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### Introduction

#### **Editorial: DOA**

*Holger Pötzsch and Kristine Jørgensen*

1

### Articles

#### **Metroidvania Ecologies**

Exploration and the Environmental Imagination in  
*Hollow Knight* and *Rain World*

*Angelo Maria Andriano and Marco Caracciolo*

9

#### **"Was Barbarossa Not German?!"**

Nation, History, and Identity in *Civilization* Players'  
Online Discussions

*Kathrin Trattner*

29

#### **Reified Gameplay**

Revisiting Playbour Through Critical Theory

*Tuomas Manninen*

53

<b>Fake Games</b> On Dark and Deceptive Representations of Non-Actual Games <i>Nele Van de Mosselaer</i>	75
<b>Antagonistic Game Designer</b> The Author as a Player <i>Stefano Gualeni</i>	95
<b>Lies of P and a Real Boy in Fake Bloodborne</b> Nostalgia and Critique in <i>Soulsborne</i> Fandom <i>Indira Neill Hoch</i>	117
<b>Unpacking an Obfuscated Female Protagonist</b> The Use of Mise-en-Scène in Minimalist Videogame Narrative Through Social Semiotics <i>Mienke Fouché</i>	139
<b>Emergent Ecological Dynamics in Videogames</b> What Player Paratexts Reveal <i>Lawrence May</i>	161
<b>Curled Up With a Good Game</b> A Survey on Personality Traits and Game Motives of Cozy Game Players <i>Rowan Daneels and Kato Maes</i>	185
<b>Of Reviews and Women</b> A Study of Women Discourses in Videogame Magazines <i>Samuel Heine and Marie-Christine Beauvais</i>	217
<b>The Arena of Teamwork</b> The Impact of Stellate Polygonal Seating on Multiplayer Game Performance <i>Geunyoung Kim</i>	245
<b>From Tradition to Interaction</b> A Systematic Literature Review of Cultural Heritage Representation in Entertainment Videogames <i>Yixiang Que, Teresa De La Hera and Jeroen Jansz</i>	275

## Reviews

- Gaming Democracy: How Silicon Valley Leveled Up the Far Right*** by Adrienne L. Massanari  
(MIT Press, 2024) 313  
Book Review  
*Megan Condis*
- Monstrosity in Games and Play: A Multidisciplinary Examination of the Monstrous in Contemporary Cultures***, edited by Sarah Stang, Mikko Meriläinen, Joleen Blom and Lobna Hassan  
(Amsterdam University Press 2025) 319  
Book Review  
*Jaroslav Švelch*
- The Rise of the Roguelite: Inside a Gaming Phenomenon***, edited by James Cartlidge  
(CRC Press, 2025). 325  
Book Review  
*David Matencio Durán*
- The Middle Ages in Computer Games: Ludic Approaches to the Medieval and Medievalism*** by Robert Houghton (D. S. Brewer, 2024) 333  
Book Review  
*Evan Moore*

## Commentary

- The State of Native Representation in Videogames** 341  
*Thomas James Reed | Lukwe'tiyó, Oneida for "He is a Good Man"*



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# **Editorial**

## **DOA**

Holger Pötzsch and Kristine Jørgensen

*Eludamos: Journal for Computer Game Culture*  
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# Editorial

## DOA

HOLGER PÖTZSCH AND KRISTINE JØRGENSEN

### Abstract

Playing on the double-meaning of the abbreviation DOA as referring to both *diamond open access* and *dead-on-arrival*, the editorial presents the rationale, politics, and not least severe challenges connected to *Eludamos's* radical open access practices. Given the recent growth of the journal, we need to balance our publishing policies against the threats of (self-) exploitation and exhaustion of our reviewers and team of editors. We argue that institutional embedding and strategic logistical and financial support is crucial for the success of any DOA publishing project and point to a promising recent initiative taken by the university library at UiT The Arctic University of Norway.

### Keywords

Diamond open access, academic publishing, Aaron Swartz, *Eludamos*, Septentrio

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*Information is power. But like with all power, there are those who want to keep it for themselves.*

Aaron Swartz, *Guerrilla Open Access Manifesto* (2009)

***Eludamos* is growing.** This year's open issue has twelve articles. In 2025, we have moved from one to two issues a year with a line-up of submissions and special issues suggesting that a year with three issues might not be far off. This growth happened despite retaining a rejection rate of roughly 70% of all incoming manuscripts. This development is the result of systematic efforts by the editorial board and Septentrio Academic Publishing at UiT to create permanent structures around the journal and increase its impact and accessibility. Today, all incoming submissions are checked via Crossref, and all published articles receive DOI numbers and are indexed in Scopus, ERIH PLUS, and DOAJ. We have research ethical procedures in place and have most recently adopted AI guidelines for authors and reviewers. For us, it is fantastic

to see that these efforts are about to pay off in terms of increased attention and growing numbers of submissions.

While the growth of our journal is a positive development reflecting the interest and trust of an increasing number of scholars, it also creates challenges in terms of available resources. The time and energy needed for assessing the relevance and quality of incoming submissions, identifying and corresponding with reviewers, giving feedback to authors, doing copy- and layout editing, and so forth has increased massively over the past three years and has put significant strains on editorial board members and reviewers.

These challenges are severe because *Eludamos* is published under a diamond open access (DOA) license ([CC BY 4.0](https://creativecommons.org/licenses/by/4.0/))—we neither charge our authors nor our readers for publishing and accessing scholarly work through our journal. And since we do not charge anyone, we do not have a stable funding that allows us to pay for copy- and layout-editing or other crucial tasks. Instead, we are dependent on sporadic small-scale support from our universities. As a result, most of the increasing amount of work involved in running a growing DOA journal has to be shouldered by the editorial team working on a voluntary basis, without payment. In the long run, we fear that this ‘business’ model might not be sustainable. As a cynic might see it, the abbreviation DOA publishing might just as well mean dead-on-arrival publishing. Many believe the practice is simply not feasible in the long run (e.g. Poynder, 2024).

However, DOA publishing—the diamond version—is important for us. We see it as one way of practically contributing to what we ‘preach’ in our editorials, journal policies, and critical articles. By making publicly funded research that has been reviewed and assessed by colleagues for free accessible to all without charges is to us a small contribution to the gradual creation of a more just and sustainable (scholarly) world. It is also a consciously political move against the big business of for-profit academic publishing. After all, we agree with Pooley (2024, p. 1) who asserts that in DOA publishing (as in politics in general) it is important “to maintain unrealistic expectations”. He writes, “whether or not another (scholarly publishing) world is possible, it is important to act *as if* it is” as this helps retain our ability to influence what he terms “the aperture of imaginative possibility” (emphasis in original). At *Eludamos* we attempt to contribute to just that. Our journal’s DOA policies and membership in the Radical Open Access Collective (ROAC) attest to that.

To bring the DOA activities at *Eludamos* into political context and illustrate what we believe to be at stake, we will now briefly turn to a story about two programmers. The two yet-unnamed young men met at a Y Combinator tech startup hackathon in Silicon Valley in 2005 (see Jakobsen, 2024). In the years following this event, one of them became one of the richest and most powerful persons in the world while the other was arrested and charged for stealing copyrighted material. One key difference accounting for the dissimilar ways in which their lives developed are precisely

their diverging views on copyright legislation, privacy, surveillance, and DOA academic publishing.

One of the programmers was smart in a problem-solving manner. He developed a way of appropriating massive amounts of online data and process, commodify, and profit off them within the frames of a given system of digital surveillance capitalism (Zuboff, 2019; Crawford, 2021) that he never questioned. The second of the two was a critical thinker who interrogated the conditions under which digital communication and scholarly publication operate and who devised strategies to challenge and ultimately subvert the given unjust system. The first became a billionaire and hero of financialized venture capitalism by stealing almost unprecedented amounts of data from virtually everyone on the planet, while the second was arrested and charged for downloading and illegally distributing copyrighted research articles while working as a PhD candidate at MIT. An unforgiving public prosecutor threatened him with 35 years in prison for this 'crime'.

The name of the first of this duo is Sam Altman, today CEO of OpenAI, the name of the second is Aaron Swartz, researcher and OA activist, who took his own life in 2013. The very different treatments these men experienced for their uses of online information says a lot about the imbalances, inequalities, and injustice of our present condition. Therefore, the parallel story of these two illustrates well why we at *Eludamos* believe that DOA academic publishing is politically and economically important. In the sense of Swartz's 'Guerilla Open Access Manifesto' (2009) cited at the beginning of this editorial, we want our research articles to be accessible and usable for everyone with an Internet connection and want everyone with a good idea and sound research to support it to be able to publish with us for free. Because we agree with Adema's (2024, p. 1) statement that "reimagining and, crucially, *reperforming* the way we publish and make research public ... forms part of a wider attempt to create more ethical and equitable scholarly forms, institutions, and practices" (our emphasis).

In this endeavor, *Eludamos* has received invaluable support from Septentrio Academic Publishing and the University Library at UiT The Arctic University of Norway. Not only do these institutions offer us technical and logistical expertise, but they most recently also have devised a strategy of channeling funds previously dedicated to pay for expensive journal subscriptions into DOA publishing. By pushing through a 25% discount from Elsevier and cutting the subscription with Wiley entirely, the university library released funds that are now allocated to facilitate DOA academic publishing across several levels and domains ranging from international organizations working for DOA initiatives to funds which DOA journals in dire need of financial assistance can apply for (Aspaas et al., 2025).

