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Awesome, but Impractical? Deeper Engagement with the Middle Ages through Commercial Digital Games

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Medievalist computer games possess a vast reach and potent influence over their audience, but this influence often runs counter to the goals of heritage and teaching practitioners. This piece argues that while the commercial and mechanical requirements of computer games limit the utility of these games as heritage and educational tools on the macro scale, these same qualities enable computer games to engage their players with the Middle Ages in a different manner from other heritage platforms, which can be of substantial value.

To this end, the piece will first highlight the similarities and differences between computer games and other means of engaging with history and heritage. It will proceed to consider the pressures these differences exert on the representation of history within games alongside the impact of the expectations of audiences and developers about this form of history and about the Middle Ages. Finally, the piece will discuss how these difficulties may be overcome, alleviated or embraced to support broader and deeper engagement with the medieval period and history more generally.

Introduction

Computer games with a medieval setting or medieval elements form a comparatively new addition to heritage and historical engagement with the Middle Ages. These medievalist games share many traits and representational tendencies with other heritage formats and media: their graphics draw on many of the same approaches and effects common to cinema and television (Šisler, 2014). Their audio often leans on medievalist musical trends ranging from lutes and church organs to Viking Metal (Cook, 2020; Lind, 2020); their stories typically follow well established narrative trends from medievalist literature ranging from the pseudo-medieval worlds of Scott and other Romantic authors, to the high fantasy of Tolkien, to the darker 'realist' fantasy of Martin (Laurel, 1986; Murray, 1998; Ensslin, 2014). The experiential and interactive nature of games draws close parallels with re-enactment and roleplay (Pugh and Weisl, 2013: 122-136); their rules and mechanics are frequently drawn from those of medievalist board and tabletop games (White, 2014; De Groot, 2016; Goodfellow, 2016). A number of commercial games-most notably the Assassin's Creed Discovery Tours-demonstrate similarities with traditional museums in their approaches to reconstructing and presenting historical sites and information (Politopoulos et al., 2019; Paananen et al., 2023), and carry all the associated baggage of these approaches (Khattab, Sihvonen and Harrer, 2021).

This melange of influences has created several fundamental differences between the engagement with medieval heritage within medievalist games and other formats. Although there are multiple similarities between the medievalism present in games and other media, the interactivity and other features of games as a medium have created a number of unusual trends within medievalist digital games which are not usually seen within other forms of heritage. The intersection of experiential interactive medievalism with audio-visual elements drawn from cinema and other sources creates a distinct form of medievalism within games. Furthermore, the interaction of the restrictions and expectations surrounding computer games with those surrounding medievalism often creates unusual and unexpected representations of the Middle Ages. This leads to the exaggeration, mitigation, or mutation of more typical popular medievalist views of the period (Houghton, 2023).

As a result of their novel qualities, medievalist computer games possess vast potential as tools for the exploration of the Middle Ages in both formal and informal settings. A substantial range of research has been undertaken addressing the potential of medievalist games as teaching tools at every level of study (Holdenried and Trépanier, 2013; Lewis, 2020; Körber, Meyer-Hamme and Houghton, 2021; Houghton, 2022b). The informal educational impact of medievalist and other historical games has been

demonstrated by a range of quantitative and qualitative studies which have highlighted the role these games can play in inspiring interest in historical periods and in developing an understanding of these periods (Houghton, 2016; Beavers, 2019; Stirling and Wood, 2021; 2022). More tentative steps have been taken to consider the utility of games as academic research tools to address the Middle Ages, but practical applications of these approaches have now begun to emerge (Clyde, Hopkins and Wilkinson, 2012; Spring, 2015; Marino Carvalho, 2017; Houghton, 2018; 2022a). As a result, the communicative and learning capacity of medievalist digital games has been thoroughly demonstrated.

Given their established engagement power, it is unsurprising that elements of historical digital games have been used within a number of heritage exhibitions, sites, and online activities. Computer game technology has been used to support the reconstruction of historical sites, for instance through the use of the Unreal Engine to power the visual recreations of the SmartHistory flyovers of Edinburgh and St Andrews (Rhodes, 2017), or the digital sonic techniques deployed within The Soundscapes of the York Mystery Plays project (López, Hardin and Wan, 2022). Relatively small custombuilt games have been created in support of specific installations-often taking the form of an augmented reality guided tour such as that deployed at the Sutton Hoo archaeological site (Angelopoulou et al., 2012). As noted above, recent entries in the Assassin's Creed series have incorporated 'Discovery Tours' which guide the player through a series of tours akin to museum exhibitions, complete with items to interact with and explanatory text and audio, but the '878 AD exhibition' in Winchester has taken this approach further through the integration of graphical elements of Assassin's Creed: Valhalla and Discovery Tour: Viking Age with live performances and augmented reality around the city (Dunn, Humphrey and Veal, 2022). A handful of larger scale heritage computer games have also been produced; a notable example of this is Strange Sickness, which addresses the plague through the materials of the Aberdeen Council Registers (Hepburn and Armstrong, 2021). Each of these approaches have augmented player engagement with heritage sites and medieval history.

