#### **Robert Houghton**

# 1 Introduction: Teaching the Middle Ages through Modern Games

The scholarship which addresses the interaction between history and modern games is growing rapidly both in terms of volume and of approach. While academic critiques of games on the basis of historical inaccuracies represent a shrinking minority of this scholarship, lively debate continues around what exactly historical accuracy and authenticity mean in popular media in general, and what they mean within games. The role of historians and historical research in the production of games is increasingly well documented and corresponds with a

<sup>1</sup> Christoph Classen and Wulf Kansteiner, "Truth and Authenticity in Contemporary Historical Culture: An Introduction to *Historical Representation and Historical Truth*," *History and Theory* 48, no. 2 (May 2009): 1–4, https://doi.org/10.1111/j.1468-2303.2009.00495.x; Konstantinos Andriotis, "Genres of Heritage Authenticity: Denotations from a Pilgrimage Landscape," *Annals of Tourism Research* 38, no. 4 (October 2011): 1613–33, https://doi.org/10.1016/j.annals.2011.03. 001; Karl Alvestad and Robert Houghton, eds., *The Middle Ages in Modern Culture: History and Authenticity in Contemporary Medievalism* (2021), https://doi.org/10.5040/9781350167452?locatt=label:secondary\_bloomsburyCollections.

<sup>2</sup> Andrew J. Salvati and Jonathan M. Bullinger, "Selective Authenticity and the Playable Past," in Playing with the Past: Digital Games and the Simulation of History, ed. Matthew Kapell and Andrew B. R. Elliott (New York: Bloomsbury Academic, 2013), 153-67; Tim Raupach, "Towards an Analysis of Strategies of Authenticity Production in World War II First-Person Shooter Games," in Early Modernity and Video Games, ed. Tobias Winnerling and Florian Kerschbaumer (Newcastle upon Tyne: Cambridge Scholars, 2014), 123–38; Robert Houghton, "It's What You Do With It That Counts: Factual Accuracy and Mechanical Accuracy in Crusader Kings II," The Public Medievalist (blog), September 30, 2014, https://www.publicmedievalist. com/ckii-houghton/; Tara Jane Copplestone, "But That's Not Accurate: The Differing Perceptions of Accuracy in Cultural-Heritage Videogames between Creators, Consumers and Critics," Rethinking History 21, no. 3 (2017): 415-38, https://doi.org/10.1080/13642529.2017.1256615; Martin Lorber and Felix Zimmermann, eds., History in Games: Contingencies of an Authentic Past, Studies of Digital Media Culture 12 (Bielefeld: Transcript-Verl, 2020); Robert Houghton, "If You're Going to Be the King, You'd Better Damn Well Act like the King: Setting Objectives to Encourage Realistic Play in Grand Strategy Computer Games," in The Middle Ages in Modern Culture: History and Authenticity in Contemporary Medievalism, ed. Karl Alvestad and Robert Houghton (IBTauris, 2021), 186-210.

<sup>3</sup> Stephen Totilo, "One Man's Year Making Assassin's Creed II," *Kotaku* (blog), December 21, 2009, https://kotaku.com/5431098/one-mans-year-making-assassins-creed-ii; Matthew Nicholls, "Digital Visualisation in Classics Teaching and Beyond," *Journal of Classics Teaching* 17, no. 33 (2016): 27–30, https://doi.org/10.1017/S2058631016000076; Lori Folder, "Thrones of Britannia – Campaign Map Reveal," *Total War Blog* (blog), November 12, 2017, https://www.total

growing demand for historical vigour amongst the playerbase.<sup>4</sup> The manner in which these games represent history and the past has been interrogated within various frameworks from diverse fields including Literary Studies,<sup>5</sup> Archaeology,<sup>6</sup> and Game Design,<sup>7</sup> and indeed has formed the basis for the construction of several new methodological approaches.<sup>8</sup> The potential of historical and pseudo-historical games to address serious and contemporary issues has been highlighted,<sup>9</sup> as

war.com/blog/thrones-campaign-map-reveal; Dominic Tarason, "Assassin's Creed Origins Becomes Edutainment Feb 20th," *Rock, Paper, Shotgun* (blog), February 13, 2018, https://www.rockpapershotgun.com/2018/02/13/assassins-creed-origins-becomes-edutainment-feb-20th/; Andrew Reinhard and Stéphanie-Anne Ruatta, "Consulting for Ubisoft on Assassin's Creed: Odyssey," *Archaeogaming* (blog), April 19, 2019, https://archaeogaming.com/2019/04/19/consulting-for-ubisoft-on-assassins-creed-odyssey/.

- **4** Erik Champion, *Critical Gaming: Interactive History and Virtual Heritage*, Digital Research in the Arts and Humanities (Farnham, Surrey: Ashgate, 2015); Copplestone, "But That's Not Accurate."
- **5** Janet Horowitz Murray, *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* (Cambridge, Mass: MIT Press, 1998); Astrid Ensslin, *Literary Gaming* (Cambridge, Massachusetts; London, England: The MIT Press, 2014).
- 6 Shawn Graham, "Agent Based Models, Archaeogaming, and the Useful Deaths of Digital Romans," in *The Interactive Past: Archaeology, Heritage & Video Games*, ed. Angenitus Arie Andries Mol et al. (Leiden: Sidestone Press, 2017), 123–31; Andrew Reinhard, *Archaeogaming: An Introduction to Archaeology in and of Video Games* (New York: Berghahn Books, 2018).
- 7 Espen J. Aarseth, *Cybertext: Perspectives on Ergodic Literature* (Baltimore, Md: Johns Hopkins University Press, 1997); Robin Hunicke, Marc LeBlanc, and Robert Zubeck, "MDA: A Formal Approach to Game Design and Game Research," *Proceedings of the Challenges in Games AI Workshop, Nineteenth National Conference of Artificial Intelligence*, 2004, 1–5.
- 8 Jerremie Clyde, Howard Hopkins, and Glenn Wilkinson, "Beyond the 'Historical' Simulation: Using Theories of History to Inform Scholarly Game Design," Loading . . . The Journal of the Canadian Game Studies Association 6, no. 9 (2012), http://journals.sfu.ca/loading/index. php/loading/article/viewArticle/105; Adam Chapman, Digital Games as History: How Videogames Represent the Past and Offer Access to Historical Practice, Routledge Advances in Game Studies 7 (New York, NY: Routledge, Taylor & Francis Group, 2016); Vincenzo Idone Cassone and Mattia Thibault, "The HGR Framework: A Semiotic Approach to the Representation of History in Digital Games," Gamevironments 5 (2016): 156–204; Robert Houghton, "World, Structure and Play: A Framework for Games as Historical Research Outputs, Tools, and Processes," Práticas Da História 7 (2018): 11–43.
- 9 Josef Köstlbauer, "Do Computers Play History?," in *Early Modernity and Video Games*, ed. Tobias Winnerling and Florian Kerschbaumer (Newcastle upon Tyne: Cambridge Scholars, 2014), 24–37; Claire Taylor, "Serious Gaming: Critiques of Neoliberalism in the Works of Ricardo Miranda Zúñiga," in *Video Games and the Global South*, ed. Phillip Penix-Tadsen (Pittsburgh: Carnegie Mellon University, 2019), 47–58; Jörg Friedrich, "You Do Have Responsibility! How Games Trivialize Fascism, Why This Should Concern Us and How We Could Change It," in *History in Games: Contingencies of an Authentic Past*, ed. Martin Lorber and Felix Zimmermann, Studies of Digital Media Culture 12 (Bielefeld: Transcript-Verl, 2020), 259–75.

indeed has their potency as tools for right wing extremists. 10 The emergence of a new range of tropes and tendencies within historical games has been catalogued and is the subject of ongoing academic scrutiny from multiple disciplines.<sup>11</sup> Innumerable monographs, edited volumes, and journal articles have been published considering a vast and expanding range of periods, <sup>12</sup> regions, <sup>13</sup> and themes <sup>14</sup> which have contributed to a vibrant and diverse historiographical tradition. Be-

<sup>10</sup> Jessie Daniels and Nick Lalone, "Racism in Video Gaming: Connecting Extremist and Mainstream Expressions of White Supremacy," in Social Exclusion, Power, and Video Game Play: New Research in Digital Media and Technology, ed. David G. Embrick, J. Talmadge Wright, and András Lukács (Lanham: Lexington Books, 2012), 85-100; Jules Skotnes-Brown, "Colonized Play: Racism, Sexism and Colonial Legacies in the DOTA 2 South Africa Gaming Community," in Video Games and the Global South, ed. Phillip Penix-Tadsen (Pittsburgh: Carnegie Mellon University, 2019), 143-53; Sam Srauy, "Professional Norms and Race in the North American Video Game Industry," Games and Culture 14, no. 5 (July 2019): 478-97, https://doi.org/10. 1177/1555412017708936.

<sup>11</sup> Matthew Kapell and Andrew B. R. Elliott, eds., Playing with the Past: Digital Games and the Simulation of History (New York: Bloomsbury Academic, 2013); Angenitus Arie Andries Mol et al., eds., The Interactive Past: Archaeology, Heritage & Video Games (Leiden: Sidestone Press, 2017); A. Martin Wainwright, Virtual History: How Videogames Portray the Past (Abingdon, Oxon; New York, NY: Routledge, 2019); Alexander von Lünen et al., eds., Historia Ludens: The Playing Historian, Routledge Approaches to History, vol. 30 (New York, NY: Routledge, 2020).

<sup>12</sup> Carl Heinze, Mittelalter Computer Spiele: Zur Darstellung und Modellierung von Geschichte im populären Computerspiel, Historische Lebenswelten in populären Wissenskulturen 8 (Bielefeld: Transcript-Verl, 2012); Tobias Winnerling and Florian Kerschbaumer, eds., Early Modernity and Video Games (Newcastle upon Tyne: Cambridge Scholars, 2014); Daniel T. Kline, ed., Digital Gaming Re-Imagines the Middle Ages, Routledge Studies in New Media and Cyberculture 15 (New York: Routledge, 2014); Christian Rollinger, ed., Classical Antiquity in Video Games: Playing with the Ancient World, Imagines - Classical Receptions in the Visual and Performing Arts (London; New York: Bloomsbury Academic, 2020).