The example above shows that, to succeed on a larger scale, DOA academic publishing cannot solely rely on the time and energy of activists and enthusiasts but needs institutional backing and strategic political and financial support. The attempts of

our editorial board to ‘maintain unrealistic expectations’ and imagine and enact academic publishing futures otherwise can only be a first step in a wider restructuring of the academic publishing landscape away from profit-driven enterprises to DOA alternatives. We perceive our work as one small step on this long journey.

## This issue

The issue you are currently holding in your virtual hands is massive. Twelve original articles draw from multiple disciplines and offer new conceptual insights, fresh empirical research, and critical analyses of specific games or genres. In addition, we publish four book reviews and one commentary. Here the complete list of contributions to volume 16, issue 2, 2025:

In ‘Metroidvania Ecologies: Exploration and the Environmental Imagination in *Hollow Knight* and *Rain World*’, Angelo Maria Andriano and Marco Caracciolo situate the *Metroidvania* games within the emerging body of research on ecogaming. The authors argue that the spatial interconnectedness of the *Metroid* games has a strong resonance with ecological theories of human-nonhuman enmeshment and nonhuman autonomy. Focusing on the two titles *Hollow Knight* and *Rain World*, Andriano and Caracciolo show how these games challenge the player’s environmental imagination and ideas of human mastery over the nonhuman world.

Kathrin Trattner takes a player-centric perspective on the influential *Civilization* series in ‘“Was Barbarossa not German?!”: Nation, history, and identity in *Civilization* players’ online discussions’. Through a qualitative content analysis of discussions in the largest German-speaking *Civilization* forum, she investigates how players negotiate the games’ ideological biases based on their own national identities.

In ‘Reified Gameplay: Revisiting Playbour through Critical Theory’, Tuomas Manninen revisits the concept of *playbour*; the phenomenon that activities originally understood as play sometimes resemble and function as labour. Applying a Critical Theory perspective, Manninen offers an analysis of the concept and its theoretical implications. Using *EVE Online* and *Cryptokitties* as examples, he offers the novel concept of *reified gameplay* to understand the alienating tendencies of playbour, where reified gameplay is “a form of gameplay action shaped by processes of reification and rationalisation within and as part of the culture industry.”

Nele van de Mosselaer introduces us to the concept of *fake games* in ‘Fake Games: On Dark and Deceptive Representations of Non-Actual Games’. Based on Gualeni and Fassone’s concept of fictional games, she defines fake games as “non-actual games that are presented with the intention to trigger false beliefs in the existence of the game or its presented mechanics and story”. Van de Mosselaer distinguishes between *darkly* and *deceptively* designed fake game representations, arguing that while darkly designed fake games have the purpose to deceive players into making

certain decisions, such as buying a game on false premises, deceptively designed fake games deceive players for the purpose of creating aesthetically valuable experiences.

In 'Antagonistic Game Design: The Author as a Player', Stefano Gualeni investigates "antagonistic game design", which is the creation of games intended to frustrate and provoke players. He argues that player engagement with such titles emerges from resisting an antagonistic implied author behind the work, and that such games establish an asynchronous and adversarial relationship between players and game that fosters alternative pathways for meaning making.

In '*Lies of P* and a Real Boy in Fake *Bloodborne*: Nostalgia and Critique in Soulsborne Fandom', Indira Neill Hoch analyses the press coverage and fan comments on Youtube videos addressing the videogame *Lies of P* as a nostalgic trigger connecting to Soulsborne fandom and Collodi's 1883 children's tale of Pinocchio. In the article, Hoch shows how reflective nostalgia can serve as a point of departure for better understanding game-adjacent spaces where affect and critique blend.

In '*Unpacking* an Obfuscated Female Protagonist: The Use of Mise-en-Scène in Minimalist Videogame Narrative through Social Semiotics', Mienke Fouché argues that the game *Unpacking* offers a novel approach to ludonarratology by omitting a visible protagonist and instead focusing on the spaces and objects that players interact with. According to the author, this minimalist narrative technique can foster engaging storytelling experiences. The study has broader implications both for game design and narrative theory because it offers a novel approach to minimalist design in interactive storytelling, and because it offers a framework for analyzing how environmental storytelling may convey character identity.

Contributing to the scholarly discourse around games and ecology, Lawrence May discusses *emergent ecological dynamics* in his contribution 'Emergent Ecological Dynamics in Videogames: What Player Paratexts Reveal'. The concept explains how new ecocritical meaning can emerge from user-created paratexts reflecting the ephemeral experience of videogame play. As player experiences of ecologies and environments that emerge in ways unintended by game designers so far are under-theorized, the article offers new methods and insights on this matter.

Adding to the emerging body of research on cozy games, Rowan Daneels and Kato Maes present a rare player study of the genre in 'Curled Up with a Good Game: A Survey Study on Personality Traits and Game Motives of Cozy Game Players'. Their survey study of 277 players examines game motives and personality traits, offering novel insights into how players use cozy games for moral self-reflection, agency, escapism, experiencing eudaimonic emotions, and experiencing engaging narratives.

In 'Of Reviews and Women: A Study of Women Discourses on Gender in Videogame Magazines', Samuel Heine and Marie-Christine Beauvais offer insight into the discourse of women writers and how they write about female protagonists in the US

gaming press in the period 198 –2021. The authors observe a complex situation of partly contradicting intentions where women’s writing sometimes is influenced by masculine hegemonic discourses, while at other times signaling resistance and critique towards this hegemony.

In ‘The Arena of Teamwork: The Impact of Stellate Polygonal Seating on Multiplayer Game Performance’, Geunyoung Kim examines how the spatial arrangement and seating configuration of players affect performance, communication, and teamwork in multiplayer sessions. Through two empirical studies, the paper demonstrates the complex relationship between spatial layout and team effectiveness in gaming and indicates that optimal multiplayer setups must balance functionality with social and spatial dynamics.

Yixiang Que, Teresa de la Hera and Jeroen Jansz provide an overview of the status quo of the research on cultural heritage representation in videogames in ‘From Tradition to Interaction: A Systematic Literature Review of Cultural Heritage Representation in Entertainment Videogames’. Their review of 80 publications shows that research so far covers representation of tangible cultural heritage, while intangible cultural heritage has received significantly less attention. Designers, they show, tend to select cultural heritage elements already familiar to their audiences.

In addition to the original articles, the issue includes four book reviews and one commentary.

Megan Condis looks at Adrienne Massanari’s *Gaming Democracy: How Silicon Valley Leveled Up the Far Right* (MIT Press, 2024) that presents analyses of three case studies of far-right game cultures – #Gamergate, the cyberlibertarian philosophy underpinning Silicon Valley, and the subreddit r/TheDonald. The book offers crucial insights into the current media ecosystem and its political implications.

Jaroslav Švelch offers his review of the collected volume *Monstrosity in Games and Play: A Multidisciplinary Examination of the Monstrous in Contemporary Cultures*, edited by Sarah Stang, Mikko Meriläinen, Joleen Blom, and Lobna Hassan (Amsterdam University Press 2025). He finds that while the book’s weakness is that it diverges in multiple directions when investigating issues ranging from in-game monsters to monstrosity as a metaphor, it also enriches the study of monsters and monstrosity in game studies by showcasing this diversity. *The Rise of the Roguelite: Inside a Gaming Phenomenon*, edited by James Cartlidge (CRC Press, 2025) has been reviewed by David Matencio Durán. The anthology offers a variety of perspective on the roguelite genre and is recommended for researchers and anyone else with an interest in the genre.

As the last book review in this issue, Evan Moore reviews Robert Houghton’s *The Middle Ages in Computer Games: Ludic Approaches to the Medieval and Medievalism*, published by D. S. Brewer in 2024, a book that follows up on the author’s edited volume of 2023. The book offers various approaches to the exploration and analysis

of medievalist video games and is recommended for both new and experienced scholars with an interest in medievalist videogames.

Lastly, this issue's commentary, 'Early Career Researchers, Open Access and the Publishing Landscape' is authored by Dom Ford and Joleen Blom, both members of the *Eludamos*' editorial team and young untenured scholars. With a striking blow that resonates with the editorial of the present issue, they discuss how the current ecosystem surrounding academic publishing is affecting their lives and careers.

We hope you will enjoy reading this issue!

### Final remarks

As usual, we end our editorial with a big thank you to all our readers, authors, and reviewers who keep this journal alive and kicking (upwards). Any thinkable DOA publishing initiative however well-funded, thought through, and strategically supported would indeed be dead-on-arrival without you!

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**Metroidvania Ecologies**  
**Exploration and the Environmental Imagination**  
**in *Hollow Knight* and *Rain World***

Angelo Maria Andriano and Marco Caracciolo

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# Metroidvania Ecologies

## Exploration and the Environmental Imagination in *Hollow Knight* and *Rain World*

ANGELO MARIA ANDRIANO AND MARCO CARACCILO

### Abstract

Metroidvania games are characterized by highly interconnected levels that open up as the player acquires new skills or knowledge of the game world. In this article, we argue that the spatial interconnectedness of the Metroidvania genre strongly resonates with ecological theories foregrounding human–nonhuman enmeshment as well as nonhuman autonomy. Discussing two recent Metroidvania titles, *Hollow Knight* (Team Cherry, 2017) and *Rain World* (Videocult, 2017), we show how these games consistently challenge the player’s environmental imagination, and particularly notions of human mastery over the nonhuman world. They do so on multiple levels: by evoking rich postapocalyptic settings that resist the player’s attempts to project anthropocentric assumptions onto the games; by confronting players with nonhuman characters and lore that remain unreadable and opaque; and by creating dynamically evolving game worlds in which nonhuman behavior feels unruly and unpredictable. Most importantly, though, the two games suggest ecosystemic interconnectedness by defamiliarizing the players’ understanding of exploration as the linear traversal of spaces that can be fully controlled and depleted. Through this discussion, we aim to situate Metroidvania games within the growing archive of ecogaming, explaining what is so unique about the genre’s approach to the environmental imagination.