However, while elements of historical digital games have begun to appear more frequently amongst heritage activities, the commercial digital games which form the foundation of these elements are typically sidelined and the core ludic elements of these games are often removed. The *SmartHistory* flyovers incorporate game graphics but remove any aspect of play from their reconstructions. Augmented reality heritage games typically use very simple mechanics and while they may certainly broaden the appeal and impact of heritage activities, they do so by adapting traditional techniques rather than by incorporating playful elements. Likewise, although the *Assassin's Creed* Discovery Tours draw directly from the graphics and mechanics of their parent games,

they remove almost all the gameplay aspects in favour of creating an experience closer to that received through a more traditional museum: players are led through a linear path with a substantial focus on viewing reconstructed items and sites and reading about the various aspects of history relevant to the game. The 878 AD exhibition re-introduces gameplay elements through a number of augmented reality challenges, but these elements are relatively simple and are explicitly aimed at children. Even the larger heritage games such as *Strange Sickness* are restricted by their budgetary limitations and educational demands and cannot approach the scale and depth of commercial games. Commercial games and playful elements are thus typically removed from heritage activities.

The limited use of commercial games within medieval heritage is completely understandable for various practical reasons alongside some core assumptions around games. Games are expensive to produce, restricting most heritage approaches to relatively simple engagements through the use of stock graphical assets and mechanics. Longer games are impractical to install within crowded heritage sites where visitors may only have a few minutes to engage with each display. Most of these activities must be accessible to a broad audience, including children and non-gamers, which precludes complex mechanics and longer sequences. Beyond all of this, there remains a perception of games as things for children which are unsuitable for addressing serious issues or history (Galloway, 2006; Chapman, 2013b; Marino Carvalho, 2017; Houghton, 2018). This leads many ludic approaches to medieval heritage to lean heavily on more traditional and authoritative modes of communication with a prominent reliance on recreating sites and artifacts, communicating information through text, and in many cases creating digital museum experiences.

Although these limited approaches are often necessary to facilitate the use of games within heritage—and they can certainly be effective—they lessen the potential of games as engagement and educational tools in several ways. The complex mechanics, gameplay and broader worlds present within commercial medievalist games can allow for an engagement with the period which is very different from that provided by museums and other forms of historical and heritage media and activities, but which can nevertheless form a valid and worthwhile interaction with the Middle Ages, and in some ways provide a deeper and more enduring experience for their players. Most fundamentally, these games allow the player to explore a vision of the past at their own pace and under their own direction, typically engaging with complex environments in order to progress. They are interactive in a different manner from other media and provide the player with a substantial degree of agency in their construction of history, while also encouraging a degree of historical empathy through casting players in the role

of historical or semi-historical figures. They allow the experience of history through play. Just as attempting to make games more like traditional pedagogic or scholarly devices can remove their most innovative and useful teaching or research qualities, attempting to make games more like museums can undermine the explorative and interactive factors which make them so engaging to an informal audience. Very often emphasising the educational elements of a game leads to the sidelining of its playful and interactive elements.

The core thesis of this article is that there is substantial potential to use commercial digital games as an informal means of engagement with the Middle Ages. A range of scholars have argued that while digital games cannot conduct history in the same manner as traditional outputs, they are still valuable tools for teaching and research as they allow an engagement with history in a different manner which may still be valid if undertaken through a pedagogically or academically vigorous approach (Chapman, 2013b; McCall, 2018; Houghton, 2022a). These arguments hold true for the use of digital games as more informal engagements with history and heritage: the unique nature of the medium allows these games to be valuable tools if appropriate scaffolding is provided within or around the game to facilitate engagement and to alleviate the impact of representational issues common within these games.

To this end, this article will make three key arguments:

- 1. The distinct nature of commercial digital games allows them to engage with their audience in a different—and in some ways deeper—manner than other forms of medievalism and heritage activity;
- 2. The nature of these games in combination with their embracement of several medievalist and gaming tendencies and tropes creates a number of substantial issues which limit their heritage utility as standalone products;
- 3. These difficulties may be mitigated to some extent through appropriate engagement with players and developers which can allow digital games to act as more meaningful and useful engagements with the Middle Ages.

Ultimately, this article will suggest that the fields of history and heritage may need to recalibrate their understanding of engagement to make effective use of commercial games as heritage tools.

Awesome Potential

Commercial medievalist games can reach a massive audience but, more significantly, historical computer games can exert a vast degree of influence over their players.

The impact of these games on their audience has been apparent to teachers at almost every level of historical study for over a decade; it is increasingly rare to find a history classroom without multiple students who have been drawn to study at least in part through such games (Elliott and Kapell, 2013; McCall, 2019). More recently, a growing range of quantitative and qualitative studies have demonstrated that games can not only act as an introduction to a period or inspiration for further (formal or informal) study, but that these games can also play a pivotal role in their players' understanding of historical events, peoples, and—most significantly—systems (Houghton, 2016; Beavers, 2019; Houghton, 2021c; Stirling and Wood, 2021; 2022).