<sup>13</sup> Vít Šisler, "Digital Arabs: Representation in Video Games," European Journal of Cultural Studies 11, no. 2 (2008): 203-20, https://doi.org/10.1177/1367549407088333; Fede Peñate Domínguez, "Steel-Clad Conquistadores on Horseback. A Case Study of Selective Authenticity and the Spanish Empire in Computer Games," Presura 23 (February 2017): 22-41; Phillip Penix-Tadsen, ed., Video Games and the Global South (Pittsburgh: Carnegie Mellon University, 2019). 14 Chris Kempshall, The First World War in Computer Games (Basingstoke, Hampshire; New York, NY: Palgrave Macmillan, 2015); Robert Houghton, ed., Playing the Crusades, Engaging the Crusades: The Memory and Legacy of the Crusades, Volume Five (Abingdon, Oxon; New York, NY: Routledge, 2021); Alyssa Goldstein Sepinwall, Slave Revolt on Screen: The Haitian Revolution in Film and Video Games, Caribbean Studies Series (Jackson: University Press of Mississippi, 2021).

yond this, games have been considered as scholarly historical research outputs, methods, and forums. <sup>15</sup>

A significant portion of this literature has focused on the use of games as learning tools. Historical games can have a phenomenal impact on their players' perceptions of the past – potentially to an even greater extent than any other form of popular media. Anecdotal evidence and a growing number of quantitative and qualitative studies have demonstrated that impact extends into the classroom: for a sizeable minority of students, games play a pivotal role in the emergence of an interest in history as a subject, but also in their formative understanding of the discipline and the past. The potency of games in this regard has contributed to their employment as elements of a growing range of educational programmes at almost every level of study, a development which has been accompanied by a corresponding emergence of a vibrant field of pedagogical research. There are of course limits to the capacities of games as educational tools and a number of authors have rightly highlighted potential pitfalls of using this medium in this manner ranging from the imperialist and colonialist tendencies of commercial games to the difficulties inherent in securing

<sup>15</sup> Clyde, Hopkins, and Wilkinson, "Beyond the 'Historical' Simulation"; Jeremy Antley, "Going Beyond the Textual in History," *Journal of Digital Humanities* 1, no. 2 (2012), http://jour nalofdigitalhumanities.org/1-2/going-beyond-the-textual-in-history-by-jeremy-antley/; Dawn Spring, "Gaming History: Computer and Video Games as Historical Scholarship," *Rethinking History* 19, no. 2 (2015): 207–21, https://doi.org/10.1080/13642529.2014.973714; Vinicius Marino Carvalho, "Videogames as Tools for Social Science History," *Historian* 79, no. 4 (2017): 794–819, https://doi.org/10.1111/hisn.12674; Robert Houghton, "Scholarly History through Digital Games: Pedagogical Practice as Research Method," in *Return to the Interactive Past: The Interplay of Video Games and Histories*, ed. Csilla E. Ariese-Vandemeulebroucke et al. (Sidestone Press, 2021), 137–55.

**<sup>16</sup>** Robert Houghton, "Where Did You Learn That? The Self-Perceived Educational Impact of Historical Computer Games on Undergraduates," *Gamevironments* 5 (2016): 8–45; Sian Beavers, "The Informal Learning of History with Digital Games" (Open University, 2019).

<sup>17</sup> Andrew B. R. Elliott and Matthew Kapell, "Introduction: To Build a Past That Will 'Stand the Test of Time'- Discovering Historical Facts, Assembling Historical Narratives," in *Playing with the Past: Digital Games and the Simulation of History*, ed. Matthew Kapell and Andrew B. R. Elliott (New York: Bloomsbury Academic, 2013); Houghton, "Where Did You Learn That?".

**<sup>18</sup>** Stefan Donecker, "Pharaoh Mao Zedong and the Musketeers of Babylon: The Civilization Series between Primordialist Nationalism and Subversive Parody," in *Early Modernity and Video Games*, ed. Tobias Winnerling and Florian Kerschbaumer (Newcastle upon Tyne: Cambridge Scholars, 2014), 105–22; Sabine Harrer, "Casual Empire: Video Games as Neocolonial Praxis," *Open Library of Humanities* 4, no. 1 (2018): 5, https://doi.org/10.16995/olh.210.

student engagement across an entire cohort. 19 Much of the skepticism around the use of games as learning tools emerges from the poor reputation of "edutainment" games, which are frequently seen as failures both in educational and entertainment terms.<sup>20</sup> Perhaps most notably in recent years, the edutainment game Playing History 2: Slave Trade<sup>21</sup> has been widely criticized for a combination of simplistic mechanics drawn from franchises as diverse as Tetris<sup>22</sup> and Crazy Taxi<sup>23</sup> with a naïve and often trivial discussion of a serious issue with heavy contemporary resonance.<sup>24</sup> Nevertheless, ludic approaches are demonstrably effective teaching tools when delivered using suitable games, in an appropriate context, and through a critical approach.<sup>25</sup> The development of more complex and interesting games which permit education through play rather than gamifying classroom activities or rote learning can provide a pedagogically valid interactive technique and support student engagement.<sup>26</sup> Even the most serious historical issues may potentially be approached through appropriately designed and deployed games.

<sup>19</sup> James Paul Gee, "What Video Games Have to Teach Us about Learning and Literacy," Computers in Entertainment 1, no. 1 (October 1, 2003): 1-20, https://doi.org/10.1145/950566.950595; David Leonard, "Live in Your World, Play in Ours': Race, Video Games, and Consuming the Other," SIMILE: Studies In Media & Information Literacy Education 3, no. 4 (November 2003): 1-9, http://dx.doi.org/10.3138/sim.3.4.002; Jeremiah McCall, "Teaching History With Digital Historical Games: An Introduction to the Field and Best Practices," Simulation & Gaming 47, no. 4 (2016): 517-42, https://doi.org/10.1177/1046878116646693; Robert Houghton, "History Games for Boys? Gender, Genre and the Self-Perceived Impact of Historical Games on Undergraduate Historians," Gamevironments 14 (2021): 1-49, https://doi.org/10.26092/ELIB/918.

<sup>20</sup> Richard Van Eck, "Digital Game Based Learning: It's Not Just the Digital Native Who Are Rest-Less," Educause Review 41 (2006): 16-30.

<sup>21</sup> Playing History 2: Slave Trade (Serious Games Interactive, 2013).

<sup>22</sup> Tetris (Alexey Pajitnov, 1984).

<sup>23</sup> Crazy Taxi (Sega, 1999).

<sup>24</sup> Wainwright, Virtual History, 196-99; Armond R. Towns, "Gamifying Blackness: From Slave Records to Playing History: Slave Trade," Information, Communication & Society 24, no. 12 (2021): 1-15, https://doi.org/10.1080/1369118X.2020.1739730.

<sup>25</sup> Kevin Schut, "Strategic Simulations and Our Past: The Bias of Computer Games in the Presentation of History," Games and Culture 2, no. 3 (2007): 213-35, https://doi.org/10.1177/ 1555412007306202; Jeremiah McCall, "Navigating the Problem Space: The Medium of Simulation Games in the Teaching of History," History Teacher 1 (2012): 9-28; Jeremiah McCall, "Playing with the Past: History and Video Games (and Why It Might Matter)," Journal of Geek Studies 6, no. 1 (2019): 29-48.

<sup>26</sup> Dennis Charsky, "From Edutainment to Serious Games: A Change in the Use of Game Characteristics," Games and Culture 5, no. 2 (2010): 177–98, https://doi.org/10.1177/1555412009354727; Simon Egenfeldt-Nielsen, Beyond Edutainment: Exploring the Educational Potential of Computer Games (S.l.: Selbstverlag bei www.lulu.com, 2010), Introduction.

Games may play a particularly important role in teaching which engages with the Middle Ages or medievalism. There is a growing body of evidence which suggests that historical games have a notably greater impact on their audience's perceptions of the pre-modern period than modern or contemporary history.<sup>27</sup> This trend is particularly noteworthy given that games which address the ancient world or, especially, the medieval world represent a significantly smaller proportion of published commercial games than those with a more modern setting.<sup>28</sup> There are numerous possible explanations for this anomaly, but ultimately these findings underline the potential utility of these games in teaching earlier periods of history. In combination with the unique and often unexpected tropes which emerge within games which employ medieval elements, games represent an important tool for the classroom in several fields, but one which must be deployed with particular care.

It is therefore vital that the use of games in the medieval history or medieval studies classroom is supported appropriately in order to ensure the effectiveness of the method and, moreover, to ensure that the exercise does not have a negative outcome for any students. This necessitates an understanding of emergent pedagogic approaches: of what games can teach and how. It also requires an engagement with the content of the games which will be used and, more generally, of the broader tendencies of historical representation within games.

## **Games for Teaching History**

There is a well-established pedagogy of learning through play developed initially with regards to teaching through card, board, and tabletop games,<sup>29</sup> and teaching with videogames rests in large part on these traditions. Most games are inherently learning experiences: the player must learn to manipulate the

<sup>27</sup> Houghton, "Where Did You Learn That?"; Beavers, "The Informal Learning of History with Digital Games."

<sup>28</sup> Yannick Rochat, "A Quantitative Study of Historical Video Games (1981-2015)," in Historia Ludens: The Playing Historian, ed. Alexander von Lünen et al., Routledge Approaches to History, vol. 30 (New York, NY: Routledge, 2020), 3-19.

<sup>29</sup> Matthew Kirschenbaum, "Contests for Meaning: Playing King Philip's War in the Twenty-First Century," in Pastplay: Teaching and Learning History with Technology, ed. Kevin Kee (University of Michigan Press, 2014), 202, https://doi.org/10.2307/j.ctv65swr0.13; Philip Sabin, "Wargames as an Academic Instrument," in Zones of Control: Perspectives on Wargaming, ed. Pat Harrigan and Matthew G. Kirschenbaum, Game Histories (Cambridge, Massachusetts: The MIT Press, 2016), 424.

game's systems in order to progress and ultimately complete the game.<sup>30</sup> In the case of historical games, the player must learn how best to interact with the pseudo-historical environment presented by the game. Digital games are, in some ways, more potent educational tools than their traditional counterparts, although they also carry additional limitations and challenges in their use. These games have been used at almost every level of study of history from preschool to postgraduate taught courses and deployed in various ways and to teach about a plethora of periods and themes.