### Keywords

Catastrophe; difficulty; ecocentrism; ecogaming; environmental imagination; nonhuman; vulnerability

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**One of the most significant areas of discussion** in today’s game studies relates to how video games explore and negotiate environmental issues (e.g. Chang, 2019; Op de Beke et al., 2024). This work on “ecogaming” has taken many different forms, including for instance content and formal analysis as well as more design-oriented or empirical approaches. The premise is that video games are both implicated in

ideologies of human mastery over the natural world and capable of questioning those ideologies along two routes: through the direct representation of environmental issues (various forms of pollution and environmental disruption, climate change, natural disasters, etc.) and by capturing the causes of environmental degradation on the level of game mechanics.<sup>1</sup> For instance, pollution is directly represented by games such as the *SimCity* franchise (Maxis, 1993); mechanically, though, pollution is made likely by the limitations imposed on the player's resources.

Scholars of ecogaming have focused on a wide range of genres. Strategy and city-building games like *SimCity*, open-world action games such as *Red Dead Redemption 2* (Rockstar Games, 2018), and adventure games including *Kentucky Route Zero* (Cardboard Computer, 2020) have all been explored for the way in which they build on, complicate, or enrich the player's environmental imagination. "Environmental imagination" is Lawrence Buell's (1995) term for the way in which particular individuals and cultures understand the relationship between human communities and the nonhuman world. Games belonging to the popular genre known as "Metroidvania" haven't been featured in these discussions, however, which is surprising given their marked tendency to foreground ecological systems. This article argues that Metroidvania games are particularly well positioned to speak to questions about human-nonhuman relations in times of climate crisis.

Focusing on two Metroidvania titles, *Hollow Knight* (Team Cherry, 2017) and *Rain World* (Videocult, 2017), we explore the ecological value of three dimensions of the Metroidvania genre: the representational level of the game world and its nonhuman inhabitants, the interaction with AI-controlled systems, as well as the gradual opening up of the game world as new mechanics and knowledge are added to the player's repertoire. This last feature constitutes the defining aspect of the Metroidvania genre: some areas of the game world can only be accessed when the player has unlocked a specific skill or mechanic (e.g., a double jump that allows them to reach ledges located too high up for a single jump) or acquired a deeper understanding of the game world. In the former case, an area is simply inaccessible until the player-character has gained the relevant skill somewhere else in the game world. In the latter, a hidden area is accessible from the outset, but the player is unaware of how to interact with the game world in order to reach it.

Either way, the typical Metroidvania gameplay loop involves revisiting locations that have already been explored by the player, thus breaking with the sequential spatiality of many game genres (including the platformers from which, arguably, the Metroidvania genre derives). Instead of linear exploration, Metroidvania games encourage (and in some cases require) the player to backtrack to earlier locations to discover the new possibilities afforded by recently acquired skills or knowledge of how

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<sup>1</sup> For more on the definition of mechanics in video games, see an influential article by Sicart (2008).

the game world works. Our core claim is that the basic structure of this loop is inherently ecological in the sense of James J. Gibson's (1986) psychology. Gibson's work emphasizes the interconnectedness between a perceiving organism and the physical environment in which the organism is located. This interconnectedness is, for Gibson, *ecological* in that it involves a system of organism-world relations. More clearly than other game genres, Metroidvania games use recursive traversal to capture ecological relations within a dynamically evolving game world. In this process, Metroidvania-style gameplay also resonates with the ecological imagination in a more specific sense: it disrupts an anthropocentric ideology of mastery, staging notions of human–nonhuman interconnectedness but also of nonhuman autonomy from human values and perspectives. This dimension of the genre's basic structure is amplified by the games' representational strategies (on the level of setting, characters, and atmosphere) and also by the simulation of ecosystemic relations, which is particularly pronounced in *Rain World's* procedurally generated animation and complex AI.

We start by introducing Metroidvania games and positioning our case studies within this popular genre, which has spawned a number of successful titles, particularly in the “indie” space. In a second step, we expand on the ecological relevance of Metroidvania exploration, with examples from both *Rain World* and *Hollow Knight*. We then turn to their representational strategies as well as *Rain World's* simulation of environmental dynamics to further specify their significance as ecogames.

## Mapping Metroidvanias: Recursive exploration and opacity

The term *Metroidvania* is a portmanteau of the titles of the two Japanese games that are thought to have inaugurated the genre in the late 1980s: *Castlevania* (Konami, 1986) and *Metroid* (Nintendo R&D4, 1987).<sup>2</sup> The genre has evolved significantly in the course of its history, but one feature has remained fairly constant: namely, the non-linearity of the player's traversal of the game world, which sets the Metroidvania genre apart from more sequential platforming games. The design of most Metroidvania games favors expansive and highly interconnected levels. This set-up can be considered a version of what Huaxin Wei, Jim Bizzocchi, and Tom Calvert (2010) call a “network” layout, with the player being able to move from one location to another along multiple routes. However, the network only becomes available during the course of gameplay: initially, the level design feels more linear because the player doesn't have access to many routes yet.

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<sup>2</sup> This lineage is not uncontested, however: Koji Igarashi, a producer associated with *Castlevania* games, points to the *Legend of Zelda* franchise (Nintendo, 1986) as inspiration for that series instead of Nintendo's science fiction-themed *Metroid* (see Mitchell, 2014).

In a study of *Castlevania: Symphony of the Night* (Konami Computer Entertainment Tokyo, 1997), one of the most influential games in the genre, Paul Martin (2011) talks about “recursive performance” to characterize the typical gameplay experience of Metroidvanias, with the maze serving as a guiding metaphor for the game’s spatial layout: “a character must go back and forth through a maze which opens itself up as the character collects equipment and becomes more powerful” (2011, p. 77). This gradual opening up of the game world has to do with the fact that some of the spatial connections only become available when the player-character has acquired certain in-game skills or, alternatively, when the player has obtained knowledge of how to interact with the game world in order to unlock new paths. This type of level design is usually referred to as “gating”: certain areas of the game world are locked until the player has the requisite skill or knowledge. In *Hollow Knight*, for example, the player discovers that attacking a certain type of mushroom (visually distinct from other mushrooms) while landing on it results in the player-character bouncing higher than would be possible with a normal jump. Using this technique (called “nail-jump” by the community) unlocks areas of the game world that wouldn’t be accessible until much later in the playthrough, when the player has acquired a double jump ability (“Monarch Wings” in the game’s terminology). Thus, the opening up of the game’s spatial network can depend on either contextual knowledge that builds on skills available from the outset (jumping and attacking) or on the acquisition of new abilities. This leads to an emphasis on spatial discovery: when revisiting an earlier location (Martin’s “recursive performance”), the player is likely to realize that the newly acquired abilities or knowledge grant them access to locations that they previously saw as inaccessible (or, in some cases, even part of the game’s background art).

As new routes or entire areas are added to the game’s network, its overall spatial complexity increases significantly. This places considerable demands on the player’s memory of the game world and thus ability to navigate it. Luke Arnott (2015) has discussed these challenges in relation to the *Metroid* franchise. Arnott argues that *Metroid* games have become more sophisticated in their use of visual maps that complement the player’s mental mapping of game space, allowing them to keep track of important locations but also of unexplored areas that might be made accessible by the newly added skills. However, Arnott observes that in the best mapping systems the cartographic representation of the game world remains fundamentally incomplete. In *Super Metroid* (Nintendo R&D1 & Intelligent Systems, 1994), for example, only

map rooms, save rooms, and energy and missile recharge rooms are marked explicitly. Doors and other passages are not marked and only the general location of some items appears on the map. The maps in *Super Metroid* are therefore still abstract enough that they require the player to read the space of the gameworld in tandem with the mapped spaces. (2015, p. 11)

This coordination between the player's recursive exploration and the cartographic aids provided by the game system is another distinctive feature of the Metroidvania genre.

The indeterminacy of in-game maps is also closely related to the opacity that is flaunted by many Metroidvania games. Daniel Vella's (2015) concept of the "ludic sublime," which Vella developed to discuss the gameplay and narrative difficulties posed by *Dark Souls* (FromSoftware, 2011), clearly applies to Metroidvania games as well. The Metroidvania genre often presents narratives grounded in ambiguity, the withholding of information, and environmental storytelling rather than cutscenes and dialogue.<sup>3</sup> Games in this genre also often maintain a certain opacity in communicating their mechanics and how they can be combined in interacting with the game world. For instance, in both *Hollow Knight* and *Rain World*, the tutorial sections are notably minimal, teaching only the most basic mechanics while leaving it up to the player to uncover how these mechanics interact and how the surrounding environment responds to the player-character's actions. Beyond *Hollow Knight*'s nail-jump, this opacity is also evident in the way *Rain World*'s ecosystem reacts to the game's core mechanics. During the tutorial, players learn that they can grab and throw objects. However, some nuances of this mechanic are never explicitly explained. For example, the game's most common enemies, the lizards, can be struck on various parts of their bodies, each with a different damage absorption level. Most of the time, lizards face the player, and their heads—being the most damage-resistant part—absorb the most damage. Players may discover that throwing a rock at a lizard will cause it to turn around, exposing its vulnerable back.