The interactive nature of computer games is certainly a core element behind their impact on their players (Zimmerman, 2004; Juul, 2005; Houghton, 2018). Medievalist computer games exist among a cluster of 'experiential medievalisms' identified by Pugh and Weisl (2013), including re-enactment and roleplay. As they highlight, these interactive forms of engagement with history and heritage can have a deeper impact on their participants' understanding of the theme and periods they present as they allow their audience to 'become' medieval in a manner distinct from less interactive medievalisms such as literature and film. In essence, by allowing interactivity, games—and other experiential medievalisms—allow for a deeper engagement with the information and ideas they convey. They encourage players to experience history in an empathetic manner by taking on the roles of historical or pseudo-historical figures, often taking on the personas of these figures, and in any event undertaking some semblance of a historical lived experience (Hartman, Tulloch and Young, 2021). As Zimmerman notes, all media is interactive to a certain extent as they may all be interacted with cognitively, but games (and other experiential media) are explicitly interactive: they allow 'participation with designed choices and procedures in a text' (Zimmerman, 2004: 158).

While the particular interactive nature of medievalist games is a feature shared with other experiential medievalisms, the ways in which it manifests is somewhat distinct. In some ways, digital games are more limited than roleplaying and re-enactment. Every action available to the player is restricted by the design decisions and limitations imposed by the developer, whether in terms of mechanics, geography or narrative (Chapman, 2016: 37–38; De Groot, 2016: 154–155; Champion, 2017: 110–111). Games are largely restricted to audio-visual feedback; they cannot present experiences through smell, taste or touch in the same manner as re-enactment or tactile exhibits (Pugh and Weisl, 2013: 128–130; Houghton, 2024). However, digital games also offer greater interactivity in some respects. They allow the player to complete activities and take actions which would be impossible in real life. They can allow access to abstract

versions of material culture and architecture which would be too expensive to recreate for even the wealthiest re-enactment society or museum. Games allow the staging of massive battles, townscapes and other events which would require an implausibly broad recruitment and correspondingly complex logistics in the physical world. Games allow players to participate in activities ranging from extreme violence to minor trespassing which would be dangerous or illegal if conducted in real life (Cramer, 2010: 96-98; Houghton, 2024). In doing so, they allow the experience of vastly different worlds in a manner which cannot be replicated through other forms of experiential medievalism.

The sheer scale and detail of the worlds presented within medievalist games often sets them apart from other representations of medieval heritage and can play a role in the impact they have on their players. The vast open worlds of a plethora of games including Witcher, Breath of the Wild, and Kingdom Come: Deliverance provide a substantial number and variety of environments for the player to explore. These vary substantially in their influences and fidelity to actual medieval structures, but their connection to medieval architecture and material culture is evident and can easily influence their players' conceptions of the period. Although more detailed and historically vigorous graphic models are available at several museums, these are of much more limited scope. Strategy games such as Crusader Kings, Medieval: Total War, and Rise of Venice present even larger—if more abstract—worlds, and accompany these with a vast range of statistics relating to politics, diplomacy, warfare, economics, and—increasingly personal relationships, presenting figures well in excess of even the most detailed academic project. Roleplaying games such as Skyrim and Dragon Age contain a huge amount of text, easily dwarfing that of all but the most voluminous of medievalist literature. These worlds are both wide and deep and can demand huge amounts of a player's time, even without the repetition of content. Of course, the lands, characters, battles and political intrigues are clearly fictional and fantastic within most of these games and players are unlikely to retain the struggles between the Imperials and Nords of Skyrim or the Templars and Mages of Dragon Age replete with mythical beasts and magic as factual representations of the Middle Ages. That said, the underlying themes of endemic violence, complex political systems, and social tensions within these games may more easily influence their audience's perceptions of the medieval world. There is substantial scope for the audio-visual, statistical, and narrative elements of games of each of these genres to influence their players' understanding of the past as a result.

Furthermore, these digital worlds allow a different form of accessibility from that of many medievalist sites. Attendance at historical sites can provide a more detailed and authentic experience for the participant than anything possible within a game, but this is limited by a number of factors. Visiting historical sites requires travel to the

location, which immediately reduces accessibility due to financial and time constraints. Even once these sites are reached, mobility limitations may preclude access to areas of historical sites. Buildings may be closed for repair or otherwise inaccessible. Postmedieval development or degradation of historical sites can fundamentally change their appearance or lead to their environmental context and significance being changed or obscured by more modern architecture. At the most extreme, these sites may no longer exist. Although digital games present their own access constraints—including costs of software and hardware, digital literacy, issues of accuracy, and gameplay restricting access to particular areas (Goodall, 2006; Lisney et al., 2013)—they nevertheless allow players to visit abstract versions of these sites without the restrictions of their real-world equivalents. In doing so, these games mirror accessibility successes in the sector using virtual reality and social media (McMillen and Alter, 2017; Bekele et al., 2018).