At their most fundamental, historical digital games can introduce students to new periods, regions, and themes, and help to develop their basic understanding of elements of the past. 31 The audio-visual representations of environments and material culture within games such as Assassin's Creed, 32 Call of Duty, 33 Age of Empires, 34 or Total War35 can allow student players to experience a simplified and stylised version of a historical world which can nevertheless form a strong introduction to the period and a valuable foundation for future study.<sup>36</sup> A particular example of this approach is found in Nicholls' extensive and painstakingly detailed digital reconstruction of fourth century Rome and the use of this evolving model within the classroom.<sup>37</sup> Through his teaching, Nicholls has demonstrated that the physical environments created within digital games can be more accessible to students than traditional maps and plans.<sup>38</sup>

Games can move beyond these simple introductions to present historical theories and models through their mechanics and rules. A game's mechanics represent an abstract and truncated model of reality, which is nevertheless functional, internally consistent, and extensively explorable. This model is in essence an argument about the events and systems it represents.<sup>39</sup> In the case of historical

<sup>30</sup> Jesper Juul, Half-Real: Video Games between Real Rules and Fictional Worlds (Cambridge, Mass: MIT Press, 2005), 95-97.

<sup>31</sup> Juan Francisco Jiménez Alcázar, "The Other Possible Past: Simulation of the Middle Ages in Video Games," Imago Temporis 5 (2011): 311; Houghton, "Where Did You Learn That?," 32.

<sup>32</sup> Assassin's Creed (Ubisoft, 2007).

<sup>33</sup> Call of Duty (Activision, 2003).

<sup>34</sup> Age of Empires (Ensemble Studios, 1997).

<sup>35</sup> For example: Shogun: Total War (Creative Assembly, 2000).

<sup>36</sup> Spring, "Gaming History," 211-12; Chapman, Digital Games as History, 66; János Vas, "Four Categories Of Video Games in the Practice of History Teaching," Staféta 2 (2017): 217–19.

<sup>37</sup> Nicholls, "Digital Visualisation in Classics Teaching and Beyond."

<sup>38</sup> Nicholls, 27.

<sup>39</sup> Ian Bogost, "The Rhetoric of Video Games," in The Ecology of Games: Connecting Youth, Games, and Learning, ed. Katie Salen Tekinbaş, The John D. and Catherine T. Macarthur Foundation Series on Digital Media and Learning (Cambridge, Mass: MIT Press, 2008), 117-40; Ian

games, the game mechanics represent arguments about historical systems and societies: they do not show historical events as they happened, but rather describe historical frameworks. Within a learning environment, these games can be used to support the formative development of students' knowledge of historical systems through the presentation of arguments of cause and effect and by allowing the exploration of counter-factual histories. Games such as *Empire: Total War*<sup>42</sup> or *Patrician*<sup>43</sup> have been used to teach economic history from basic concepts of supply and demand to more complex considerations of Imperial economics and mercantilism. More complex games such as those of the *Civilization*<sup>45</sup> and *Europa Universalis* series allow students to explore nuanced geopolitical situations in their entirety, highlighting the interconnected nature of politics, society, technology, economics, warfare, and a range of other factors.

Bogost, *Persuasive Games: The Expressive Power of Videogames* (Cambridge, Mass.: MIT Press, 2010).

- **40** Rolfe Daus Peterson, Andrew Justin Miller, and Sean Joseph Fedorko, "The Same River Twice: Exploring Historical Representation and the Value of Simulation in the Total War, Civilization and Patrician Franchises," in *Playing with the Past: Digital Games and the Simulation of History*, ed. Matthew Kapell and Andrew B. R. Elliott (New York: Bloomsbury Academic, 2013), esp. p. 38; Adam Chapman, "Affording History: Civilization and the Ecological Approach," in *Playing with the Past: Digital Games and the Simulation of History*, ed. Matthew Kapell and Andrew B. R. Elliott (New York: Bloomsbury Academic, 2013), 61–73; Spring, "Gaming History," 215; Carvalho, "Videogames as Tools," 812; Houghton, "World, Structure and Play," 25–27.
- **41** Gary King, Robert O Keohane, and Sidney Verba, *Designing Social Inquiry: Scientific Inference in Qualitative Research*, 1994, http://www.dawsonera.com/depp/reader/protected/exter nal/AbstractView/S9781400821211; Harry J. Brown, *Videogames and Education* (Armonk, N.Y.: M.E. Sharpe, 2008), 118; Alcázar, "The Other Possible Past," 300–301; Peterson, Miller, and Fedorko, "The Same River Twice," esp. p. 38.
- 42 Empire: Total War (Activision, 2009).
- 43 The Patrician (Ascaron, 1993).
- 44 Peterson, Miller, and Fedorko, "The Same River Twice," 41-42.
- 45 Sid Meier's Civilization (MicroProse, 1991).
- 46 Europa Universalis (Paradox Interactive, 2000).
- 47 Alex Whelchel, "Using Civilization Simulation Video Games in the World History Classroom," *World History Connected* 4, no. 2 (2007), http://worldhistoryconnected.press.uillinois. edu/4.2/whelchel.html; John K. Lee and Jeffrey Probert, "Civilization III and Whole-Class Play," *The Journal of Social Studies Research* 34, no. 1 (2010): 1–28; John Pagnotti and William B. Russell, "Using Civilization IV to Engage Students in World History Content," *The Social Studies* 103, no. 1 (2012): 39–48, https://doi.org/10.1080/00377996.2011.558940; Tom Apperley, "Modding the Historians Code: Historical Versimilitude and the Counterfactual Imagination," in *Playing with the Past: Digital Games and the Simulation of History*, ed. Matthew Kapell and Andrew B. R. Elliott (New York: Bloomsbury Academic, 2013), 185–98; Peterson, Miller, and Fedorko, "The Same River Twice," 43; Stephen Ortega, "Representing the Past: Video Games

Even games with a less obvious connection to history have been employed to teach the subject, such as Vas' use of the post-apocalyptic roleplaying series Fallout<sup>48</sup> to consider societal collapse. 49 Similar ludic teaching approaches have been deployed or suggested in neighboring fields including archaeology, international relations, and politics.<sup>50</sup> Historical games can allow students to discuss complex theoretical frameworks at various levels, extending all the way to postgraduate study.<sup>51</sup>

Play can also enable the critique of the historical arguments represented by game mechanics. Although these arguments are often questionable or outdated, this can present opportunities to interrogate flimsy historical arguments. Highlighting and analyzing shortcomings in the mechanics of a historical game mirrors the methods used to analyze the veracity of historical arguments put forth in more traditional academic media, 52 and this activity holds substantial learning potential.<sup>53</sup> Ortega has successfully used class criticism of the mechanics of *Civilization V* to engage students with the critique of historical arguments more generally.<sup>54</sup> In a similar manner, and despite his concerns about acritical use of the game, Donnecker has suggested that Civilization may be used educationally as a parody of nationalist history and ideology through the critique of the game's representation of historical figures and processes.<sup>55</sup> As McMichael

- **48** *Fallout* (Interplay Productions, 1997).
- 49 Vas, "Four Categories Of Video Games in the Practice of History Teaching," 221-23; Boom et al., "Teaching through Play," 37-38.
- 50 Nicolas de Zamaróczy, "Are We What We Play? Global Politics in Historical Strategy Computer Games," International Studies Perspectives 18, no. 2 (2017): 155-58, https://doi.org/10. 1093/isp/ekv010; Tara Jane Copplestone, "Designing and Developing a Playful Past in Video Games," in The Interactive Past: Archaeology, Heritage & Video Games, ed. Angenitus Arie Andries Mol et al. (Leiden: Sidestone Press, 2017), 96; Boom et al., "Teaching through Play," 36-37.
- 51 A. Martin Wainwright, "Teaching Historical Theory through Video Games," The History Teacher 47, no. 4 (2014): 579.
- **52** Houghton, "World, Structure and Play," 27–29.
- 53 Jeremiah McCall, "Historical Simulations as Problem Spaces: Criticism and Classroom Use," Journal of Digital Humanities 1, no. 2 (2012): 21, http://journalofdigitalhumanities.org/1-2/historical-simulations-as-problem-spaces-by-jeremiah-mccall/.
- 54 Ortega, "Representing the Past," 1-4.
- 55 Donecker, "Pharaoh Mao Zedong and the Musketeers of Babylon," 120–21.

Challenge to the Historical Narrative," Syllabus 4, no. 1 (2015): 1-13; Vas, "Four Categories Of Video Games in the Practice of History Teaching," 215-17; Krijn H. J. Boom et al., "Teaching through Play: Using Video Games as a Platform to Teach about the Past," in Communicating the Past in the Digital Age: Proceedings of the International Conference on Digital Methods in Teaching and Learning in Archaeology (12th-13th October 2018), ed. Sebastian Hageneuer (Ubiquity Press, 2020), 36-37, https://doi.org/10.5334/bch.

notes, the use of games in this manner can develop students' understanding of the presentation of history in society, <sup>56</sup> and Vas has argued that this critical approach may be used outside the strategy genre to consider the representation of history within the mechanics and world of games such as Assassin's Creed.<sup>57</sup> The limitations of the history presented in games can serve as a valuable means to explore and criticize historical arguments and viewpoints within a critical educational context.

Digital games can also be used to teach about the nature of history as a discipline. Custom built games have been created to teach historiographical approaches and to promote deconstructionist approaches to history. Clyde and Wilkinson developed The History Game to demonstrate their views on the construction of history as an abstract concept, formed by the selection of facts, evidence, interpretations, and conclusions made by their player historians.<sup>58</sup> More recently, Martínez has developed Time Historians where students collect data and interpretations relating to ancient Egypt in order to collaboratively create a historical account. He takes a loosely similar approach to Clyde and Wilkinson and utilizes a deconstructionist approach to demonstrate historiography and historical discourse while underlining the limits of empiricism. 59 Games have also been created to directly and explicitly support the development of other historical skills – a key example of this is Compeau and MacDougal's Tecumesh Lies Here which deploys augmented reality to direct students to learn about historical events and arguments through traditional methods including the use of libraries, archives, and the internet.<sup>60</sup>

A less abstract method to engage students with historical debate makes use of user modifications and game creation and has been deployed by several historians and teachers. As the mechanics of historical games represent arguments about given periods and themes, the alteration of these mechanics on the basis of historical research corresponds to the development of counterarguments and

<sup>56</sup> Andrew McMichael, "PC Games and the Teaching of History," The History Teacher 40, no. 2 (February 2007): 203-4.