This type of discovery is so rewarding because games like *Rain World* have a marked tendency to underexplain their mechanics. The resulting experience of opacity, as we will see in the next sections, ties in with the games' tendency to resist anthropocentric assumptions and perspectives in favor of a more ecocentric approach—that is, an approach in which the ultimate source of value isn't human life but a sense of ecosystemic connectedness criss-crossing the human–nonhuman divide, and in some instances even leaving the human on the sidelines.<sup>4</sup>

## Loops of exploration

Spatial exploration is one of the most basic activities in many video game genres: it provides mechanical rewards (e.g., upgrades) as well as aesthetic pleasures (for instance, through impressive vistas or environmental variety), and it is typically required to advance the narrative. Exploration involves openness to discovery but also

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<sup>3</sup> For more on environmental storytelling in games, see Henry Jenkins's (2004) chapter, which introduced the term, and more recent work by Clara Fernández-Vara (2011).

<sup>4</sup> On the definition of ecocentrism and how ecocentric values can emerge in the context of computational intelligence, see Torrance (2011).

to failure; in that respect, it captures the thrilling uncertainties of gameplay (see Costikyan, 2013). But video games' focus on exploration is also ideologically problematic insofar as it inevitably draws upon a colonial imaginary of territorial expansion and resource extraction. Put bluntly, the attractions of exploration are closely bound up with a specific environmental imagination whereby the nonhuman world must be brought under control in order to harvest its resources (upgrades, experience points, etc.). This understanding of exploration, which is arguably the dominant one in Western modernity, is of course only a tendency, not something that many games spell out, with the exception perhaps of strategy games such as the *Civilization* series, which comes close to an explicit endorsement of this ideology (see Ford, 2016). Yet, even when it remains implicit, this tendency shapes the imagination of developers and players alike; accordingly, it has been observed and critiqued by many game scholars. For instance, drawing on seminal work by Mary Fuller and Henry Jenkins (1995), Soraya Murray writes that "much of game design organizes the representations of its spaces and their traversability through its direct use-value for the player" (2024, p. 149).

The *Metroidvania* games we explore in this article function as ecogames precisely because of how they systematically challenge this ideology of "direct use-value" by imposing significant constraints on exploration. These constraints fall into three categories, each of which can be understood as reshaping or disrupting players' fantasies of environmental mastery: first, the already mentioned "gating" of the game world and how overcoming those obstacles requires an expansion of the player-character's skills (as well as of the player's knowledge); second, the general difficulty of traversing non-gated areas; third, the opacity and indeterminacy of the in-game maps, which only partially supplement the player's mental representations of the game world.

We can start by drawing on the ecological psychology of James J. Gibson (1986), which revolves around the possibilities of interactions afforded by the environment (also known as "affordances"). These affordances are not an inherent property of the environment but reflect the makeup and sensorimotor abilities of a particular organism. For instance, a tree affords climbing for animals of a certain size and agility; but for more land-bound creatures a tree is simply an obstacle to be avoided. Thus, from Gibson's ecological perspective, the environment isn't a stable background but a dynamic space that affords different types of movement depending on the perceiving organism's makeup. This unstable quality of the environment is directly staged by *Metroidvania* games through the expanding repertoire of the player's skills and knowledge: as Arnott puts it, "a seeming dead end occasionally signifies a secret" (2015, p. 8). This means that the player's perception of the environment changes dramatically based on the player-character's possibilities of interaction: a double jump, as already mentioned, makes accessible what had previously looked like a dead end. The game world's gating system thus disrupts the player's understanding of the environment as a backdrop that can be fully controlled: instead, they are constantly made aware of how the path forward could be contained

in previously visited locations—a loop of exploration that significantly challenges the assumption that game spaces can be depleted by simply visiting them once.

Even beyond the gating of certain areas, Metroidvania games consistently make exploration difficult and potentially even frustrating at times. Mechanical difficulty in games is typically discussed in relation to challenging boss encounters (e.g., in From-Software games) or complicated gameplay systems (see Jagoda, 2018). Games like *Rain World* and *Hollow Knight* can feature punishing combat, but more often than not their difficulty is a function of traversal: simply put, many levels or areas can be successfully traversed only through increasingly difficult gameplay, which can involve precise inputs or careful exploration. *Hollow Knight* features a number of grueling sections in which the player-character is required to make their way through a labyrinth of thorns, deadly crystals, invincible enemies blocking the way, etc. (see Figure 1). Accidentally bumping or falling into one of these obstacles returns the player-character to the start of the maze (or even kills the player-character, if their health is low). Successful traversal requires a long sequence of timed inputs (such as double jumps, dashes, etc.), with an extremely small margin of error. These parkour-like sections foreground the way in which the environment, far from being a mere backdrop to the player's interactions, can function as the antagonist: it actively resists the player-character's tendency to take "traversability" for granted or equate it with "direct use-value" (to borrow again Murray's terminology).

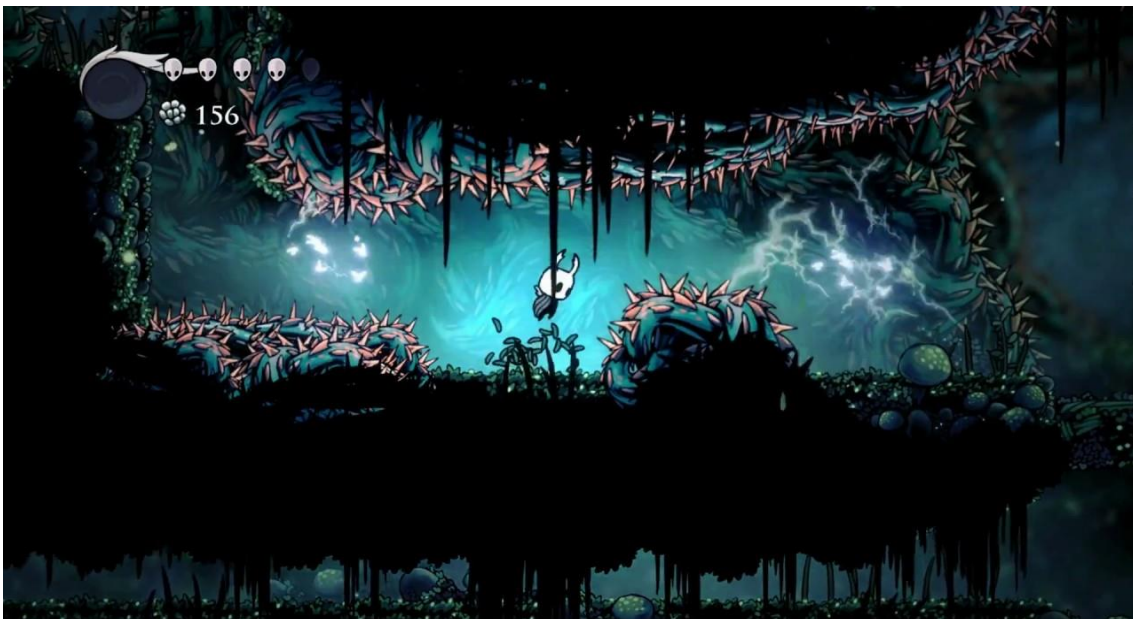


Figure 1. Difficult traversal in *Hollow Knight*. To make progress, the thorns and electric clouds must be avoided through a sequence of timed jumps and dashes.

In *Rain World*, the challenges of spatial exploration are amplified by a time-based mechanic. An indicator at the bottom left of the screen shows how much time is left to explore the world. As soon as time runs out, a torrential rain kills every living being in its path, including the player-character. To avoid death, players must reach one

of the hibernation shelters scattered throughout the levels (see Figure 2). Hibernation allows the player-character to survive the rain: when they wake up, a new temporal cycle starts. Each successful hibernation increases the player's Karma level, a cryptic mechanic never explained by the game. The higher the Karma, the more doors can be unlocked by the player. This intricate system of interconnected mechanics gives rise to a varied gameplay loop whereby a player goes in and out of hibernation until the level of Karma required to unlock the doors is reached. However, for the hibernation to be successful, the player-character must have eaten, which forces the player to keep exploring, leaving the safety of the hibernation shelter and exposing themselves to the risk of rain or predators.

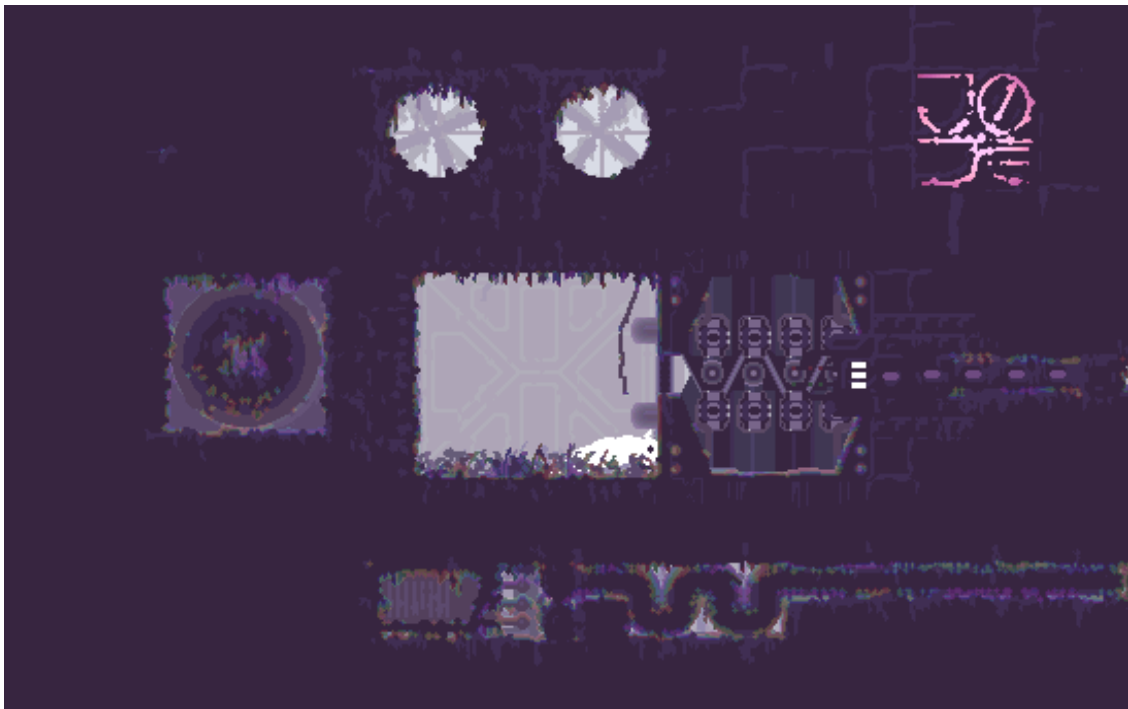


Figure 2. Resting in a hibernation shelter in *Rain World*.