More significantly though, the mechanics of digital games allow and oblige their players to engage with history in a different manner from more traditional forms of medievalism. Bogost's identification of game mechanics as producing stories through a process of procedural rhetoric highlights a fundamental distinction between the ways in which narrative emerges within games and the ways in which narratives are constructed within other media (Bogost, 2008). In essence, a game's rules and narrative can play just as much of a role in the story produced through play as any linear narrative or audio-visual devices. Chapman has adapted Bogost's analysis to the representation of history within games, categorising games which produce historical arguments primarily through their mechanics (rather than a linear narrative) as contextual simulations (Chapman, 2016). The mechanics of these games represent abstract and limited but internally consistent models of some element of history. Although the limitations of Chapman's work are widely acknowledged (not least by Chapman himself), the broad concept that historical digital games may present arguments through their mechanics is almost universally accepted amongst historical games scholars and forms the basis for most theoretical and practical uses of games as pedagogical or scholarly tools (Taylor, 2003; McCall, 2012; Elliott, 2017; Houghton, 2021c). The mechanics of medievalist digital games present historical arguments as a core element of their function and demand that the player engage with these elements in order to make progress within the game (Douglas, 2002; Fogu, 2009; Chapman, 2013a; McCall, 2014, 2018).

The representation of historical arguments through game mechanics is not unique to digital games, but these arguments are typically processed and presented in a distinct and more detailed manner within them. The mechanics of more traditional historical games—card games, board games, tabletop games—produce similar representations

of historical models to those found in their digital counterparts (Bierstedt, 2023: 131). Indeed, many mechanical approaches used within digital games are adapted from older tabletop games (Webber, 2014: 216-217; De Groot, 2016: 159; Goodfellow, 2016: 149). Likewise, other experiential forms of medievalism rely to some extent on a system of rules to function and construct narratives. Roleplay and re-enactment adhere to accepted and often explicit sets of rules governing behaviour in and out of character. Perhaps most notably, combat re-enactment typically requires extensive and carefully enforced rules not only to keep in character, but also for balance and-above all-safety reasons (Cramer, 2010: 96–98). However, while there are certainly similarities between the mechanics of digital games and other forms of experiential medievalism, the sheer scale and complexity of the rules of digital games sets them apart (Bierstedt, 2023: 131). Digital games can keep track of a vast range of changing character attributes, calculate random outcomes swiftly, and present data to players clearly and succinctly. Digital games lack the personal interpretation and easy modification of rules within other experiential media, but their scale provides a new opportunity for a different sort of engagement with history and heritage.

By encouraging or demanding playful participation, digital games foster audience driven engagement in a manner and scale distinct from more traditional approaches. The role that players inhabit as co-authors of the narratives produced within games facilitates the development of stories and histories well beyond those envisaged by game developers (Poremba, 2003; Ensslin, 2012). Players may play games in drastically different manners than intended by their creators, as is demonstrated through the plethora of speed-runs, pacifist runs, and other self-imposed challenges used by players across multiple genres of game (Aarseth, 2004: 371–372; Dyer-Witheford and De Peuter, 2009: 191–194; Chapman, 2016: 41–42). Player interactions within a game–such as forming guilds in *World of Warcraft* or creating vast structures together in *Minecraft*—or outside the game, such as modding and forum participation—may be foreseen and even encouraged by developers, but ultimately they rely on the involvement of the players (Chapman, 2016: 38–39; Elliott, 2017; Koebel, 2017: 71; Houghton, 2018: 27–31).

While it should be acknowledged that these qualities are common to games addressing all periods of history, they are particularly potent with regard to the premodern period in general and to the Middle Ages especially. Several studies have highlighted the greater impact of pre-modern games on their players' perceptions of the ancient and medieval periods than of more modern eras (Beavers, 2019; Houghton, 2021a). This trend can be explained in part by the fact that these earlier periods of history almost invariably receive less attention within school curricula than the

modern age. Likewise, pre-modern heritage is often obscured by a focus on more recent history. While medievalist film and literature are more commonplace, they lack the interactivity of games. Meanwhile, while re-enactment and board games can supply a more thorough engagement with the period, these are often less accessible or less complex than digital games. Medievalist digital games can easily form the main means of interaction with the Middle Ages for many players.

Digital games therefore present a means of engagement with the Middle Ages which bears several similarities with other forms of medievalism, but which nevertheless represents a distinct mode of heritage interaction. This interactive and player-driven approach is visible within other experiential medievalisms, but which manifests in a different manner and on a typically larger and more complex scale in digital games than in these other forms. These differences, in conjunction with the sizeable reach of commercial digital games, provide a substantial opportunity to engage new audiences with medieval heritage in an innovative manner.

