magnification of *APTl*'s fantasized rat swarm and its pestilential powers as an apocalyptic, unrelenting, and seemingly unstoppable force of nature, taking a similar approach that Edgar Allan Poe took in his adaptation of the plague in his novel *The Red Masque of Death* (1842). Like the enigmatic Red Masque of Death, *APTl*'s fantasy plague rats spares neither the rich nor the poor, young or old, and most notably the good and innocent from the evil and the wicked.

7 Conclusion

Gameplay as history has value in opening potential pathways or ideas to expand historical game education and its varying literacies in secondary school

classrooms and universities, as evident in this discussion on historical fantasy as one of many variations. Gameplay historical fantasy, as demonstrated in the case study *APTI* via a multimodal frame approach, is only one of a number of styles of historical imagination within historical gaming. Yet the exemplification of the rat swarm as a lucrative yet substantial pedagogical subject within the game does signal a potentially exciting interest and opportunity to record, utilize, and disseminate one's gameplay activity as both a major historical source for scholarship and as critical texts for teaching and conducting lessons around historical learning, with gameplay experiences being prime semiotic resources.

In describing potential ideal scenarios using the subject of plague as an exemplar for history teaching via games like *APTI*, one potentially effective or realistic approach in illustrating how historical gameplay could work would be implementing a couple of historical game case studies and their respective historical modality (e.g. imaginative history) as either or both learning templates or exercises and assessments. The ideal group for this endeavor are senior students (Yr 12–13, ages 17–18) and university students. History teachers themselves with training in video games beforehand would record the game using the necessary equipment such as an elgato game capture device with its accompanying editing software. With recordings of the entire game and its findings, and with each recording representing a session, they can make copies for use in teaching lessons about pre-modern plagues, or alternatively as part of an assessment with teacher criteria and guidance give copies to the students who can access them via school-provided laptops and/or computer devices. The students with extensive learning and knowledge on historical fantasy would analyze and highlight any key aspects of the game's animated historical fantasies from the footage, with corroboration of these findings with other historical sources, such as written folklore literature and historical primary sources and/or artefacts of plague events, as a means of evaluating the game as an entryway into or as supplementary scholarship for gaining knowledge on past societies' imaginations of plagues. Although this application described is still yet to be considered and used in a real practical context, the rat swarm model can help provide a starting template to consider a selection of historical games that can engage in this new area of historical teaching.

References

- Aarseth, E. (1997). *Cybertext: Perspectives on Ergodic Literature*. Baltimore, M.A: John Hopkins University Press.

- Aarseth, E. (2007). I Fought the Law: Transgressive Play and The Implied Player. *Proceedings of the 2007 DiGRA International Conference: Situated Play*, 130–133.
- Aberth, J. (2017). *The Black Death – The Great Mortality of 1348–1350: A Brief History with Documents*. Boston, M.A: Bedford/St. Martin's.
- Adams, E., & Rollings, A. (2010). *Fundamentals of Game Design* (2nd ed.). Upper Saddle River, N.J: Prentice Hall.
- Anonymous. (2021, 13 June). *Assassin's Creed: Ubisoft's Million Dollar Franchise*. World Today News. <www.world-today-news.com/assassins-creed-ubisofts-million-dollar-franchise>.
- Apperley, T. (2007). Virtual Unaustralia: Videogames and Australia's Colonial History. *Proceedings of the Cultural Studies Association of Australasia Conference 2006*, 1–23.
- Brown, F. (2019, 30 May). *Total War: Three Kingdoms Sold a Million Copies in a Week*. PCGamer. <www.pcgamer.com/au/total-war-three-kingdoms-sold-a-million-copies-in-a-week>.
- Burn, A. (2017). Games, Films and Media Literacy: Frameworks for Multimodal Analysis. In M. Knobel, & C. Lankshear (Eds.), *Researching New Literacies: Design, Theory, and Data in Sociocultural Investigation* (Vol. 76, pp. 169–194). New York: Peter Lang.
- Burn, A., & Parker, D. (2003). *Analysing Media Texts*. London, and New York: Continuum.
- Burn, A., & Schott, G. (2004). Heavy Hero or Digital Dummy? Multimodal Player-avatar Relations in Final Fantasy 7. *Visual Communication*, 3(2), 213–233.
- Chapman, A. (2016). *Digital Games as History: How Videogames Represent the Past and Offer Access to Historical Practice*. Abingdon: Routledge.
- Chapman, A. (2019). Playing the Historical Fantastic: Zombies, Mecha-Nazis and Making Meaning about the Past through Metaphor. In H. Pötzsch (Ed.), *War Games: Memory, Militarism and the Subject of Play* (pp. 91–111). Bloomsbury.
- Chapman, A., Foka, A., & Westin, J. (2016). Introduction: What is Historical Game Studies. *Rethinking History*, 21(3), 358–371.
- Cole, L. (2016). *Imperfect Creatures: Vermin, Literature, and the Sciences of Life, 1600–1740*. Ann Arbor, M.I: University of Michigan Press.
- Cooke, J. (2009). *Legacies of Plague in Literature, Theory and Film*. London: Palgrave MacMillan.
- Crawford, C. (1984). *The Art of Computer Game Design*. New York: McGraw-Hill Education.
- Crawford, R.H.P. (1914). *Plague and Pestilence in Literature and Art*. Oxford: Clarendon Press.
- Creswell, J.W. (2002). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative research*. Upper Saddle River, N.J: Prentice Hall.
- Dawson, W.R. (1925). The Mouse in Fable and Folklore. *Folklore*, 36(3), 227–248.