Spatial traversal, in other words, is never a given in *Metroidvania* games. The player needs time to develop motor skills and acquire in-game abilities that facilitate the navigation of an environment that remains challenging, surprising, and opaque—in other words, an environment that resists the player's mechanical or intellectual mastery. The fast travel systems that can be unlocked in *Hollow Knight* (a tram and a network of "stag stations") are similarly imperfect, never guaranteeing instant access to other regions of the game world. In *Rain World* the fast travel system is even more limited. There is no fast travel system between the various hibernation shelters. However, upon completion of specific quests, the player-character is rewarded with a one-time teleportation "ticket." These quests are typically very difficult: for example, one of them requires the player to observe a vegetarian diet for six hibernation cycles. Such systems are designed to assist the player's navigation without eliminating the difficulty of traversal completely. In this way, recursive gameplay offers an opportunity of experiencing ecological significance by destabilizing the link between

exploration and the physical or ideological control of space. In *Rain World*, if players fail to hibernate and get caught by the rain, the game's graphics appear faded and washed out—a visual stand-in for environmental opacity. The player-character becomes even hard to see at times, suggesting that the physical environment is seeping into the slugcat's body, as if the organism-world differentiation was about to break down.

As mentioned in the previous section, the scale and “gated” layout of the game world create unique spatial complexities, turning in-game maps into an essential navigational resource for the player of *Metroidvania* games. But these maps are often as hard to read or use as the games' environments are difficult to traverse. In *Hollow Knight* for example, the map of each area is obtained by locating a (typically well-hidden) cartographer nonplayer character (NPC) who has explored the area before the player-character. Once obtained, the map is not as helpful as one might expect it to be: it is incomplete and only presents a general representation of the area, without showing all the viable routes and interconnections between the various areas. Moreover, the in-game map is updated only when the player-character rests at a checkpoint (a bench): the result is that the map can never be used in real time, but only after a time delay that significantly slows down exploration. A further complication is that the map does not automatically display the position of the player-character when opening it. The position is shown only when the player equips a specific amulet, which takes up a slot that could be used to wear another amulet, thus forcing the player to make a choice between ease of orientation in space and their defensive or offensive powers. Orientation in space thus becomes a mechanically costly choice. Something similar happens in *Rain World*, where the map updates as the player explores the game world and functions only as a visual support of the exploratory effort that has already been made without the help of the map.

Through these multiple levels of difficulty, the map system highlights the overall environmental opacity of *Metroidvania* games.<sup>5</sup> The network formed by the game's locations consistently challenges the player's comprehension, particularly as the newly acquired abilities open up routes that complicate the player's existing mental model of the game world. To keep track of these spatial connections, the player is forced to rely on imperfect visual representations (in-game maps) or on time-intensive and repetitive loops of exploration. The linearity of the player's spatial progress is thus radically disrupted, revealing how the environment changes dynamically as a result of the player-character's abilities. Affectively, this is communicated by the games' insistence on the expansiveness of the game world, which is another source of ludic sublime, in Vella's terminology: the player-character's body is dwarfed by the size and complexity of the world they find themselves in (more on this world in the next section).

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<sup>5</sup> For an alternative perspective on opacity in video games, focusing on issues of mediality and mediation, see Schwingeler (2012).

Environmental opacity, instability, and vastness of scale thus go hand in hand: together, they destabilize ideologies of exploration-as-domination, contributing to keeping the players on their toes throughout gameplay. Through multiple routes, then, *Metroidvania* games implement mechanical strategies that undermine the possibility of anthropocentric mastery over the environment. This critique of anthropocentrism, as we'll see in the next section, is supported by representational devices that foreground postapocalyptic situations and put a great deal of pressure on the human form.

## Postapocalyptic setting and nonhuman vulnerability

Both *Hollow Knight* and *Rain World* are set in worlds that brim with lore for willing players to uncover.<sup>6</sup> *Hollow Knight*, in particular, was clearly inspired by the rich world-building of FromSoftware games such as the *Dark Souls* series.<sup>7</sup> It displays many of the features that make *Dark Souls* narratives unique: sparse use of language, intricate backstories, environmental storytelling with plenty of gaps for players to fill in imaginatively (see Author a; Author b). It is hardly a coincidence, then, that *Hollow Knight* and *Rain World* have given rise to lively fan communities dedicated to the reconstruction and discussion of these worlds' backstories.

Also like the *Dark Souls* franchise, *Hollow Knight* and *Rain World* evoke ruined or postapocalyptic situations. The first settlement encountered by the player in *Hollow Knight*, the town of Hallownest, lies in ruins. Scattered throughout the world are traces—statues, artifacts, and relics—left behind by an ancient civilization that worshipped a mysterious entity called the Void. This information is gradually revealed to the player as they interact with NPCs as well as specific objects or locations. What emerges is a world that feels depleted and diminished, “hollow” as the game's title suggests. It's not a coincidence that the world's capital is named the City of Tears, an intensely atmospheric location whose bleakness is underlined by the perpetually falling rain drops. This atmosphere reinforces the sense of the player-character's insignificance vis-à-vis the scale and threat of the environment they are engaging with. The setting of *Rain World* is even more explicitly postapocalyptic: an ecological catastrophe has ravaged the locations explored by the player-character. The rain that gives the game its title was caused by the enormous amounts of pollution generated by powerful computers known as “Iterators”. These past events are part of the lore that can be disclosed by the player using key items called “Colored Pearls”. These objects are very rare and can only be found in specific locations: after finding

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<sup>6</sup> Lore is to be understood here as an archive of information (for instance, concerning characters, locations, etc.) that remains in the background, unlike the game's plot. See Krzywinska (2008).

<sup>7</sup> The titular “knight” and the many references to well-worn fantasy tropes are also clearly inspired by the *Souls* series. However, this knight is visibly nonhuman, which introduces an ironic counterpoint to the seriousness of the title and its associations with strength, honor, etc.

them, they can be given to an NPC who unlocks several pieces of information about the past of the game world and its lore.

Players willing to engage with these worlds' backstories are asked to take on the role of amateur archeologists, discovering what caused widespread destruction on the basis of scant and partial spatial traces.<sup>8</sup> The catastrophic scenarios evoked by both games tie in with one of the most significant framings of today's ecological crisis: human impact on the nonhuman environment is understood through the lens of the disasters that are unfolding around us, or that are bound to unfold in the (near) future if governments don't take action (see Horn, 2018). On a representational level, then, the games' foregrounding of ruined landscapes amplifies the ecological significance of the mechanics examined in the previous section.<sup>9</sup>

There is something even more radical about the games' postapocalyptic imagination, though. If the environmental storytelling of these games leaves many questions open, one aspect is unmistakably clear: human beings are largely absent in these games. *Rain World* does refer to a mysterious group of "Ancients", who are depicted in vaguely humanoid terms by a number of murals throughout the game.<sup>10</sup> It is implied that the catastrophe that caused the titular rain is linked to this Ancient civilization. Very little else in the world of *Rain World* is anthropomorphic in nature: the posthuman setting speaks to the fantasies of "worlds without us" explored by Alan Weisman (2007) in a famous thought experiment on what would happen if humanity disappeared overnight. The player-controlled character also resists anthropocentric readings: known as "slugcats", they have a cat-like head and ears, two arms, and an elongated, amorphous tail. *Hollow Knight* contains even fewer traces of the human form: the protagonist—referred to simply as "the Knight" in-game—is a vaguely insect-like creature. The many NPCs and enemies they encounter in the course of the game—including a few knights identical to the player-controlled one—are also similar to bugs in appearance.

Animal life is thus visually highlighted by both games, but this isn't a realistic exploration of what it is like to be an animal. We are far from the kind of aspirational identification with animals discussed and critiqued by Michael Fuchs (2021) in relation to *Bear Simulator* (Farjay Studio, 2016). Because of the knight's and slugcat's mysterious nature and obscure backstories, no such straightforward identification is possible here. Instead, the player's interaction with the avatars is guided by an experience of vulnerability, a concept theorized by animal studies scholar Anat Pick

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<sup>8</sup> See also Caracciolo (2022) on the archeological attitude such games can elicit in players and Andriano (2025) and Caracciolo (2024) for broader discussions about the role of the interpretation in lore-based narrative games such as the Soulsring games.

<sup>9</sup> The link between *Rain World* lore and the climate crisis emerges explicitly in online discussions: see, e.g., SparrowWingYT (2024).

<sup>10</sup> More information, including a screenshot of one of the murals, can be found at the game's wiki ('Lore', 2025).

(2011).<sup>11</sup> As Pick posits, vulnerability reaches across the divide between human beings and nonhuman animals: in this case, it brings together the player (who is mechanically in control) and the nonhuman avatar, but crucially it does so without attempting to erase their differences.