It should be noted that different genres and individual computer games provide different approaches: for example, action and adventure games tend to privilege the reconstruction of history through their audio-visuals, while strategy games tend to make more use of their mechanics to construct complex historical systems (Chapman, 2016: 59–79). Furthermore, there are particular approaches attached to medievalist games—most notably an emphasis on extreme violence (Houghton, 2024). These variations create a substantial range of means of engagement with the Middle Ages and a diverse selection of interpretations of the period. This complicates the use of games further, but also broadens their possible audience and means of engaging with history.

Ludic Impracticalities

While games can have an awesome impact on their players and allow for deeper engagement with medieval history and heritage, there are a number of issues which limit the value of this engagement and *currently* make the use of most commercial games for outreach impractical. Several of these issues are common to games set in any period, but these are often exacerbated by popular perceptions of the period. Medievalist computer games tend to present a particular vision of the Middle Ages which is at odds with reality and exaggerates or mutates several common medievalist tropes and tendencies. These representations are often accepted to some extent by their players on the basis of claims to historical fidelity, the implementation of complex mechanics, and by a relative lack of knowledge of the period. Beyond this, the ability of certain small groups of players to dominate interactions within games and the culture surrounding games can influence their engagement with history to a substantial extent.

Historical computer games tend to follow a series of established trends. Wainwright (2019) has catalogued many of these trends, but common tendencies include: a focus on violence (de Zamaróczy, 2017; Boom et al., 2020; Hammar, 2020); constant and irreversible scientific progress (Pobłocki, 2002; Fogu, 2009; Pereira García and Gómez Gonzalvo, 2015; Metzger and Paxton, 2016); sideline religion (Šisler, 2014; Domínguez, 2017), and stories and worlds focus on white (Williams et al., 2009; Higgin, 2012; Hammar, 2020), male (Miller and Summers, 2007; Williams et al., 2009; Kowert, Breuer and Quandt, 2017; Hammar, 2020), and heterosexual characters and themes (Beasley and Collins Standley, 2002; Griffiths, Davies and Chappell, 2004; Chang, 2015). The driving force behind many of these tendencies are the mechanical limitations and conventions of the medium which impact games in several ways, including the restriction of their ability to address abstract concepts (Juul, 2005), emphasising progress and competition (Aarseth, 2004), and focusing on graphical fidelity over story (Bulut, 2018). Beyond this, the identity of most game developers as white, male, cisgender, and heterosexual (Geyser, 2018; Hammar, 2020), and a perceived audience of young, heterosexual, white men (Nakamura, 2012; Srauy, 2019; Hammar, 2020), continue to exert a huge influence on the characters, regions, issues, and stories told through historical games. There are obviously exceptions to these generalisations, but it remains the case that computer games—both in general and in historical games specifically—overwhelmingly follow these trends.

Although many of these trends are visible within medievalist games, they are moderated, exaggerated or adjusted through their convergence or conflict with representational trends in modern medievalism. Audiences expect to see a particular set of tropes attached to the Middle Ages: frequent and bloody physical violence (Matthews, 2015; Smith, 2016; Locke, 2018; Kaufman and Sturtevant, 2020); chivalric and valorous knights in shining armour (Henthorne, 2004; Lynch, 2016; Simmons, 2019); technological stagnation (West-Harling, 2010; Bildhauer, 2011; Webber, 2014); a powerful and oppressive Church (West-Harling, 2010; Kaufman and Sturtevant, 2020); subservient and marginalised women (Tolmie, 2006; Kaufman, 2008; 2016), and a homogenously white world (Bertarelli and Amaral, 2020; Waymack and Greenlee, 2020; Hsy, 2021).

The combination of these gaming and medievalist trends can often create an exaggerated and stereotypical vision of the period within medievalist games, but their interaction often leads to new and unexpected representations. Medievalist games tend to present bloody violence more frequently and explicitly than games set in other periods or medievalism in other media (Chadwick, 2014; Noone and Kavetsky, 2014; Houghton, 2024). Knights and chivalry are commonplace and have a substantial impact on both combat systems and notions of morality (MacCallum-Stewart, 2008;

Webber, 2014; Moberly and Moberly, 2015). Visions of a backwards Dark Ages are often undermined by mechanics of technological progress or combat balance (Pitruzzello, 2014; McKenzie, 2018). The material trappings of the Church are commonplace, but deeper engagements are rare and usually limited to the role of religion in medieval warfare (Love, 2011; Heinze, 2012: 170–172, 238–243; Heidbrink, Knoll and Wysocki, 2014; Hemminger, 2014). Diversity in race, gender, and sexuality may be present, but typically only at a superficial level with a mechanical and narrative focus on a straight, white and male world (Nakamura, 2012; Hammar, 2020; Young, 2021). The Middle Ages in games aligns with popular medievalism to some extent, but this is moderated substantially by gaming tropes and requirements. In any event, the account of the period present within most games is divergent from academic and heritage narratives.

