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Evaluating a Historical Video Game: Roles of Gaming Expertise and History Expertise

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Abstract: We invited gamers with various levels of gaming and history expertise to play a historical game, *Civilization,* in order to explore how players evaluate the game. Expert players tended to view the game as half-reliable; whereas history mid-experts tended to view it as unreliable. Players employed diverse epistemic ideals to evaluate the game. This suggests that *Civilization* could be used to engage students in critical reflection and discourse about representations of history in popular culture.

Introduction

Historical games are a highly popular genre of digital games. These games incorporate historical representations that have varied degrees of reliability and accuracy (Chapman, 2016). Because players can spend substantial amounts of time interacting with semi-accurate historical representations in historical games, it is important to understand how they perceive and evaluate the reliability of such games. However, the ways in which players think about the epistemic aspects of historical games have rarely been examined.

This study is part of a larger study in which we examine the epistemic aims, ideals, and reliable processes (Chinn et al., 2014) that players of *Civilization V (Civ)*, a popular historical simulation game, engage with in three layers of knowing: knowing in the game, knowing about playing the game, and knowing about the game as a representation (Barzilai, 2017). Because history expertise has been found to affect how people process, interpret, and evaluate historical sources (Gottlieb & Wineburg, 2012), we wished to examine whether and how history expertise might shape players' epistemic thinking. We also examined whether expertise in playing the game might also influence evaluations of the game. In this contribution, we focus on the following questions: (1) How do players with different levels of gaming expertise and history expertise perceive the reliability of *Civ*? (2) Which epistemic ideals do players use to evaluate the reliability of *Civ*?

Method

We used a 2X2 design that crossed gaming expertise and history expertise. The participants included 23 adult gamers who were purposefully selected so that approximately half had no *Civ* experience, and the other half were experienced *Civ* players. Additionally, approximately half of the participants did not study history beyond mandatory high-school studies, and the other half had an academic degree in history or were studying towards such a degree. We considered this latter group as mid-level history experts because they were not professional historians and yet had developing academic expertise in this discipline. This resulted in four groups of players with: (1) no expertise, (2) *Civ* expertise, (3) history expertise, and (4) both *Civ* and history expertise.

To expose players' thinking, they were asked to think aloud while playing *Civ* for one hour. After playing the game, we conducted retrospective semi-structured interviews about the game. The data were qualitatively analyzed using thematic analysis. The analysis was informed by the AIR model, but the specific aims, ideals, and processes employed by the players were inductively inferred from the data. The first author and a research assistant independently coded a third of the quotes. The Kappa score for interrater agreement ranged from 0.64 to 0.85 (M = 0.73, SD = 0.08). Disagreements were resolved by discussion.

Findings

Views of CIV's reliability

We identified three main views of the game's reliability: About half of the players (47.8%) viewed the game as *half-reliable* (i.e., as partly accurate or credible), some players (39.1%) viewed the game as *unreliable (*i.e., as entirely inaccurate or not credible), and a few (13.0%) said that they found it *difficult to judge* its reliability.

Civ experts tended to describe the game as half-reliable (75.0%) more often than *Civ* novices (18.2%). Civ experts often said that the game can meaningfully represent history despite its unreliable characteristics, e.g., "Even if this game does not represent history in the most reliable way, in my opinion it can be a good tool for teaching history." *Civ* novices often expressed difficulties judging the game's reliability (27.3%), e.g., "I saw only

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a little, so it's really hard for me to say." Gaming expertise appeared to support complex reliability judgements because of expert players' deep familiarity with various features of the game. This helped expert players know which features were more or less reliable and make nuanced judgments.

Historical expertise appeared to play a different role. History mid-experts viewed the game as unreliable (60.0%) somewhat more than history novices (23.1%). History mid-experts used their knowledge of historical processes, events, and phenomena to criticize the game, e.g., "*It's not just ideologies*, but also the geographical area. It's an imaginary scenario, *there's no historical context.*" In contrast, history novices often described the game as half-reliable (61.5%) and seemed more accepting of its semi-accurate features.

Players with both *Civ* and history expertise coordinated their domains of expertise in different ways. One player viewed the game as pure a-historical fun, e.g., "*The game has no historical truth*." Other players interpreted the game, in light of their understanding of the nature of historical knowledge and of video games, as representing a particular historical perspective or abstraction, e.g., "Everything in history is about processes. So if you simplify it, it's down to what happened and who was the leader, so really *it's very fitting to represent it this way*."

Epistemic ideals for evaluating the reliability of CIV

Participants mentioned two main categories of ideals for evaluating the reliability of *Civ*: (a) *Correspondence* to real-world history based on evaluation of *consistency* with their own historical knowledge, e.g., "I know something isn't reliable when it contradicts something I know"; and (b) the *creators' trustworthiness*, which was mostly evaluated according to intent *to entertain vs. inform,* e.g., "they focus more on entertainment than historical reliability", *expertise,* e.g., "if [the creator] is a famous historian it will add some credit to the [game's] reliability", and *commercial interests,* e.g., "the game's main goal is not teaching history but selling as many copies to as many players possible." Interestingly, all player groups engaged with these ideals in a similar manner and frequency.

Discussion

Experienced *Civ* players viewed the game as half-reliable, acknowledging that some features of the game can represent history, while being critical of other features. This complex view allowed them to perceive the game as meaningful while remaining vigilant regarding its inaccuracies. In contrast, greater historical knowledge led players to be more critical of the reliability of the game. Players with both *Civ* and history expertise navigated this tension in different ways: either by rejecting the historicity of *Civ* or by accepting *Civ* as a type of historical representation that can be "read" as a historical text that reflects a particular historical perspective or abstraction.

To evaluate the game, players engaged with multiple epistemic criteria, relating both to the content of the game and to the trustworthiness of its creators. There were no differences in the criteria used by novices and experts, in contrast to prior studies. It is possible that the tension created by the game's semi-accurate nature prompted players to critically evaluate it.

These findings suggest that historical games can have a twofold contribution: They can inform learners, to some extent, about historical processes, events, leaders, etc., and they can also enable players to engage in critical reflection and discourse about the nature and reliability of historical representations. Learning to critique historical representations in games, and to consider creators' intentions and biases, might help raise learners' awareness of how history is represented in popular culture. More generally, we suggest that because learners are frequently exposed to representations (and misrepresentations) of history, science, and more in popular culture and media, learning to navigate and critique such half-reliable spaces is an important 21st century skill.

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