The knight and the slugcat are repeatedly presented as feeble and dispensable creatures, as suggested by the countless loops of death and resurrection they go through. (In *Hollow Knight*, this point is reinforced by the numerous beings identical to our player-controlled knight-‘vessels’, in the game’s terminology—we encounter throughout the game world.) This sense of vulnerability is amplified by the ‘cute’ aesthetics that informs the game world and its inhabitants. Timothy Morton has argued that the aesthetics of cuteness is “obviously an obstacle to the ecological thought” (2010, p. 15), since it privileges individual animals (and attractive animal species) over the ecological systems they are embedded in. However, in *Hollow Knight* and *Rain World* cuteness and vulnerability enter a productive tension with the games’ emphasis on repetitive loops of exploration. The player-characters’ visual appeal is counterbalanced by the realization that death is an integral part of spatial traversal. This blend of vulnerability, cuteness, and acceptance of failure is central to players’ engagement with the avatar: the attachment we develop for the knight and the slugcat (partly through their endearing qualities) is modulated by awareness of their fallibility, which encourages a more distanced stance towards the player-characters.<sup>12</sup>

In sum, vulnerability is an important ecological affect evoked by both games. It creates an imaginative bridge between the human player and the nonhuman life we are controlling (mechanically) without fully grasping (narratively). This affective strategy reinforces the player’s connection with the avatar (and with their surroundings) without giving in to the illusion that the human player can simulate, and thus fully master, a nonhuman animal. Like the environment and the narrative of which they are a part, the player-characters’ identities remain out of reach but distinctly nonhuman in nature, with their vulnerability echoing the larger environmental catastrophes that struck these game worlds. We will see in the next section that *Rain World* goes even further than *Hollow Knight* by implementing sophisticated AI systems that evoke a vision of ecological interconnectedness transcending the player-character.

## Environmental simulation

The world of *Hollow Knight* remains fairly consistent throughout gameplay, but there are some elements of unpredictability: enemy movement and attack patterns can be haphazard, for example, and key NPCs like Quirrel can be encountered at various

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<sup>11</sup> See also Tom Tyler’s (2022) discussion of the ethical intricacies inherent in the representation of animal life in video games, a discussion that also draws on Pick’s (2011) work.

<sup>12</sup> For discussion of the complexities of character engagement in games, see Newman (2002) and Vella (2013).

(and seemingly random) locations throughout the game world. Moreover, an important world event occurs after the player-character defeats one of the three Dreamers (which is the main objective we are given early on): the starting area, the Forgotten Crossroads, is profoundly transformed by an outbreak known as the Infection. The layout of this region changes dramatically, blocking access to certain routes and spawning a host of stronger, mutated enemies. These minor and major departures from the player's expectations lend the game world of *Hollow Knight* a certain dynamic quality, but that environmental unpredictability pales in comparison with the procedural complexity of *Rain World*.

The media attention surrounding the latter game's release was primarily driven by the recognition of two unusual features (see Skrebels, 2017): procedural character animation within the game world and the simulation of a believable ecosystem enabled by highly complex AI governing NPC behaviors.<sup>13</sup> In procedural animation, the animation corresponding to the player's input is generated in real-time by drawing from a general pool of algorithmic rules.<sup>14</sup> This is different from how, in most video games, the player's input is mapped onto a narrow set of preprogrammed animations representing specific actions. Procedural animation gives *Rain World* its distinctively flow-like aesthetic in terms of movement execution (see Figure 3). It also makes the player-character harder to control, limiting the predictability of movements corresponding to player inputs and emphasizing the sense of opacity and vulnerability we discussed in the previous section. Crucially for our purposes, the mechanical difficulty of controlling a nonhuman avatar highlights the separation between the player's human perspective and nonhuman behaviors. The unpredictability of animations and the sense of traversing a nonhuman world further complicates interactions with other creatures encountered in the game world, whose bodily movements are also often unusual or erratic. This creates challenges in planning defensive or offensive actions due to the fluidity of the current situation and its possible outcomes.



Figure 3. Grabbing a fly while jumping in *Rain World*: an example of procedural animation.

<sup>13</sup> In addition to scholarly work, online discussions also address the topic of how ecosystems can be represented through video game mechanics. For instance, the YouTube channel Curious Archive (<https://www.youtube.com/@CuriousArchive>) analyzes the topic, also in relation to *Rain World*.

<sup>14</sup> See also GDC Festival of Gaming (2017), where *Rain World* developers Joar Jakobsson and James Therrien explain how they implemented procedural animation in the game.

The difficulty of predicting character movements is further compounded by another distinctive feature of *Rain World*: AI implementation. It has been argued that “game AI offers an alternative, less-linear and less-teleological trajectory for the emergence of cognitive and creative possibilities, bringing to the fore dynamics and ecologies of distributed agency, relationality and processuality” (Giddings, 2020, p. 115). *Rain World* is well known for employing a complex AI system that governs animal behaviors dynamically, enabling unpredictable interactions between the various AIs controlling individual organisms as well as entire species.<sup>15</sup> That approach creates a “less-teleological trajectory” in the simulation of nonhuman behaviors, which means that the nonhuman is framed as unruly and resistant to human control.

Moreover, *Rain World* simulates an ecosystem that does not revolve around the player-character but of which the player-character is only a part. The most obvious one is that the game’s system tracks each animal’s behavior regardless of whether they are shown on the screen: their behaviors and life patterns are generated independently of the player’s actions.<sup>16</sup> While traversing the game world, it is not uncommon to encounter scenes of combat between other animals, giving the player the sense of algorithmically driven nonhuman autonomy and immersion in a complex ecosystem that does not depend upon their presence.

This AI system takes on ecological significance in the player’s experience and interpretation of the game. The design creates an impression of ecosystemic interconnectedness or “enmeshment” (Morton, 2010): the player traverses a world that simulates the development of autonomous life, a world in which animals move freely and independently of the player-character’s decisions. Animals do not occupy specific positions awaiting a player-triggered response, as occurs, for instance, in the *Dark Souls* franchise, where enemy placement is a significant design element and has strategic implications for the player.

The credibility of the AI system is further reinforced by numerous complications added to the independence of individual animal behaviors. For example, the game features a reputation system: the player’s tactical choices have consequences for the behavior of other creatures towards them. Avoiding aggressive behavior towards Scavengers, a particularly aggressive lifeform, increases the player’s reputation in their eyes, enabling trading or simply reducing these creatures’ aggressiveness towards the player. In other cases, the reputation system is even more explicit:

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<sup>15</sup> This contrasts with the way many AI systems (particularly Large Language Models) are trained on human-produced data and thus, in a sense, reliably anthropocentric. We would like to thank one of the peer reviewers for this astute observation.

<sup>16</sup> In an interview (Priestman, 2017), Jakobsson states that “instead of the AI creatures just existing as a player obstacle, they exist in their own right, they exist there for themselves”. He also adds that “instead of thinking ‘how can I make this creature act and serve as an obstacle in the game’ I went at it from the angle ‘how can I make this creature behave in such a way that it can find food and move around and get back to its home before the night comes’”.

the player can feed a lizard, which then acts as a protective companion, following the player across the game map. Another behavioral modifier illustrating the multi-layered interactions between various AIs is the personality system. Depending on the personality of certain creatures, they may behave more friendly or aggressively, regardless of the player's or other creatures' actions, introducing further complexities to the ecosystem's interaction system.

What must be noted is that, in all these cases, whether involving the reputation system or personality traits, information about the state of particular NPCs or their relationship with the player is never transparent: it can only be inferred from various visual and behavioral cues. This serves as an example of the opacity characterizing Metroidvania ecogames, both representationally (as discussed in the previous section) and mechanically. The complex system of interconnected AI facilitates a shift from an anthropocentric paradigm, directing attention away from the player-character and toward the ecosystem as a whole. The mechanics of *Rain World*, in conjunction with its AI system, carry ecological significance because they place the player in a world they can never fully control, where they are perpetually decentralized, and where the actions of individual creatures have repercussions across the entire ecosystem. Similarly, the game's lore depicts a civilization that has faced ecological disaster due to its failure to respect and understand the ecosystemic consequences of the actions of a single species.

## Conclusion

An established tradition of "human-centered" game design argues that games should cater to the sensorimotor and cognitive needs of human players (see Bostan, 2020). However, other approaches to interactive design in more general terms (not strictly game design), have highlighted the insufficiency of this design paradigm, advocating the importance of "post-anthropocentric" design choices (Borthwick et al., 2022). Our analysis of Metroidvania ecogames in this article is consistent with this post-anthropocentric philosophy. In the two indie games discussed here, *Hollow Knight* and *Rain World*, game mechanics, rules, and narrative create gaming experiences that, while aimed at human players, propose representational strategies and simulations that cultivate ecocentric perspectives rather than anthropocentric ones. More specifically, the representational dimension of these games—with its focus on postapocalyptic environments and nonhuman vulnerability—converges with two formal and mechanical features: the difficulty of spatial traversal and (particularly in *Rain World*) the simulation of dynamic environments. The result is a systematic critique of the environmental imagination dominant in Western modernity, an imagination that emphasizes human mastery and agency over ecological responsibility and interconnectedness.