These divergences can have a substantial impact on players' understandings of the Middle Ages, as historical games in general often give the impression of being authoritative and authentic accounts of their periods. The developers of these games often vocally announce the accuracy of their games and this extends to the employment of historical consultants to provide a veneer of authority to the games (Mayer, 2008; Copplestone, 2017; Medel, 2018; Wright, 2018; Enseleit and Schade, 2021). A focus on accuracy is a common demand amongst potential players, and many criticisms of historical games are justified through an appeal to a lack of historical accuracy (Champion, 2015; Manning, 2022). Players are often cynical of these claims to authority, but the version of history presented by these games is often accepted as authentic to some degree, whether consciously or unconsciously (Houghton, 2018: 14; Boom et al., 2020: 31).

These appeals to authority are not unique to games—as similar and often spurious claims are made by the creators of historical literature, cinema and re-enactments (Bildhauer, 2011: 20; Houghton and Alvestad, 2021: 4)—but are particularly insidious within them. As outlined above, games, unlike other engagements with history, present a complex system of mechanics to determine the ways in which their worlds function. Their claims to accuracy are based not only on graphical fidelity or adherence to popular narrative, but also on the construction of a fully functioning and reactive model of a historical world. Players must learn these mechanics in order to progress through the game and are thus obligated to learn the representations of history presented within. This effect is lessened where the link between game theme and game mechanics is weak (players learn to play the game and do not necessarily draw connections with historical events and forces). However, in all but the most abstract of games there is substantial potential for players to consciously or unconsciously retain a historical understanding based on their interactions with the game's rules. In the case of medievalist games,

this apparent authority is augmented by the limited interaction most players have with the Middle Ages. While outlandish outfits, buildings, and storylines may be rejected by players with relative ease, the mechanics which govern these settings can have a deeper and less obvious impact on their players.

These apparently authoritative images of the Middle Ages can vary substantially depending on player action and interpretation, creating a further barrier towards their use for heritage interactions. The role of players in determining the history represented through games can substantially change their experience of the game. Each player brings their own understanding of the Middle Ages (and the world more broadly) to a game and this can fundamentally alter their behaviour within it (Burn, 2006; Mancini and Sibilla, 2017; Chapman, 2020). As a result, the outcomes and messages of games can be almost impossible for developers to predict; players can (and will) stretch and bend game mechanics to achieve their goals or vision of the period. Developers can certainly influence the message of the game (Chapman, 2016; De Groot, 2016; Champion, 2017), but ultimately every player's experience will be different. While broad statements can be made about the vision of history received by most players of many medievalist games, this personal variation makes the widespread use of games for heritage unpredictable.

More importantly, though, the role of players in determining the narrative and history of games can promote exclusionary behaviours amongst sections of the player base and outright racism, sexism and homophobia amongst vocal minorities. These trends are well documented within computer game communities more generally (Daniels and Lalone, 2012; Nakamura, 2012; Greer, 2013; Kowert, Breuer and Quandt, 2017; Skotnes-Brown, 2019; Stang and Trammell, 2020; Condis, 2021), and medievalist communities have faced similar issues (Young, 2015; 2018; Kaufman, 2016; Hsy, 2021). There is growing evidence of an overlap between the two groups. Player outcry against the inclusion of non-white characters in Mordhau and defences of the almost homogenously white world of The Witcher and Kingdom Come: Deliverance employed exclusionary rhetoric common to some sections of medievalism in concert with clear links to the approaches used by similar groups based around gaming within Gamergate (Vossen, 2020; Young, 2021). A sizeable proportion of modders of medievalist roleplaying games such as Skyrim concentrate on the creation of women more closely aligned to straight Western concepts of beauty and the introduction of more sexually explicit content (Cooper, 2021). The communication between players in massively multiplayer online role-playing games (MMORPGs) such as World of Warcraft is often the medium for racism, misogyny, or homophobia (Schwartz, 2006; Mayer, 2008; Higgin, 2009; 2012). The existence of these typically small but vocal groups can pose a major obstacle for the use of digital games as medievalist engagement.

Commercial digital games therefore present several notable barriers in their use as communication tools for medieval heritage. They present unpredictable accounts of the period, which often lean into popular medievalist tropes, modified by gaming conventions and requirements; compliance to academic consensus is an auxiliary consideration. Moreover, the very elements that make digital games powerful historical engagement tools undermine their heritage potential. Their detailed mechanics require players to learn the game's vision of history and grant the games a degree of historical authority, but where the history presented within these games is led by popular perspectives and gaming limitations, they can very easily mislead players. The role of players in shaping the history presented by games through play, modding and engagement with developers can likewise lead to the promulgation of acritical popular history and exclusionary perspectives of the period.