<sup>57</sup> Vas, "Four Categories Of Video Games in the Practice of History Teaching," 219-21.

<sup>58</sup> Jerremie Clyde and Glenn R. Wilkinson, "More Than a Game . . . Teaching in the Gamic Mode: Disciplinary Knowledge, Digital Literacy, and Collaboration," The History Teacher 46, no. 1 (2012): 49-56.

<sup>59</sup> Manuel Alejandro Cruz Martínez, "The Potential of Video Games for Exploring Deconstructionist History" (PhD, University of Sussex, 2019).

<sup>60</sup> Timothy Compeau and Robert MacDougall, "Tecumseh Lies Here: Goals and Challenges for a Pervasive History Game in Progress," in Pastplay: Teaching and Learning History with Technology, ed. Kevin Kee (University of Michigan Press, 2014), 94-97, https://doi.org/10. 2307/j.ctv65swr0.8.

debate. 61 Kee and Graham have demonstrated this in practice through student modification of *Civilization IV* as a conscious development of historical theses.<sup>62</sup> They have extended this method by having students construct digital games through a historically critical and scholarly approach. <sup>63</sup> Boom et al. have highlighted the widespread applicability of a similar method through the use of the text based game creator Twine: students develop gameplay based on their historical knowledge and research and in doing so create arguments about the past.<sup>64</sup>

Beyond these uses of game rules, mechanics, and modification as historical teaching methods, the use of this media as a platform for roleplay has substantial pedagogical merit. Bowman has constructed an extensive historical survey addressing the use of roleplaying games across a substantial range of fields, 65 and there is some evidence that roleplaying elements of games can extend their impact on players' understanding of history. 66 Within the study of history, roleplay has long formed an educational tool across periods and themes as a means to engage students with new periods and approaches, <sup>67</sup> and while these methods do not necessarily rely on formal game environments and structures, they nevertheless can form important elements of learning strategies through games. McDaniel's basic methodology for the deployment of educational roleplay (through preparing students with some knowledge of the subject matter, placing students in conflicting positions, providing direction and objectives for students within roleplay, managing students' progress through the exercise

<sup>61</sup> Shawn Graham, "Rolling Your Own: On Modding Commercial Games for Educational Goals," in Pastplay: Teaching and Learning History with Technology, ed. Kevin Kee (University of Michigan Press, 2014), 226-27, https://doi.org/10.2307/j.ctv65swr0; Kevin Kee and Shawn Graham, "Teaching History in an Age of Pervasive Computing: The Case for Games in the High School and Undergraduate Classroom," in Pastplay: Teaching and Learning History with Technology, ed. Kevin Kee (University of Michigan Press, 2014), 279, https://doi.org/10.2307/j. ctv65swr0.17; Greg Koebel, "Simulating the Ages of Man: Periodization in Civilization V and Europa Universalis IV," Loading . . . The Journal of the Canadian Game Studies Association 10, no. 17 (2017): 72; Houghton, "World, Structure and Play," 27-31.

<sup>62</sup> Kee and Graham, "Teaching History in an Age of Pervasive Computing," 279-81.

<sup>63</sup> Kee and Graham, 281-85.

<sup>64</sup> Boom et al., "Teaching through Play," 34-36.

<sup>65</sup> Sarah Lynne Bowman, "Educational Live Action Role-Playing Games: A Secondary Literature Review," The Wyrd Con Companion Book 3 (2014): 112-31.

<sup>66</sup> Houghton, "Where Did You Learn That?," 27-28.

**<sup>67</sup>** Sharon M. Fennessey, History in the Spotlight: Creative Drama and Theatre Practices for the Social Studies Classroom / Sharon M. Fennessey (Portsmouth, NH: Heinemann, 2000); Avril Maddrell, "Teaching a Contextual and Feminist History of Geography through Role Play: Women's Membership of the Royal Geographical Society (1892-1893)," Journal of Geography in Higher Education 31, no. 3 (2007): 393-412, https://doi.org/10.1080/03098260601082305.

and ultimately embedding the roleplay activity within the broader curriculum<sup>68</sup>) was not designed around the use of games, but coincidentally follows much the same structure as McCall's framework for ludic education. <sup>69</sup> There is substantial potential for the further development of this overlap between roleplay and games in an educational environment.

Despite the wide-ranging and diverse potential for games as learning tools, it is important to acknowledge the limitations and peculiarities of the medium. The portrayal of history within commercial games is subject to the same pressures and trends found in any other media and, just as is the case with any other media, they tend to favor commercial interests, artistic spectacle, and popular expectations over historical veracity or depth. 70 Players' behavior within a game and their interpretation of the history it represents are inevitably influenced to a substantial extent by their understanding of this history: to an extent, the experience of history through games mirrors the players' expectations regardless of the intention of the creators of the game. <sup>71</sup> The focus on interactivity, player agency, competition, and progression within games can exaggerate these tendencies or create new and unexpected tropes and while the creation of custom games for learning purposes can alleviate many of these issues; this requires an understanding of how the fundamental differences in how games construct and communicate history in comparison to more traditional media. The creation of such games - and computer games in particular - can also require substantial investment of time and resources and requires a skillset removed from that of the traditional historian. Students also have a propensity to accept the history produced within games used for teaching as fact without challenging the arguments.<sup>72</sup> Most significantly, it must be acknowledged that proficiency, enthusiasm, and engagement with games can vary substantially within a class and there is alarming potential to alienate individuals and groups.<sup>73</sup>

<sup>68</sup> Kathryn N. McDaniel, "Four Elements of Successful Historical Role-Playing in the Classroom," The History Teacher 33, no. 3 (May 2000): 357, https://doi.org/10.2307/495033.

<sup>69</sup> McCall, "Teaching History With Digital Historical Games."

<sup>70</sup> Donecker, "Pharaoh Mao Zedong and the Musketeers of Babylon," 116; Alessandro Testa, "Religion(s) in Videogames - Historical and Anthropological Observations," Online - Heidelberg Journal of Religions on the Internet 5 (2014): 271, https://doi.org/10.11588/REL.2014.0. 12170; Adam Scott Glancy, "The 'I' in Team: War and Combat in Tabletop Tole-Playing Games," in Zones of Control: Perspectives on Wargaming, ed. Pat Harrigan and Matthew G. Kirschenbaum, Game Histories (Cambridge, Massachusetts: The MIT Press, 2016), 71-80; Houghton, "World, Structure and Play," 35-36.

<sup>71</sup> Chapman, Digital Games as History, 36.

<sup>72</sup> Schut, "Strategic Simulations," 228–29; Boom et al., "Teaching through Play," 31.

<sup>73</sup> McCall, "Teaching History With Digital Historical Games," 532–33.

Nevertheless, the potency of games in the history classroom is evident. Despite their shortcomings, historical games can act as valuable and innovative methods for students to explore the past, but for this approach to be effective, they must be deployed critically. They must be used alongside formal teaching and accompanied by reflection before, during, and after play.<sup>74</sup> Furthermore, the limitations of individual games and the attitudes students bring to the medium and themes within these games must be addressed within the classroom.<sup>75</sup> McCall has emphasized the important role teachers should play in guiding students through the critical play and exploration of games, <sup>76</sup> and has developed extensive guidelines for the use of games as classroom tools.<sup>77</sup> In a similar manner, Pagnotti and Russell have produced an outline for the critical use of Civilization IV. 78 There is substantial pedagogical merit to these approaches and there is no reason why games should not be considered as valuable teaching tools when employed through the appropriate critical methods.

# Modern Games and the Middle Ages

The place of the Middle Ages within modern games is peculiar. Representations of the period are driven by the confluence of medievalist and gaming tropes which often produce exaggerated or unexpected accounts. Games as a media tend to emphasize a number of factors including violence, 79 progression, 80

<sup>74</sup> Ronan Lynch, Bride Mallon, and Cornelia Connolly, "The Pedagogical Application of Alternate Reality Games: Using Game-Based Learning to Revisit History," International Journal of Game-Based Learning 5, no. 2 (2015): 35-37, https://doi.org/10.4018/ijgbl.2015040102; Boom et al., "Teaching through Play," 31.

<sup>75</sup> Scott Alan Metzger and Richard J. Paxton, "Gaming History: A Framework for What Video Games Teach About the Past," Theory & Research in Social Education 44, no. 4 (2016): 556-58, https://doi.org/10.1080/00933104.2016.1208596.

**<sup>76</sup>** McCall, "Navigating the Problem Space," 23–24.

<sup>77</sup> McCall, 24-25; McCall, "Teaching History With Digital Historical Games."

<sup>78</sup> Pagnotti and Russell, "Using Civilization IV to Engage Students."

<sup>79</sup> de Zamaróczy, "Are We What We Play?," 165; Boom et al., "Teaching through Play," 33-34; Emil Lundedal Hammar, "Producing & Playing Hegemonic Pasts: Historical Digital Games as Memory-Making Media" (PhD, Arctic University of Norway, 2020), 64, https:// munin.uit.no/handle/10037/17717; Houghton, "If You're Going to Be the King."

<sup>80</sup> Kaspar Pobłocki, "Becoming-State: The Bio-Cultural Imperialism of Sid Meier's Civilization," Focaal - European Journal of Anthropology 39 (2002): 165; Claudio Fogu, "Digitizing Historical Consciousness," History and Theory 48, no. 2 (May 2009): 117, https://doi.org/10.1111/j.

and competition<sup>81</sup> while abstracting, marginalizing or ignoring social interaction, 82 religion, 83 and morality. 84 Popular perceptions of the Middle Ages also typically focus on violence<sup>85</sup> but promote a vision of technological and social backwardness, 86 the centrality of religion, 87 and moral absolutes. Both sets of tropes tend towards eurocentrism and a white, male, and heterosexual world.<sup>88</sup> The combination of these tropes within modern games which employ medieval elements often produce easily anticipated exaggerations - such as extreme and endemic violence, implicit structural racism and sexism, or near absolute homogeneity of characters - but can also create more unexpected aberrations - Whiggish mechanics of technological progress accompanied by a "Dark Age" narrative, colorblind colonial empires in the eleventh century, or the segregation of religious paraphernalia and ritual from faith and morality.