The Metroidvania ecogames we explored here offer players challenges and frictions that disrupt ideologies of human domination by positioning players within worlds

that are impossible to fully grasp and control. These games create systems that transcend the player-character and decentralize human assumptions, instead focusing on nonhuman creatures and the workings of the ecosystem as a whole. They simultaneously offer a set of mechanics and rules emphasising the importance of ecological interconnectedness and a narrative that portrays the consequences of ignoring it. *Hollow Knight* and *Rain World* are not alone: other recent Metroidvania games, for instance *Animal Well* (Shared Memory, 2024) and *Ultros* (Hadoque, 2024), operate in very similar ways. The formula of “gated” environmental exploration of the Metroidvania genre is thus particularly well suited for the staging of ecological issues. This is due to how the player-character’s interactions with the game world are consistently defamiliarized by their growing repertoire of abilities and environmental knowledge: space cannot be taken for granted or simply depleted through exploration. Instead, it must be revisited in gameplay loops that—together with other representational or simulative features of the games—encourage a rethinking of established patterns of environmental awareness, foregrounding human–nonhuman interconnection as well as individual vulnerability.

It is important to spell out that our argument only identifies a *tendency* in the Metroidvania genre: we are not claiming that all Metroidvania games can be read as ecogames, and neither are we suggesting that all players exposed to games like *Hollow Knight* or *Rain World* will necessarily recognize their ecological dimension. As scholars in the field of empirical ecocriticism have highlighted (see Schneider-Mayerson, 2018), the influence of environmental representations—in fiction but also arguably in games—is complex and mediated by social contexts and a wide range of cultural assumptions. Ultimately, grasping the ecological significance of these games is a matter of encountering them in social contexts that draw players’ attention to this significance. However, it should be clear that the Metroidvania genre represents an important addition to discussions on ecogaming: when framed from an ecological perspective (in scholarship but also in educational settings), the genre can yield significant and, in some ways, unique insights into the possibilities and limits of human–nonhuman connection. These insights are simultaneously affective and conceptual, and they are grounded in both the representational world of Metroidvania games and in the mechanics they implement.

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**“Was Barbarossa Not German?!”**  
**Nation, History, and Identity in**  
***Civilization* Players’ Online Discussions**

Kathrin Trattner

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# “Was Barbarossa Not German?!”

## Nation, History, and Identity in *Civilization* Players’ Online Discussions

KATHRIN TRATTNER

### Abstract

This paper investigates how players engage with and reflect on the construction of the nation and its place in history in the turn-based strategy game series *Civilization* (1991–2025). The *Civilization* series has been studied extensively concerning portrayals of history and nationhood within the games, mainly through their rule systems. This study’s purpose is to add a player-centered perspective to this body of scholarship and thereby critically challenge assumptions about players’ reception of the games’ portrayals of the nation throughout history. For this purpose, a structuring qualitative content analysis was conducted to analyze player discussions on the largest German-speaking *Civilization* forum. As this study demonstrates, players neither simply internalize nor ignore the games’ ideological underpinnings inherent to the structure of their rules as previous literature assumes. Rather, players negotiate *Civilization*’s portrayal of the nation throughout history in complex ways that are, most of all, dependent on their own national identities and feelings of belonging. The study thereby speaks to broader disciplinary discourses within game studies by critically investigating whether or how ideologies ingrained within games’ rule systems are perceived, discussed, negotiated, or sometimes even subverted by players.

### Keywords

Player discussions; nation; history; identity; *Civilization*

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You do not want to tell me that Germany has only existed since 1871, right? Then you are exactly one of those to whom my post was directed. Germany exists as a ‘civilization’ or even nation longer (1848) and the HRE was German just as Austria was German at that time and the Habsburgs were German.

Germany as a state is young, as a nation old or was Goethe not German, Luther, Barbarossa? All these people are perceived as Germans and also the HRE was German in essence.

Again for all I'm talking about the NATION. (Civ5Thr004, Pos. 123–124)

**This is an excerpt from a forum discussion** on the largest German-speaking *Civilization* forum. What started as a discussion of *Sid Meier's Civilization V's* (2010) historical (in)accuracies in representing the Holy Roman Empire throughout history ended in an emotional plea for the trans-historical continuity of the German nation. There are different terms used in the above quote: *civilization*, highlighted through the use of quotation marks, is used very similarly to *nation*. Both *civilization* and *nation*, are, then, contrasted to the *state*. One is artificial, the other ones are natural. One is new, the other ones are old, perhaps even timeless. Another thing worth mentioning is that the post was written by a German. Perhaps the specific conception of the history of the German nation may also be impacted by that factor.

When a game like *Civilization V* models historical processes and lets players act *as* a nation, what does that tell us about how nations come to be, how they develop, and what they mean? And, perhaps even more interestingly, how do people who play the games relate that to their own notions of the nation and its place in history? By looking at discussions like the one above, we can not only learn how players perceive and evaluate what is portrayed in a game, but also how their own sense of identity may impact these perceptions and negotiations. This study investigates how players talk about the concept of the nation within the *Civilization* series and beyond as they discuss specific nations and their place in history. Specifically, it addresses the following questions:

How do *Civilization* players engage with and reflect on the games' portrayal of the nation and its place in history?

What role does their own national identity play in these negotiations?

For this purpose, a structuring qualitative content analysis (Kuckartz & Rädiker, 2023) was conducted to analyze player discussions on the largest German-speaking *Civilization* forum. By encompassing players' negotiations of the concept of the nation within (and beyond) the game series, the study aims to add a player-centered perspective to existing scholarship on the *Civilization* series, history, and the nation. In that way, it also speaks to broader disciplinary discourses by critically investigating whether or how ideologies engrained within games' rule systems are perceived, discussed, negotiated, or perhaps even subverted by players.

## What (or when) is a nation?

To begin with, we need to take a step back and ask the question: what are we even talking about when we talk about the nation? Very closely tied to the question “what is a nation?” is the question “when is a nation?” (Connor, 1990). How the nation is imagined (Anderson, 1990) in relation to history plays a pivotal role in how it is understood as a concept. This is also reflected in the classic tripartite division of theories of the nation and nationalism into *primordialist*, *modernist*, and *ethno-symbolist* approaches (Antonsich, 2015, p. 298; Özkırımlı, 2010, p. 199; Smith, 1998). For the purpose of this article, we will focus on primordialist and modernist approaches. Primordialism “maintains that nations have always existed” (Antonsich, 2015, p. 299), meaning that “nationality is a ‘natural’ part of human beings, as natural as speech, sight or smell” (Özkırımlı, 2010, p. 49). In this view, the nation is of “immemorial or perennial character” (Smith, 1998, p. 159). From the 1960s onward, and particularly in the 1980s, a paradigm shift emerged in the field of nation and nationalism studies. The modernist view of the nation claims the exact opposite of primordialist positions: it “suggests that nations and nationalism are intrinsic features of the modern world” (Antonsich, 2015, p. 299) and that “nations, like states, are a contingency, and not a universal necessity” (Gellner, 1983, p. 3). In opposition to primordialist approaches, the modernist view of the nation, therefore, seeks to problematize the naturalization of the nation as timeless.

This division of the field is, of course, simplified, as not all approaches to the nation fit neatly into one of those categories. Wehler (2019, p. 15), for instance, argues for an understanding of the nation as an initially *conceived order* which is developed by drawing on the traditions of an ethnic polity<sup>1</sup> and then gradually created as a sovereign unit of action through nationalism and its supporters. This means that he maintains some kind of historical continuity that goes back further than modernity in the formation of the nation, yet his definition is decidedly modernist in terms of the causal relation suggested between the nation and nationalism. For primordialists, nations bring forth nationalism, whereas modernists claim the opposite, namely that “nationalism comes before nations. Nations do not make states and nationalisms but the other way round” (Hobsbawm, 2012, p. 10).

Going back to the aim of this article—encompassing *Civilization* players’ negotiations of the concept of the nation within (and beyond) the game series—we need to ask whether the attempts at defining the nation as outlined above can help us achieve this. I ask this question because what all previously discussed approaches to the nation have in common is that they deal with developments on a macro level. They are concerned with questions of the *formation* of the nation through “large-scale historical processes as well as the consequences thereof throughout history” (Trattner, 2023, p. 77). Yet, as Hobsbawm contends, nations are “dual phenomena,

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<sup>1</sup> The term ‘ethnic polity’ is a rough translation of Wehler’s (2019, p. 15) original term “ethnischer Herrschaftsverband”.

constructed essentially from above, but which cannot be understood unless also analysed from below, that is in terms of the assumptions, hopes, needs, longings and interests of ordinary people” (Hobsbawm, 2012, p. 10). As much as we might want to dismiss primordialist views of the nation and go along with modernist definitions of nations as constructed when looking at them ‘from above’, the problem remains that, when we look at them ‘from below’, we can often see that “members of ethnic communities and nations ... feel their communities are primordial” (Smith, 1994, p. 376), meaning primordialism is very common in everyday understandings of the nation by ‘ordinary people’ (Antonsich, 2015, p. 299; Wehler, 2019, p. 36). Therefore, for our purpose, a shift in perspective is needed. In line with Brubaker (2004, p. 115), I argue that “asking ‘what is a nation?’—as countless analysts have done since Renan—encourages us to treat nations as entities” and will therefore not serve us much in trying to answer the research question outlined above. The purpose of this study is not to reproduce the category of the nation by attempting to define it, but to understand how it is ascribed meaning by different actors in different contexts, in this case, players discussing the *Civilization* series. It is about encompassing everyday understandings and negotiations of the nation in relation to media, specifically videogames.