Deeper Engagement

These practical difficulties are widespread across commercial medievalist digital games and mitigating them is of vital importance in moving their use in heritage beyond superfluous gimmicks or simple tools to encourage engagement. Broadly, this may be achieved through two principal approaches. Firstly, by contributing to the production of more critical historical and heritage games. And secondly by encouraging players to engage with games more critically and drawing connections between these games and heritage sites and other resources. The first holds wide ranging potential but is substantially limited in practice. The second is more limited in reach but is typically more practical in application.

Closer engagement between developers and heritage practitioners or historians to produce more critical and educational games is, on the surface, the ideal solution to the use of digital games for historical engagement. Much of the theory and practice surrounding 'scholarly games' or 'serious games' is of relevance here. These 'heritage games' could recreate buildings and material culture in meticulous detail (Spring, 2015: 212; Champion, 2020: 14). They could cite their sources—potentially with links to particular heritage sites or digital resources (Clyde, Hopkins and Wilkinson, 2012: 5; Marino Carvalho, 2017: 811; Houghton, 2018: 37–38). They could provide narratives which follow academic understanding or even which engage with uncertainties and debates (Clyde, Hopkins and Wilkinson, 2012: 12). Game mechanics could be carefully constructed around historical models and arguments (Spring, 2015: 215; Houghton, 2018: 25–27). With sufficient resources, a 'heritage game' could be produced with the graphical fidelity and complex mechanics to match commercial games while incorporating scholarly credentials.

However, the production of such a 'heritage game' is stymied by practical issues. Many developers have engaged with historians, often to a substantial extent, but the games produced are inherently limited by their commercial and entertainment nature. Their engagement with heritage and history can be effective to a certain extent; for example, the work of Lavelle and other historical consultants on Assassin's Creed: Valhalla allowed for the inclusion of unexpected representations of Viking Age England, including counters to the Victorian myth of Saxons as 'a society of free peasant farmers' and an emphasis on cultural diversity (Burrows, 2021). However, while many developers are genuinely concerned with ensuring a degree of conformity to scholarly history, they are nevertheless constrained by the entertainment, mechanical and commercial priorities outlined above. The Crusader Kings games provide a vast database of historical figures as the basis for the game but are restrained by a range of factors. Examples of these include the limitations of the game engine's focus on the highest levels of society, practical hardware issues restricting how many characters may be presented while maintaining acceptable performance speeds, and the lack of data for substantial regions within much of this period, which leads to the creation of reasonable but fictional space fillers (Houghton, 2021b). In a similar manner, the Assassin's Creed series has been shaped by player expectations, for instance surrounding the focus on and levels of violence, and a need to conform to recognisable landmarks, which can lead to the inclusion of ahistorical depictions of key sites such as San Croce in Florence appearing with its 19th-century façade in the 15th-century Assassin's Creed II (Dow, 2013: 219-220). The commercial nature of these games restricts their ability to focus on critical history and thus the ability of consultant historians to influence the development of the game is often curtailed.

Instead of focusing on creating commercial games which adhere more strongly to academic visions of the Middle Ages, a more practical approach is to embrace the nature of these games and work to equip players to engage with ludic history more carefully and critically. This approach is fundamentally similar in its goal to that used by several scholars when introducing digital games to a classroom learning environment (Schut, 2007; Champion, 2015; Pereira García and Gómez Gonzalvo, 2015; McCall, 2016; Boom et al., 2020). Typical features of this approach include embedding the content of the game firmly within a broader historical context (Lynch, Mallon and Connolly, 2015: 35–37; Boom et al., 2020: 31), a clear communication of the limitations of individual games and of games as a whole (Metzger and Paxton, 2016: 556–558), and the role of teachers in guiding students through play and connecting their experiences to historical study (McCall, 2012: 23–24). A number of guides to these pedagogical approaches have been produced and these may form the basis for heritage engagement (McCall, 2012: 24–25; Pagnotti and Russell, 2012; McCall, 2016).

To be relevant for heritage engagement, these pedagogical approaches around critical play must be adapted for a more informal learning environment and to the context of heritage sites and digital resources. Perhaps most simply, exhibits may draw links to relevant games, highlighting the use of particular locations, characters and themes, noting discrepancies from the dominant scholarly narrative, and considering why these variations appear. With somewhat greater resources, heritage practitioners may engage with gamers through popular articles, podcasts, Let's Play videos or video streams and other similar projects. Several websites including The Public Medievalist, Mittelalter Digital, and Paidia maintain platforms for articles relating to medievalist games. The Middle Ages in Modern Games Twitter (now X) conference and accompanying proceedings are open access and aimed primarily at a popular audience. Let's Plays such as those of Ludohistory and the VALUE Foundation can likewise have an impact in getting players to consider medievalist games more critically. A variety of written and audiovisual approaches are used within the multi-platform @Reshistorica. These activities focus on critical history and encourage their consumers to take a more measured approach to the use of the Middle Ages in games, and can draw substantial audiences, often into the tens of thousands.