<sup>1468-2303.2009.00500.</sup>x; de Zamaróczy, "Are We What We Play?," 166-67; Metzger and Paxton, "Gaming History," 554.

<sup>81</sup> Espen J. Aarseth, "Quest Games as Post-Narrative Discourse," in Narrative across Media: The Languages of Storytelling, ed. Marie-Laure Ryan, Frontiers of Narrative (Lincoln: University of Nebraska Press, 2004), 365-66; Adam Smith and Soren Johnson, "Soren Johnson on Challenging the Norms of 4X Games," Rock, Paper, Shotgun (blog), April 6, 2018, https://www.rock papershotgun.com/2018/04/06/soren-johnson-4x-strategy-interview/.

<sup>82</sup> de Zamaróczy, "Are We What We Play?," 164-67; Wainwright, Virtual History, 102-11.

<sup>83</sup> Domínguez, "Steel-Clad Conquistadores," 37; Wainwright, Virtual History, 141-48; Vít Šisler, "From Kuma\War to Quraish: Representation of Islam in Arab and American Video Games," in Playing with Religion in Digital Games, ed. Heidi Campbell and Gregory P. Grieve, Digital Game Studies (Bloomington, IN: Indiana University Press, 2014), 124–25.

<sup>84</sup> William J. White, "The Right to Dream of the Middle Ages Simulating the Medieval in Tabletop RPGs," in Digital Gaming Re-Imagines the Middle Ages, ed. Daniel T. Kline, Routledge Studies in New Media and Cyberculture 15 (New York: Routledge, 2014), 21-22; Kathrin Trattner, "Religion, Games, and Othering: An Intersectional Approach," Gamevironments 4 (2016): 43-44; Hammar, "Producing & Playing Hegemonic Pasts," 65; Tilo Hartmann and Peter Vorderer, "It's Okay to Shoot a Character: Moral Disengagement in Violent Video Games," Journal of Communication 60, no. 1 (March 2010): 98, https://doi.org/10.1111/j.1460-2466.2009.01459.x.

<sup>85</sup> Debra Ferreday, "Game of Thrones, Rape Culture and Feminist Fandom," Australian Feminist Studies 30, no. 83 (2015): 21-36, https://doi.org/10.1080/08164649.2014.998453; James L. Smith, "Medievalisms of Moral Panic:," in Studies in Medievalism XXV: Medievalism and Modernity, ed. Karl Fugelso, Joshua Davies, and Sarah Salih (Boydell and Brewer, 2016), 163-70, www.jstor.org/stable/10.7722/j.ctt19x3hn8.16.

<sup>86</sup> Andrew B. R. Elliott, Medievalism, Politics and Mass Media: Appropriating the Middle Ages in the Twenty-First Century, Medievalism 10 (Woodbridge, Suffolk: D. S. Brewer, 2017), 55-77

**<sup>87</sup>** Heinze, *Mittelalter Computer Spiele*, 242–43.

<sup>88</sup> Lisa Nakamura, "Queer Female of Color: The Highest Difficulty Setting There Is? Gaming Rhetoric as Gender Capital," ADA 1 (2012), https://doi.org/10.7264/N37P8W9V; Hammar, "Producing & Playing Hegemonic Pasts," 70–71.

These representations can easily influence their players perceptions of the Middle Ages, perhaps more so than for later periods of history.<sup>89</sup> Educational curricula largely marginalise or omit the medieval period leaving game developers and players to rely primarily on popular history and historical fiction to inform their understanding and play. 90 Medievalism is deeply embedded within the western popular imagination and has been employed to a substantial extent within the construction of modern political, cultural, and national identities,<sup>91</sup> and the reproduction of this medievalism within games serves to encourage players to accept their portrayal of the period. 92 The popularity of the fantasy genre within games and other media and the close association of this format with the medieval further complicates the representations within these games, but also contributes to their impact on their players' understanding of the period. 93 In combination, these factors contribute strongly to the potential influence exerted by these games.

As such, it is particularly important to consider the limitations of historical games for the teaching of the Middle Ages. They can be hugely influential both inside and outside the classroom and the complexity of influences behind their representations can lead to a sizeable range of deep and often unexpected depictions and receptions. In concert these issues can lead players towards unusual understandings of the period which must be interrogated carefully through critical play and integration with broader learning activities and approaches. This by no means disqualifies games as educational tools for the Middle Ages, and

<sup>89</sup> Houghton, "Where Did You Learn That?," 25-26.

<sup>90</sup> Houghton, 13-14.

<sup>91</sup> Elliott, Medievalism, Politics and Mass Media; Paul B. Sturtevant, The Middle Ages in Popular Imagination: Memory, Film and Medievalism, New Directions in Medieval Studies (London; New York: I.B. Tauris, 2018).

<sup>92</sup> Julian Wolterink, "Authentic Historical Imagery: A Suggested Approach for Medieval Videogame," Gamevironments 6 (2017): 104-31; Andrew B. R. Elliott and Mike Horswell, "Crusading Icons: Medievalism and Authenticity in Historical Digital Games," in History in Games: Contingencies of an Authentic Past, ed. Lorber Martin and Felix Zimmermann, Studies of Digital Media Culture 12 (Bielefeld: Transcript-Verl, 2020), 142.

<sup>93</sup> Leigh Schwartz, "Fantasy, Realism, and the Other in Recent Video Games," Space and Culture 9, no. 3 (2006): 313-25, https://doi.org/10.1177/1206331206289019; Adam Chapman, "Playing the Historical Fantastic: Zombies, Mecha-Nazis and Making Meaning about the Past through Metaphor," in War Games: Memory, Militarism and the Subject of Play, ed. Phil Hammond and Holger Pötzsch (New York, NY: Bloomsbury Academic, 2020), 91-97; Aurelia Brandenburg, "'If It's a Fantasy World, Why Bother Trying to Make It Realistic?' Constructing and Debating the Middle Ages of The Witcher 3: Wild Hunt," in History in Games: Contingencies of an Authentic Past, ed. Martin Lorber and Felix Zimmermann, Studies of Digital Media Culture 12 (Bielefeld: Transcript-Verl, 2020), 201-20.

indeed as the chapters in this volume demonstrate they can be incredibly effective in this role, but it demands particular care when using them.

It should also be noted that the complex and convergent gaming and medievalist tropes present within these games pose some important learning and teaching opportunities. The web of influences behind these representations of the Middle Ages can form the basis for discussion of the development and dissemination of public medievalism and popular history.<sup>94</sup> In fact, the exaggerated tropes within this media in conjunction with the very visible and vocal popular discussion around these games can make them particularly useful case studies for this purpose – indeed this was a principle motivation for Heinze in selecting games with medieval elements as the subject of his Mittelalter Computer Spiele. 95 Beyond this, these games may be readily employed as demonstrations of the construction and interrogation of history: the selection and privileging of sources; the arrangement of data to support arguments through the creation of mechanics; and ultimately the consideration and debate of these arguments through play, counterplay, and user-modification. There are in sum a plethora of viable educational uses for representations of the Middle Ages in modern games.

#### This Volume

This volume presents a series of approaches to the use of historical games as learning and teaching tools for Medieval Studies and Popular Medievalism. In doing so it considers the use of physical and digital games as teaching tools at pre-university, undergraduate, and postgraduate levels; addresses the creation or modification of games for teaching; highlights the possibilities posed through user-modification as a learning activity; and ultimately notes the potential of games outside the classroom within museums and historical research. The volume balances the development of pedagogical theory with a substantial range of practical examples and highlights the overlap of effective teaching methods at pre-university and university level. This is facilitated through a tight focus on games as a medium and medieval history as the taught subject.

<sup>94</sup> Andreas Körber, Johannes Meyer-Hamme, and Robert Houghton, "Learning to Think Historically: Some Theoretical Challenges When Playing the Crusades," in *Playing the Crusades*, ed. Robert Houghton, Engaging the Crusades: The Memory and Legacy of the Crusades, Volume Five (Abingdon, Oxon; New York, NY: Routledge, 2021), 103.

<sup>95</sup> Heinze, Mittelalter Computer Spiele, 13–17.

Part I provides a consideration of the learning impact of games on their players within and outside the classroom. In their chapter, Eve Stirling and Jamie Wood use the results of an extensive online survey to examine the formative learning acquired by history students' casual play of historical video games. They explore how and why the respondents thought that some games were historical, and how playing games encouraged them to go beyond the digital world to further their understanding of the past. They consider students' roles as active agents in learning about the past through virtual play rather than as passive consumers of digital products. They draw on this analysis to provide suggestions about how games might be used productively to support students' learning.

Part II concerns the use of commercial games in education. Within this section, Mike Horswell sketches out ways in which crusading was presented in Assassin's Creed, and demonstrates how we might unpack its vision of crusading and the histories of perceptions of the past embedded in, and transmitted by, the franchise-launching game. David Devine continues in this vein to consider gamifying the composition classroom at university level by using Skyrim to allow the player to take on the identity of "the student of medievalist rhetoric." Mehmet Sükrü Kuran and Ahmet Erdem Tozoğlu describe their experiences using Crusader Kings II as a supplementary tool to teach medieval macrohistory following a "history-as-a-process" philosophy and to provide an immersive teaching experience through the combination of lectures and discussions with personal gaming experience.

Part III moves on to consider the possibilities presented by custom built games within the classroom. In their chapter Klio Stamou, Anna Sotiropoulou, and Phivos Milonas describe the creation of a video game designed to familiarize pre-university students with the Byzantine era and aspects of its everyday life - such as military organization and public administration – and hence to develop students' historical thinking and social awareness. Next, Owen Gottlieb and Shawn Clybor address their experience of iterative curriculum design around the Lost & Found series set in Fustat (Old Cairo) in the twelfth century at high school level. In the final chapter of this section Coutnay Konshuh and Frank Klaasen explore the creation and deployment of their game – The Renaissance Marriage Game – as a supplementary educational tool and reflect on its use within a large class.