- Elliott, A.B.R. (2017). Simulations and Simulacra: History in Video Games, *Práticas da História*, (5), 11–41.
- Gilman, E.B. (2009). *Plague Writing in Early Modern England*. Chicago: University of Chicago Press.
- Hawreliak, J. (2019). *Multimodal Semiotics and Rhetoric in Videogames*. Abingdon: Routledge.
- Houghton, R. (2018). World, Structure and Play: A Framework for Games as Historical Research Outputs, Tools, and Processes. *Práticas da História*, (7), 11–43.
- Jewitt, C. (2009). Introduction: Handbook Rationale, Scope and Structure. In C. Jewitt (Ed.), *The Routledge Handbook of Multimodal Analysis* (pp. 1–8). Abingdon: Routledge.
- Jones, C. (1996). Plague and Its Metaphors in Early Modern France. *Representations*, (53), 97–127.
- Kapell, M.W., & Elliott, A.B.R. (Eds.). (2013). *Playing with the Past: Digital Games and the Simulation of History*. New York: Bloomsbury Academic.
- Kline, D.T. (Ed.). (2014). *Digital Gaming Re-imagines the Middle Ages*. Abingdon: Routledge.
- Kress, G., & Van Leeuwen, T. (2001). *Multimodal Discourse: The Modes and Media of Contemporary Communication*. London: Arnold.
- Kress, G., & Van Leeuwen, T. (2006). *Reading Images: The Grammar of Visual Design* (2nd ed.). Abingdon: Routledge.
- Morely, N. (2020). Choose your own Counterfactual: The Melian Dialogue as Text-Based Adventure. In C. Rollinger (Ed.), *Classical Antiquity in Video Games: Playing with the Ancient World* (pp. 179–192). London, and New York: Bloomsbury Publishing.
- Quijano, J. (2019). *The Composition of Video Games: Narrative, Aesthetics, Rhetoric and Play*. Jefferson, N.C: McFarland Inc. Publishers.
- Rollinger, C. (Ed.). (2020). *Classical Antiquity in Video Games: Playing with the Ancient World*. London, and New York: Bloomsbury Publishing.
- Rollinger, C. (2020). Playing with the Ancient World: An Introduction to Classical Antiquity in Video Games. In C. Rollinger (Ed.), *Classical Antiquity in Video Games: Playing with the Ancient World* (pp. 1–18). London, and New York: Bloomsbury Publishing.
- Schott, G. (2017). That Dragon, Cancer: Contemplating Life and Death in a Medium that has Frequently Trivialized both. DiGRA '17 – Proceedings of the 2017 DiGRA International Conference, 1–10.
- Schott, G., & Redder, B. (2018). Presence at History: Toward an Expression of Authentic Historical Content as Game Rules and Play. Proceedings of the 2018 DiGRA International Conference: The Game is the Message, 1–15.
- Shaw, A. (2015). The Tyranny of Realism: Historical Accuracy and Politics of Representation in Assassin's Creed III. *Loading*, 9(14), 4–24.

- Spring, D. (2014). Gaming History: Computer and Video Games as Historical Scholarship. *Rethinking History*, 19(2), 207–221.
- Stieve, E.M. (1988). *Medical and Moral Interpretations of Plague and Pestilence in Late Middle English Texts* [Published Doctoral Dissertation, Michigan State University]. MSU Libraries.
- Tavinor, G. (2008). Definition of Videogames. *Contemporary Aesthetics*, 6. <<https://contempaesthetics.org/newvolume/pages/journal.php?volume=23>>.
- Tavinor, G. (2009). *The Art of Videogames*. Hoboken, N.J: John Wiley & Sons.
- Toh, W. (2018). *A Multimodal Approach to Video Games and the Player Experience*. Abingdon: Routledge.
- Uricchio, W. (2005). Simulation, History, and Computer Games. In J. Raessens, & J. Goldstein (Eds.), *Handbook of Computer Game Studies* (pp. 327–338). Cambridge, MA: MIT Press.
- Walker, A. (2021, 3 August). *Red Dead Redemption 2 Has Sold In More Than 38 Million Copies*. Kotaku. <www.kotaku.com.au/2021/08/red-dead-redemption-2-has-sold-in-more-than-38-million-copies>.
- Youngs, D., & Harris, S. (2003). Demonizing the Night in Medieval Europe: A Temporal Monstrosity?. In B. Bildhauer, & R. Mills (Eds.), *The Monstrous Middle Ages* (pp. 134–154). Toronto, and Buffalo: University of Toronto Press.

Gameplay Footage Recordings

Still Image

- Redder, B. (2019). 'A Plague Tale Innocence I Pilot'. *A Plague Tale: Innocence*.
- Redder, B. (2019). 'A Plague Tale Innocence IV'. *A Plague Tale: Innocence*.
- Redder, B. (2019). 'A Plague Tale Innocence V'. *A Plague Tale: Innocence*.
- Redder, B. (2019). 'A Plague Tale Innocence VI'. *A Plague Tale: Innocence*.

Video

- Redder, B. (2019). 'A Plague Tale Innocence I Pilot'. *A Plague Tale: Innocence*.