To take this engagement with gamers further, heritage practitioners may present challenges for players to encourage historical behaviour and outcomes, or to consider the history presented by these games more carefully. As an anecdotal example, in a popular article about historical accuracy in *Crusader Kings II* I made an offhand comment that 'Harold crushing William at Hastings would be *inaccurate*. Harold, with his army of elephant riding mercenaries from Bengal, conquering the Russian steppes would be unrealistic' (Houghton, 2014). This prompted a comment among a small group of players on Reddit who imagined the 'Robert Houghton challenge: invading Muscovy with Harold II with war elephants' (artificalinelegance, 2015). It is unlikely that this challenge was ever completed, but the incident highlights the influence that these popular articles may have on players' approaches to a game and their willingness to engage with that game in a more considered manner. A more constructive and influential guide around roleplaying in *Crusader Kings III* actively encourages players to take on the personalities of their characters and in doing so encourages a deeper form of interaction with the medieval period (PaniCaL, 2020; Nolden, 2020a; 2020b; Houghton, 2022a).

Using commercial digital games for medievalist heritage requires an understanding of how these games represent the Middle Ages and how this differs from other forms of medievalism. To a certain extent, this understanding can be acquired through academic articles and other scholarly works; there has been a vast volume of learned literature produced addressing many of the most popular medievalist games over the last decades

including *Assassin's Creed*, *World of Warcraft*, and *Crusader Kings*. Engagement with popular articles, reviews, Let's Plays and game forums can likewise inform this consideration. However, as Boom et al. emphasise, the most detailed understanding of a game is always acquired through play (2020: 31–32). This does not have to be exhaustive—it is not necessary to master or even complete a game to gain an understanding of its core elements—or universal—it is likewise not necessary or even possible to play every medievalist game produced—but playing a broad range of games across genres can provide a wide-ranging, foundational understanding of their tendencies. Familiarity with a range of medievalist games can allow curators, re-enactors, and other heritage professionals to identify likely conceptions held by players and to adapt displays and performances accordingly.

There is some potential, therefore, to employ commercial games to support engagement with medieval heritage beyond simply inspiring interest in the period. These efforts require the construction of appropriate historical and intellectual scaffolding around games; at their heart, these efforts rely on encouraging players to think critically about the history portrayed through these games. In this manner, these approaches bear strong similarities to the increasingly widespread teaching methods associated with medievalist digital games. The approaches outlined here will impact only a small proportion of players; even the most well subscribed historical publications and podcasts are dwarfed by the sheer scale of the audiences of the most successful historical games. But these efforts can have a pronounced impact on those who engage with them. In order to achieve this engagement, it is vital to interact not only with the creators of these games, but with their players and the games themselves.

Conclusion

Commercial medievalist digital games could be a substantial resource for heritage engagement and informal (but useful) historical education. They possess several qualities which allow them to act as powerful engagement tools, including their scale, interactivity, and reach. This awesome potential is undermined to a substantial extent by representational trends within the medium which distort their portrayal of the Middle Ages and which—because of the same factors which make these games such powerful engagement tools—can easily mislead their players and consolidate outdated and exclusionary views of the period in their players' minds. Nevertheless, by using intellectual scaffolding similar to that which is employed when using games for classroom teaching but adapted for a more informal learning environment, these games can still act as viable interactions with medieval heritage. As is the case with ludic classroom approaches, the core issue is to encourage players to engage with medievalist games in a critical manner.

It should be emphasised that digital commercial games cannot engage with history and heritage in the same manner as museums, re-enactment, cinema, more traditional games, or even custom-built digital games. Just as digital games conduct history in a different manner from traditional academic outputs and must employ different approaches from more conventional methods when used for teaching, these games cannot match the tactile and narrative elements of many of these heritage approaches or the focus on scholarly history within many others. Attempts to do so often create useful heritage engagements—as with the Discovery Tours in the *Assassin's Creed* series—but in doing so they lose many of the defining characteristics of digital games and typically create limited facsimiles of the more traditional approaches they attempt to mirror. As is the case with educational or scholarly games, attempting to make games more like those traditional approaches undermines their unique qualities.

Digital commercial games may, nevertheless, engage with history and heritage in a valuable manner. The scale of their reach alone demands attention, but the depth of their influence requires that history and heritage professionals engage with them, if only to be aware of the messages they are imprinting on their audiences. Harnessing this media has great potential—and this has been recognised through engagements such as the 878 AD exhibition—but this can be taken further. Commercial digital games 'do' history in a different way, but this innovative approach is still valuable.

Ultimately, the approaches outlined here favour a focus on the depth of their impact over the breadth. The commercial and practical priorities of medievalist digital games typically demand the relegation of scholarly elements to an auxiliary status. By engaging with smaller groups of players outside of the game, a more meaningful difference can be made to their playing experience. Under these more narrow constraints and with the acceptance that digital games are commercial products with their own peculiar demands, games can indeed be a deep and practical means to engage with the Middle Ages. Moreover, this engagement could be even more awesome.

Competing Interests

The author has no competing interests to declare.

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