Part IV considers the potential of student led game design and modification as a pedagogical tool. Erik Champion, Terhi Nurmikko-Fuller, and Katrina Grant explore the ways in which Skyrim can be used and modified by undergraduate and postgraduate students to explain, through play, three related aspects of medieval society: the distinctive, related, and unique characteristics of Romanesque and Gothic architecture; the art, craft, and preservation of calligraphy, literature, inscription, and lore; and the importance of the medieval

landscape in art history. Robert Houghton's chapter presents a teaching case study around the creation and modification of a board game representation of the Investiture Contest, underlines the importance of historical and digital literacies in the use of such methods, and considers techniques to counter underlying assumptions about the period and medium. Finally, Klaasen considers how theoretical models or concepts (such as race, class gender, anxiety, inversion, or repression) may be used as the basis for students to develop historical games which reflect and investigate these concepts through their mechanics.

Part V addresses the potential of historical games outside the classroom. Mariana Lopez, Marques Hardin, and Wenqi Wan discuss how gamification strategies have been combined with specialist knowledge on acoustical heritage, computer modelling, soundscape recreation, and medieval drama to create the online interface The Soundscapes of the York Mystery Plays. The final chapter by Houghton considers the potential of games as research tools for professional academic study. It considers the theory and practice surrounding this emergent field to highlight the possibilities and pitfalls presented by this medium and highlights divergent Gamic, Simulacrum, and Roleplaying approaches.

These chapters address numerous aspects of games as educational tools within various aspects of the field of medieval history and aligned and adjacent disciplines. Their approaches are hugely varied and present a cross section of the incredibly diverse array of teaching and learning methods surrounding the use of this media. Taken as a whole, they provide a substantial range of methods and methodologies which may be profitably transferred to teach almost any element of the Middle Ages or medievalism and to consider issues from other periods and fields. The pedagogical utility of games is undoubtedly limited by designer and audience expectations of the medium alongside its practical limitations, but the case studies and theory related through this volume do much to alleviate these issues and demonstrate the potency of games as educational tools.

# **Bibliography**

Aarseth, Espen J. Cybertext: Perspectives on Ergodic Literature. Baltimore, Md: Johns Hopkins University Press, 1997.

Aarseth, Espen J. "Quest Games as Post-Narrative Discourse." In Narrative across Media: The Languages of Storytelling, edited by Marie-Laure Ryan, 361–76. Frontiers of Narrative. Lincoln: University of Nebraska Press, 2004.

Alcázar, Juan Francisco Jiménez. "The Other Possible Past: Simulation of the Middle Ages in Video Games." Imago Temporis 5 (2011): 299-340.

- Alvestad, Karl, and Robert Houghton, eds. The Middle Ages in Modern Culture: History and Authenticity in Contemporary Medievalism. 2021. https://doi.org/10.5040/ 9781350167452?locatt=label:secondary bloomsburyCollections.
- Andriotis, Konstantinos. "Genres of Heritage Authenticity: Denotations from a Pilgrimage Landscape." Annals of Tourism Research 38, no. 4 (October 2011): 1613-33. https://doi. org/10.1016/j.annals.2011.03.001.
- Antley, Jeremy. "Going Beyond the Textual in History." Journal of Digital Humanities 1, no. 2 (2012). http://journalofdigitalhumanities.org/1-2/going-beyond-the-textual-in-history-byjeremy-antley/.
- Apperley, Tom. "Modding the Historians Code: Historical Versimilitude and the Counterfactual Imagination." In Playing with the Past: Digital Games and the Simulation of History, edited by Matthew Kapell and Andrew B. R. Elliott, 185-98. New York: Bloomsbury Academic, 2013.
- Beavers, Sian, "The Informal Learning of History with Digital Games," Open University, 2019. Bogost, Ian. Persuasive Games: The Expressive Power of Videogames. Cambridge, Mass.: MIT Press, 2010.
- Bogost, Ian. "The Rhetoric of Video Games." In The Ecology of Games: Connecting Youth, Games, and Learning, edited by Katie Salen Tekinbaş, 117-40. The John D. and Catherine T. Macarthur Foundation Series on Digital Media and Learning. Cambridge, Mass: MIT Press, 2008.
- Boom, Krijn H. J., Csilla E. Ariese, Bram van den Hout, Angenitus Arie Andries Mol, and Aris Politopoulos. "Teaching through Play: Using Video Games as a Platform to Teach about the Past." In Communicating the Past in the Digital Age: Proceedings of the International Conference on Digital Methods in Teaching and Learning in Archaeology (12th-13th October 2018), edited by Sebastian Hageneuer, 27-44. Ubiquity Press, 2020. https://doi.org/10.5334/bch.
- Bowman, Sarah Lynne. "Educational Live Action Role-Playing Games: A Secondary Literature Review." The Wyrd Con Companion Book 3 (2014): 112-31.
- Brandenburg, Aurelia. "'If It's a Fantasy World, Why Bother Trying to Make It Realistic?" Constructing and Debating the Middle Ages of The Witcher 3: Wild Hunt." In History in Games: Contingencies of an Authentic Past, edited by Martin Lorber and Felix Zimmermann, 201-20. Studies of Digital Media Culture 12. Bielefeld: Transcript-Verl, 2020.
- Brown, Harry J. Videogames and Education. Armonk, N.Y.: M.E. Sharpe, 2008.
- Carvalho, Vinicius Marino. "Videogames as Tools for Social Science History." Historian 79, no. 4 (2017): 794-819. https://doi.org/10.1111/hisn.12674.
- Cassone, Vincenzo Idone, and Mattia Thibault. "The HGR Framework: A Semiotic Approach to the Representation of History in Digital Games." Gamevironments 5 (2016): 156-204.
- Champion, Erik. Critical Gaming: Interactive History and Virtual Heritage. Digital Research in the Arts and Humanities. Farnham, Surrey: Ashgate, 2015.
- Chapman, Adam. "Affording History: Civilization and the Ecological Approach." In Playing with the Past: Digital Games and the Simulation of History, edited by Matthew Kapell and Andrew B. R. Elliott, 61-73. New York: Bloomsbury Academic, 2013.
- Chapman, Adam. Digital Games as History: How Videogames Represent the Past and Offer Access to Historical Practice. Routledge Advances in Game Studies 7. New York, NY: Routledge, Taylor & Francis Group, 2016.

- Chapman, Adam. "Playing the Historical Fantastic: Zombies, Mecha-Nazis and Making Meaning about the Past through Metaphor." In War Games: Memory, Militarism and the Subject of Play, edited by Phil Hammond and Holger Pötzsch, 91-110. New York, NY: Bloomsbury Academic, 2020.
- Charsky, Dennis. "From Edutainment to Serious Games: A Change in the Use of Game Characteristics." Games and Culture 5, no. 2 (2010): 177-98. https://doi.org/10.1177/ 1555412009354727.
- Classen, Christoph, and Wulf Kansteiner. "Truth and Authenticity in Contemporary Historical Culture: An Introduction to Historical Representation and Historical Truth." History and Theory 48, no. 2 (May 2009): 1-4. https://doi.org/10.1111/j.1468-2303.2009.00495.x.
- Clyde, Jerremie, Howard Hopkins, and Glenn Wilkinson. "Beyond the 'Historical' Simulation: Using Theories of History to Inform Scholarly Game Design." Loading . . . The Journal of the Canadian Game Studies Association 6, no. 9 (2012). http://journals.sfu.ca/loading/ index.php/loading/article/viewArticle/105.
- Clyde, Jerremie, and Glenn R. Wilkinson. "More Than a Game . . . Teaching in the Gamic Mode: Disciplinary Knowledge, Digital Literacy, and Collaboration." The History Teacher 46, no. 1 (2012): 45-66.
- Compeau, Timothy, and Robert MacDougall. "Tecumseh Lies Here: Goals and Challenges for a Pervasive History Game in Progress." In Pastplay: Teaching and Learning History with Technology, edited by Kevin Kee, 87-108. University of Michigan Press, 2014. https://doi.org/10.2307/j.ctv65swr0.8.
- Copplestone, Tara Jane. "But That's Not Accurate: The Differing Perceptions of Accuracy in Cultural-Heritage Videogames between Creators, Consumers and Critics." Rethinking History 21, no. 3 (2017): 415-38. https://doi.org/10.1080/13642529.2017.1256615.
- Copplestone, Tara Jane. "Designing and Developing a Playful Past in Video Games." In The Interactive Past: Archaeology, Heritage & Video Games, edited by Angenitus Arie Andries Mol, Csilla E. Ariese-Vandemeulebroucke, Krijn H. J. Boom, and Aris Politopoulos, 85-97. Leiden: Sidestone Press, 2017.
- Daniels, Jessie, and Nick Lalone. "Racism in Video Gaming: Connecting Extremist and Mainstream Expressions of White Supremacy." In Social Exclusion, Power, and Video Game Play: New Research in Digital Media and Technology, edited by David G. Embrick, J. Talmadge Wright, and András Lukács, 85-100. Lanham: Lexington Books, 2012.
- Domínguez, Fede Peñate. "Steel-Clad Conquistadores on Horseback. A Case Study of Selective Authenticity and the Spanish Empire in Computer Games." Presura 23 (February 2017): 22-41.
- Donecker, Stefan. "Pharaoh Mao Zedong and the Musketeers of Babylon: The Civilization Series between Primordialist Nationalism and Subversive Parody." In Early Modernity and Video Games, edited by Tobias Winnerling and Florian Kerschbaumer, 105-22. Newcastle upon Tyne: Cambridge Scholars, 2014.
- Egenfeldt-Nielsen, Simon. Beyond Edutainment: Exploring the Educational Potential of Computer Games. S.l.: Selbstverlag bei www.lulu.com, 2010. Introduction.
- Elliott, Andrew B. R. Medievalism, Politics and Mass Media: Appropriating the Middle Ages in the Twenty-First Century. Medievalism 10. Woodbridge, Suffolk: D. S. Brewer, 2017.
- Elliott, Andrew B. R., and Mike Horswell. "Crusading Icons: Medievalism and Authenticity in Historical Digital Games." In History in Games: Contingencies of an Authentic Past, edited by Lorber Martin and Felix Zimmermann, 137-55. Studies of Digital Media Culture 12. Bielefeld: Transcript-Verl, 2020.

- Elliott, Andrew B. R., and Matthew Kapell, "Introduction: To Build a Past That Will 'Stand the Test of Time'- Discovering Historical Facts, Assembling Historical Narratives." In Playing with the Past: Digital Games and the Simulation of History, edited by Matthew Kapell and Andrew B. R. Elliott. New York: Bloomsbury Academic, 2013.
- Ensslin, Astrid. Literary Gaming. Cambridge, Massachusetts; London, England: The MIT Press, 2014.
- Fennessey, Sharon M. History in the Spotlight: Creative Drama and Theatre Practices for the Social Studies Classroom / Sharon M. Fennessev. Portsmouth, NH: Heinemann, 2000.
- Ferreday, Debra. "Game of Thrones, Rape Culture and Feminist Fandom." Australian Feminist Studies 30, no. 83 (2015): 21-36. https://doi.org/10.1080/08164649.2014.998453.
- Fogu, Claudio. "Digitizing Historical Consciousness." History and Theory 48, no. 2 (May 2009): 103-21. https://doi.org/10.1111/j.1468-2303.2009.00500.x.
- Folder, Lori. "Thrones of Britannia Campaign Map Reveal." Total War Blog (blog), November 12, 2017. https://www.totalwar.com/blog/thrones-campaign-map-reveal.
- Friedrich, Jörg. "You Do Have Responsibility! How Games Trivialize Fascism, Why This Should Concern Us and How We Could Change It." In History in Games: Contingencies of an Authentic Past, edited by Martin Lorber and Felix Zimmermann, 259-75. Studies of Digital Media Culture 12. Bielefeld: Transcript-Verl, 2020.
- Gee, James Paul. "What Video Games Have to Teach Us about Learning and Literacy." Computers in Entertainment 1, no. 1 (October 1, 2003): 1-20. https://doi.org/10.1145/ 950566.950595.
- Graham, Shawn. "Agent Based Models, Archaeogaming, and the Useful Deaths of Digital Romans." In The Interactive Past: Archaeology, Heritage & Video Games, edited by Angenitus Arie Andries Mol, Csilla E. Ariese-Vandemeulebroucke, Krijn H. J. Boom, and Aris Politopoulos, 123-31. Leiden: Sidestone Press, 2017.
- Graham, Shawn. "Rolling Your Own: On Modding Commercial Games for Educational Goals." In Pastplay: Teaching and Learning History with Technology, edited by Kevin Kee, 214-27. University of Michigan Press, 2014. https://doi.org/10.2307/j.ctv65swr0.
- Hammar, Emil Lundedal. "Producing & Playing Hegemonic Pasts: Historical Digital Games as Memory-Making Media." PhD, Arctic University of Norway, 2020. https://munin.uit.no/ handle/10037/17717.
- Harrer, Sabine. "Casual Empire: Video Games as Neocolonial Praxis." Open Library of Humanities 4, no. 1 (2018): 5. https://doi.org/10.16995/olh.210.
- Hartmann, Tilo, and Peter Vorderer. "It's Okay to Shoot a Character: Moral Disengagement in Violent Video Games." Journal of Communication 60, no. 1 (March 2010): 94-119. https://doi.org/10.1111/j.1460-2466.2009.01459.x.
- Heinze, Carl. Mittelalter Computer Spiele: Zur Darstellung und Modellierung von Geschichte im populären Computerspiel. Historische Lebenswelten in populären Wissenskulturen 8. Bielefeld: Transcript-Verl, 2012.
- Houghton, Robert. "History Games for Boys? Gender, Genre and the Self-Perceived Impact of Historical Games on Undergraduate Historians." Gamevironments 14 (2021): 1-49. https://doi.org/10.26092/ELIB/918.
- Houghton, Robert. "If You're Going to Be the King, You'd Better Damn Well Act like the King: Setting Objectives to Encourage Realistic Play in Grand Strategy Computer Games." In The Middle Ages in Modern Culture: History and Authenticity in Contemporary Medievalism, edited by Karl Alvestad and Robert Houghton, 186-210. IBTauris, 2021.

AU: Please provide missing publisher location for the "Houghton, 2021" referen-

ces list entry.

- Houghton, Robert. "It's What You Do With It That Counts: Factual Accuracy and Mechanical Accuracy in Crusader Kings II." The Public Medievalist (blog), September 30, 2014. https://www.publicmedievalist.com/ckii-houghton/.
- Houghton, Robert, ed. Playing the Crusades. Engaging the Crusades: The Memory and Legacy of the Crusades, Volume Five. Abingdon, Oxon; New York, NY: Routledge, 2021.
- Houghton, Robert. "Scholarly History through Digital Games: Pedagogical Practice as Research Method." In Return to the Interactive Past: The Interplay of Video Games and Histories, edited by Csilla E. Ariese-Vandemeulebroucke, Kriin H. I. Boom, Angenitus Arie Andries Mol, and Aris Politopoulos, 137-55. Sidestone Press, 2021.
- Houghton, Robert. "Where Did You Learn That? The Self-Perceived Educational Impact of Historical Computer Games on Undergraduates." Gamevironments 5 (2016): 8-45.
- Houghton, Robert. "World, Structure and Play: A Framework for Games as Historical Research Outputs, Tools, and Processes." Práticas Da História 7 (2018): 11-43.
- Hunicke, Robin, Marc LeBlanc, and Robert Zubeck. "MDA: A Formal Approach to Game Design and Game Research." Proceedings of the Challenges in Games AI Workshop, Nineteenth National Conference of Artificial Intelligence, 1-5. 2004.
- Juul, Jesper. Half-Real: Video Games between Real Rules and Fictional Worlds. Cambridge, Mass: MIT Press, 2005.
- Kapell, Matthew, and Andrew B. R. Elliott, eds. Playing with the Past: Digital Games and the Simulation of History. New York: Bloomsbury Academic, 2013.
- Kee, Kevin, and Shawn Graham. "Teaching History in an Age of Pervasive Computing: The Case for Games in the High School and Undergraduate Classroom." In Pastplay: Teaching and Learning History with Technology, edited by Kevin Kee, 270-91. University of Michigan Press, 2014. https://doi.org/10.2307/j.ctv65swr0.17.
- Kempshall, Chris. The First World War in Computer Games. Basingstoke, Hampshire; New York, NY: Palgrave Macmillan, 2015.
- King, Gary, Robert O. Keohane, and Sidney Verba. Designing Social Inquiry: Scientific Inference in Qualitative Research, 1994. http://www.dawsonera.com/depp/reader/pro tected/external/AbstractView/S9781400821211.
- Kirschenbaum, Matthew. "Contests for Meaning: Playing King Philip's War in the Twenty-First Century." In Pastplay: Teaching and Learning History with Technology, edited by Kevin Kee, 198-213. University of Michigan Press, 2014. https://doi.org/10.2307/j.ctv65swr0.13.
- Kline, Daniel T., ed. Digital Gaming Re-Imagines the Middle Ages. Routledge Studies in New Media and Cyberculture 15. New York: Routledge, 2014.
- Koebel, Greg. "Simulating the Ages of Man: Periodization in Civilization V and Europa Universalis IV." Loading . . . The Journal of the Canadian Game Studies Association 10, no. 17 (2017): 60-76.
- Körber, Andreas, Johannes Meyer-Hamme, and Robert Houghton. "Learning to Think Historically: Some Theoretical Challenges When Playing the Crusades." In Playing the Crusades, edited by Robert Houghton, 93-110. Engaging the Crusades: The Memory and Legacy of the Crusades, Volume Five. Abingdon, Oxon; New York, NY: Routledge, 2021.
- Köstlbauer, Josef. "Do Computers Play History?" In Early Modernity and Video Games, edited by Tobias Winnerling and Florian Kerschbaumer, 24-37. Newcastle upon Tyne: Cambridge Scholars, 2014.
- Lee, John K., and Jeffrey Probert, "Civilization III and Whole-Class Play." The Journal of Social Studies Research 34, no. 1 (2010): 1-28.

- Leonard, David. "Live in Your World, Play in Ours': Race, Video Games, and Consuming the Other." SIMILE: Studies In Media & Information Literacy Education 3, no. 4 (November 2003): 1-9. http://dx.doi.org/10.3138/sim.3.4.002.
- Lorber, Martin, and Felix Zimmermann, eds. History in Games: Contingencies of an Authentic Past. Studies of Digital Media Culture 12. Bielefeld: Transcript-Verl, 2020.
- Lünen, Alexander von, Katherine J. Lewis, Benjamin Litherland, and P. H. Cullum, eds. Historia Ludens: The Playing Historian. Routledge Approaches to History, vol. 30. New York, NY: Routledge, 2020.
- Lynch, Ronan, Bride Mallon, and Cornelia Connolly. "The Pedagogical Application of Alternate Reality Games: Using Game-Based Learning to Revisit History." International Journal of Game-Based Learning 5, no. 2 (2015): 18-38. https://doi.org/10.4018/ijgbl.2015040102.
- Maddrell, Avril. "Teaching a Contextual and Feminist History of Geography through Role Play: Women's Membership of the Royal Geographical Society (1892-1893)." Journal of Geography in Higher Education 31, no. 3 (2007): 393-412. https://doi.org/10.1080/ 03098260601082305.
- Martínez, Manuel Alejandro Cruz. "The Potential of Video Games for Exploring Deconstructionist History." PhD, University of Sussex, 2019.
- McCall, Jeremiah. "Historical Simulations as Problem Spaces: Criticism and Classroom Use." Journal of Digital Humanities 1, no. 2 (2012). http://journalofdigitalhumanities.org/1-2/ historical-simulations-as-problem-spaces-by-jeremiah-mccall/.
- McCall, Jeremiah. "Navigating the Problem Space: The Medium of Simulation Games in the Teaching of History." History Teacher 1 (2012): 9-28.
- McCall, Jeremiah. "Playing with the Past: History and Video Games (and Why It Might Matter)." Journal of Geek Studies 6, no. 1 (2019): 29-48.
- McCall, Jeremiah. "Teaching History With Digital Historical Games: An Introduction to the Field and Best Practices." Simulation & Gaming 47, no. 4 (2016): 517-42. https://doi.org/ 10.1177/1046878116646693.
- McDaniel, Kathryn N. "Four Elements of Successful Historical Role-Playing in the Classroom." The History Teacher 33, no. 3 (May 2000): 357. https://doi.org/10.2307/495033.
- McMichael, Andrew. "PC Games and the Teaching of History." The History Teacher 40, no. 2 (February 2007): 203-18.
- Metzger, Scott Alan, and Richard J. Paxton. "Gaming History: A Framework for What Video Games Teach About the Past." Theory & Research in Social Education 44, no. 4 (2016): 532-64. https://doi.org/10.1080/00933104.2016.1208596.
- Mol, Angenitus Arie Andries, Csilla E. Ariese-Vandemeulebroucke, Krijn H. J. Boom, and Aris Politopoulos, eds. The Interactive Past: Archaeology, Heritage & Video Games. Leiden: Sidestone Press, 2017.
- Murray, Janet Horowitz. Hamlet on the Holodeck: The Future of Narrative in Cyberspace. Cambridge, Mass: MIT Press, 1998.
- Nakamura, Lisa. "Queer Female of Color: The Highest Difficulty Setting There Is? Gaming Rhetoric as Gender Capital." ADA 1 (2012). https://doi.org/10.7264/N37P8W9V.
- Nicholls, Matthew. "Digital Visualisation in Classics Teaching and Beyond." Journal of Classics Teaching 17, no. 33 (2016): 27-30. https://doi.org/10.1017/S2058631016000076.
- Ortega, Stephen. "Representing the Past: Video Games Challenge to the Historical Narrative." Syllabus 4, no. 1 (2015): 1-13.

- Pagnotti, John, and William B. Russell. "Using Civilization IV to Engage Students in World History Content." The Social Studies 103, no. 1 (2012): 39-48. https://doi.org/10.1080/ 00377996.2011.558940.
- Penix-Tadsen, Phillip, ed. Video Games and the Global South. Pittsburgh: Carnegie Mellon University, 2019.
- Peterson, Rolfe Daus, Andrew Justin Miller, and Sean Joseph Fedorko. "The Same River Twice: Exploring Historical Representation and the Value of Simulation in the Total War, Civilization and Patrician Franchises." In Playing with the Past: Digital Games and the Simulation of History, edited by Matthew Kapell and Andrew B. R. Elliott, 33-48. New York: Bloomsbury Academic, 2013.
- Pobłocki, Kaspar. "Becoming-State: The Bio-Cultural Imperialism of Sid Meier's Civilization." Focaal – European Journal of Anthropology 39 (2002): 163–77.
- Raupach, Tim. "Towards an Analysis of Strategies of Authenticity Production in World War II First-Person Shooter Games." In Early Modernity and Video Games, edited by Tobias Winnerling and Florian Kerschbaumer, 123-38. Newcastle upon Tyne: Cambridge Scholars, 2014.
- Reinhard, Andrew. Archaeogaming: An Introduction to Archaeology in and of Video Games. New York: Berghahn Books, 2018.
- Reinhard, Andrew, and Stéphanie-Anne Ruatta. "Consulting for Ubisoft on Assassin's Creed: Odyssey." Archaeogaming (blog), April 19, 2019. https://archaeogaming.com/2019/04/ 19/consulting-for-ubisoft-on-assassins-creed-odyssey/.
- Rochat, Yannick, "A Quantitative Study of Historical Video Games (1981-2015)." In Historia Ludens: The Playing Historian, edited by Alexander von Lünen, Katherine J. Lewis, Benjamin Litherland, and P. H. Cullum, 3-19. Routledge Approaches to History, vol. 30. New York, NY: Routledge, 2020.
- Rollinger, Christian, ed. Classical Antiquity in Video Games: Playing with the Ancient World. Imagines - Classical Receptions in the Visual and Performing Arts. London; New York: Bloomsbury Academic, 2020.
- Sabin, Philip. "Wargames as an Academic Instrument." In Zones of Control: Perspectives on Wargaming, edited by Pat Harrigan and Matthew G. Kirschenbaum, 421–37. Game Histories. Cambridge, Massachusetts: The MIT Press, 2016.
- Salvati, Andrew J., and Jonathan M. Bullinger. "Selective Authenticity and the Playable Past." In Playing with the Past: Digital Games and the Simulation of History, edited by Matthew Kapell and Andrew B. R. Elliott, 153-67. New York: Bloomsbury Academic, 2013.
- Schut, Kevin. "Strategic Simulations and Our Past: The Bias of Computer Games in the Presentation of History." Games and Culture 2, no. 3 (2007): 213-35. https://doi.org/ 10.1177/1555412007306202.
- Schwartz, Leigh. "Fantasy, Realism, and the Other in Recent Video Games." Space and Culture 9, no. 3 (2006): 313-25. https://doi.org/10.1177/1206331206289019.
- Scott Glancy, Adam. "The 'l' in Team: War and Combat in Tabletop Tole-Playing Games." In Zones of Control: Perspectives on Wargaming, edited by Pat Harrigan and Matthew G. Kirschenbaum, 71-80. Game Histories. Cambridge, Massachusetts: The MIT Press, 2016.
- Sepinwall, Alyssa Goldstein. Slave Revolt on Screen: The Haitian Revolution in Film and Video Games. Caribbean Studies Series. Jackson: University Press of Mississippi, 2021.
- Šisler, Vít. "Digital Arabs: Representation in Video Games." European Journal of Cultural Studies 11, no. 2 (2008): 203-20. https://doi.org/10.1177/1367549407088333.

- Šisler, Vít, "From Kuma\War to Ouraish: Representation of Islam in Arab and American Video Games." In Playing with Religion in Digital Games, edited by Heidi Campbell and Gregory P. Grieve, 109-33. Digital Game Studies. Bloomington: Indiana University Press, 2014.
- Skotnes-Brown, Jules. "Colonized Play: Racism, Sexism and Colonial Legacies in the DOTA 2 South Africa Gaming Community." In Video Games and the Global South, edited by Phillip Penix-Tadsen, 143-53. Pittsburgh: Carnegie Mellon University, 2019.
- Smith, Adam, and Soren Johnson. "Soren Johnson on Challenging the Norms of 4X Games." Rock, Paper, Shotqun (blog), April 6, 2018. https://www.rockpapershotgun.com/2018/ 04/06/soren-johnson-4x-strategy-interview/.
- Smith, James L. "Medievalisms of Moral Panic." In Studies in Medievalism XXV: Medievalism and Modernity, edited by Karl Fugelso, Joshua Davies, and Sarah Salih, 157-72. Boydell and Brewer, 2016. www.jstor.org/stable/10.7722/j.ctt19x3hn8.16.
- Spring, Dawn. "Gaming History: Computer and Video Games as Historical Scholarship." Rethinking History 19, no. 2 (2015): 207–21. https://doi.org/10.1080/ 13642529.2014.973714.
- Srauy, Sam. "Professional Norms and Race in the North American Video Game Industry." Games and Culture 14, no. 5 (July 2019): 478–97. https://doi.org/10.1177/ 1555412017708936.
- Sturtevant, Paul B. The Middle Ages in Popular Imagination: Memory, Film and Medievalism. New Directions in Medieval Studies. London; New York: I.B. Tauris, 2018.
- Tarason, Dominic. "Assassin's Creed Origins Becomes Edutainment Feb 20th." Rock, Paper, Shotqun (blog), February 13, 2018. https://www.rockpapershotgun.com/2018/02/13/as sassins-creed-origins-becomes-edutainment-feb-20th/.
- Taylor, Claire. "Serious Gaming: Critiques of Neoliberalism in the Works of Ricardo Miranda Zúñiga." In Video Games and the Global South, edited by Phillip Penix-Tadsen, 47-58. Pittsburgh: Carnegie Mellon University, 2019.
- Testa, Alessandro. "Religion(s) in Videogames Historical and Anthropological Observations." Online - Heidelberg Journal of Religions on the Internet 5 (2014): 249-78. https://doi.org/10.11588/REL.2014.0.12170.
- Totilo, Stephen. "One Man's Year Making Assassin's Creed II." Kotaku (blog), December 21, 2009. https://kotaku.com/5431098/one-mans-year-making-assassins-creed-ii.
- Towns, Armond R. "Gamifying Blackness: From Slave Records to Playing History: Slave Trade." Information, Communication & Society 24, no. 12 (2021): 1-15. https://doi.org/10.1080/ 1369118X.2020.1739730.
- Trattner, Kathrin. "Religion, Games, and Othering: An Intersectional Approach." Gamevironments 4 (2016): 24-60.
- Van Eck, Richard. "Digital Game Based Learning: It's Not Just the Digital Native Who Are Rest-Less." Educause Review 41 (2006): 16-30.
- Vas, János. "Four Categories Of Video Games in the Practice of History Teaching." Staféta 2 (2017): 211–27.
- Wainwright, A. Martin. "Teaching Historical Theory through Video Games." The History Teacher 47, no. 4 (2014): 579-612.
- Wainwright, A. Martin. Virtual History: How Videogames Portray the Past. Abingdon, Oxon; New York, NY: Routledge, 2019.
- Whelchel, Alex. "Using Civilization Simulation Video Games in the World History Classroom." World History Connected 4, no. 2 (2007). http://worldhistoryconnected.press.uillinois. edu/4.2/whelchel.html.

White, William J. "The Right to Dream of the Middle Ages Simulating the Medieval in Tabletop RPGs." In Digital Gaming Re-Imagines the Middle Ages, edited by Daniel T. Kline, 15-28. Routledge Studies in New Media and Cyberculture 15. New York: Routledge, 2014.

Winnerling, Tobias, and Florian Kerschbaumer, eds. Early Modernity and Video Games. Newcastle upon Tyne: Cambridge Scholars, 2014.

Wolterink, Julian. "Authentic Historical Imagery: A Suggested Approach for Medieval Videogame." Gamevironments 6 (2017): 104-31.

Zamaróczy, Nicolas de. "Are We What We Play? Global Politics in Historical Strategy Computer Games." International Studies Perspectives 18, no. 2 (2017): 155-74. https://doi.org/ 10.1093/isp/ekv010.

## Ludography

Age of Empires. Ensemble Studios, 1997.

Assassin's Creed. Ubisoft, 2007.

Call of Duty. Activision, 2003.

Crazy Taxi. Sega, 1999.

Empire: Total War. Activision, 2009.

Europa Universalis. Paradox Interactive, 2000.

Fallout. Interplay Productions, 1997.

Playing History 2: Slave Trade. Serious Games Interactive, 2013.

Shogun: Total War. Creative Assembly, 2000.

Sid Meier's Civilization. MicroProse, 1991.

Tetris. Alexey Pajitnov, 1984.

The Patrician. Ascaron, 1993.