Therefore, I aim “to make the category ‘nation’ the object of analysis, rather than use it as a tool of analysis” (Brubaker, 2004, p. 116). This entails moving away from questions of the *formation* of the nation in relation to history and, instead, shifting the focus towards *negotiations* of these ideas and thereby their reproduction and naturalization (Antonsich, 2020, p. 1232). A helpful approach to this is the analytical lens of the *everyday nation* (Brubaker et al., 2006; Fox & Miller-Idriss, 2008; Thompson, 2001), which “explores how the nation resonates in different ways among a diverse population” (Antonsich, 2020, p. 1234). It is, then, not about the question of how nations come to be and develop, but about the question, “what do people do with the nation?” (Antonsich, 2020, p. 1232), and how they actively reproduce it in social interactions. Such everyday interpretations and negotiations of categories like the nation are profoundly influenced by and occur in connection with various forms of media, including videogames.

## **The nation and history in *Civilization* and beyond: Previous literature**

As van der Merwe (2021, p. 138) asserts, there are surprisingly few comprehensive studies on nation, identity, and video gaming.<sup>2</sup> In recent years, several studies have dealt with specific national gaming cultures (Cao et al., 2025; Donald et al., 2023; Fiadotau, 2021; Jiang & Fung, 2019; Martin, 2018; Nie, 2013; Ramírez-Moreno & Navarrete-Cardero, 2024; Švelch & Houška, 2025). Authors have examined the role of nation states and national identity in the development and production of video

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<sup>2</sup> For a thorough overview, see van der Merwe (2021, pp. 138–143).

games (Jiang & Fung, 2019; Parker & Jenson, 2017; Švelch & Houška, 2025) as well as representations of cultural and national identity within games (Cao et al., 2025; Donald et al., 2023; Zulkarnain, 2014). Compared to analyses of production and representation, very few studies have thus far dealt with players' interpretations and negotiations of the nation within games (Li & Li, 2023; Sudar, 2017). What is furthermore particularly interesting for the topic of this paper, is that studies that analyze portrayals of particular nations in the context of video games often emphasize the role history plays in these representations (Donald et al., 2023; Martin, 2018; Nie, 2013; Zulkarnain, 2014).

Not least due to the series' long history and enduring popularity, *Civilization* has long been a focus point of historical game studies. Furthermore, as Carpenter (2021, p. 44) points out: “the player, after all, is playing as the nation”. It is therefore not surprising that *Civilization* is one of the most frequently discussed video game series concerning questions of the nation and/in gaming, especially in connection with history. Despite a few notable exceptions (Apperley, 2018; Carr, 2007; Majewski, 2021; Myers, 2010; Owens, 2011), most studies on *Civilization* that touch upon the topic of the nation are concerned with the games themselves rather than their reception. The main focus is, then, often on the games' rule structures and how arguments on how history (and/or the nation) works are made through those rules. Only a few studies focus explicitly on the construction of the nation in *Civilization* (Bijsterveld Muñoz, 2022; Donecker, 2014). Mostly, these questions are only addressed in passing in the context of analyses of representations of history, colonialism, or imperialism (e.g., Bembeneck, 2013; Carpenter, 2021; Ford, 2016; Friedman, 1998). Within this body of scholarship, two aspects are of central interest to this study. Firstly, how the nation is represented in *Civilization*, how it functions and what ideological assumptions this is based on according to the literature. And, secondly, what assumptions are, then, being made concerning the players and their reception thereof. Regarding the former, some key characteristics of the nation, as modeled by *Civilization*, can be made out. According to the literature, the nation in *Civilization* is:

- a) *Primordialist* in its conception. Every game starts in 4000 BC with one particular civilization “and the concept of the game presumes that the civilisation, as an historical actor, remains the same” (Donecker, 2014, p. 106) throughout all of history (cf. also Bijsterveld Muñoz, 2022).
- b) *Homogenous* in its composition. Heterogeneity is only present above the level of the nation, whereas the games' “mechanic homogenizes those within the state, flattening out the possibilities for hybridity or a multiplicity of identities” (Carpenter, 2021, p. 44; cf. also: Bijsterveld Muñoz, 2022, p. 1318; Carr, 2007, p. 234; Donecker, 2014; Friedman, 1998, pp. 145–146).
- c) *Essentialist* in its characterization. Each playable civilization is defined by unique characteristics that delimit it from others, which attributes “an

essential nature to the nations being played” (Bijsterveld Muñoz, 2022, p. 1318; cf. also Chen, 2003, p. 100; Donecker, 2014).

- d) Reflective of *nationalist* sentiments. All of this speaks for an underlying nationalist conception of the nation (Bijsterveld Muñoz, 2022, p. 1322; Donecker, 2014, p. 113; Friedman, 1998, p. 134).

It is important to note here that, strictly speaking, primordialist conceptions of the nation comprise the other points: A primordialist imagining of the nation implies that the nation is homogenous, it is an essentialist position and, putting all of that together, a nationalist one. However, on an analytical level, I argue that it makes sense to distinguish between these characteristics of *Civilization's* portrayal of the nation because they emphasize different levels (e.g., the historical development of the nation versus the traits and characteristics its people are ascribed) that, like in scholarly literature on the topic, are likely to appear separately in the data.

This leads us to the second question of how players are thought to perceive and negotiate the way the nation is implemented in the games according to the reviewed literature. If ideologies are seen as embedded in a game's rule system, it is often implied that players must necessarily accept or even internalize those ideological assumptions (Bembeneck, 2013; Bijsterveld Muñoz, 2022; Carpenter, 2021; Donecker, 2014; Douglas, 2002; Friedman, 1998, p. 136; Kapell, 2002, p. 133; Koabel, 2017, p. 64; Mir & Owens, 2013; Pobłocki, 2002; Stephenson, 1999; Voorhees, 2009). Another position contrary to the assumption of indoctrination contends that players do not really care about or even notice such ideological subtext (Galloway, 2006, p. 102; Majewski, 2021; Myers, 2010, p. 108). What both positions have in common is that they assume a relative homogeneity of players and their experiences and negotiations of what is represented to them through a game. This rather reductionist view of a passive audience has, however, also been criticized by several authors, who recognize the possibility of players critically engaging with *Civilization's* portrayal and mechanical implementation of the nation and the ways it models historical processes (Apperley, 2018; Carr, 2007; Chapman, 2013; Ford, 2016; Ghys, 2012; Owens, 2011; Reichert, 2008; Zamaróczy, 2016).

Critiquing such approaches is, of course, not new, not only in game studies but also following a long tradition within actor-centered media research (Jenkins, 1992). As Apperley (2018, p. 2) summarizes for the case of *Civilization*: “It is entirely reasonable to observe that digital games like the *Sid Meier's Civilization* series are based on Eurocentric and colonial assumptions. However, it does not necessarily follow that through playing these games the players internalize these assumptions” (cf. also Carr, 2007, p. 223). Understanding discursive reproductions of the nation through the framework of everyday nation means acknowledging them as fragmented, conflicting, and heterogenous rather than assuming a uniform interpretation of the concept based on a deterministic understanding of media. The aim of this article is, therefore, to critically question the ideas of players' internalization or ignorance of

the ideological subtexts of *Civilization's* portrayal of the nation by highlighting the heterogeneity of interpretations of the concept in relation to the games.

## Research material and method

This study's research material stems from discussions on the Civilization Webring Forum (<https://www.civforum.de/>), the largest German-speaking forum on the game series. Online since the early 2000s, the Civilization Webring Forum contains over 9.3 million posts in around 100,000 threads by almost 24,000 users.<sup>3</sup> It is therefore a rich source in several regards. To find out how *Civilization* players engage with the games' constructions of the nation and its place in history and what role their own national identities could play in these negotiations, a structuring qualitative content analysis (QCA) (Kuckartz & Rädiker, 2023) was conducted based on material gathered on the forum.

Qualitative content analysis is the systematic and methodologically controlled scientific analysis of texts, pictures, films, and other contents of communication. Not only manifest but also latent contents are analysed. At the centre of qualitative analyses are categories with which all the material relevant to the research question(s) is coded. (Kuckartz & Rädiker, 2023, p. 21)

Kuckartz and Rädiker distinguish between different types of QCA: structuring QCA, evaluative QCA, and type-building QCA. For this study, structuring QCA was deemed an appropriate approach, since, as the authors explain, it “is usually used to structure the material according to topics and themes” (2023, p. 98). Therefore, “it is precisely the open, rather explorative research projects for which this method can work particularly well” (Kuckartz & Rädiker, 2023, p. 122). For coding the material, a deductive-inductive approach was chosen. The initial deductive codes were constructed based on the reviewed literature in combination with the research question. The benefit of this approach is that it enables a comparison between previous findings and assumptions from media-focused literature on the topic and the player's actual discussions and negotiations about it, thereby adding to the current state of research by actively engaging with it.

To determine the sample, it was first crucial to understand the structure of the analyzed forum, which contains a vast number of threads and posts, not all equally relevant to the research topic. Sub-forums focused on technical issues, specific gameplay strategies, games other than *Civilization*, and off-topic discussions were excluded. This narrowed the focus to the general discussion sections for the first six main installments of the game series (MicroProse, 1991, 1996; Firaxis Games, 2001, 2005, 2010, 2016) where most debates about constructions of the nation and history

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<sup>3</sup> As it is a German-speaking forum, all of the threads are in German. All of the translations in this article are the author's.

take place. Discussions on all of the first six main installments were included in the sample rather than focusing on one installment in particular, because within all of them the construction of the nation does not differ significantly in the characteristics outlined in the previous section. I then proceeded to search these sub-forums for the keyword *nation*, as the initial aim was to encompass how players use the term nation in the context of their communication about *Civilization* as well as beyond, exploring how they assign meaning to it. Therefore, all threads containing hits were evaluated regarding their relevance for the research question and, if they were thematically relevant, included in the sample.

In a first stage, I read all of the threads included in the initial sample without coding them, but instead marking passages that appeared relevant to the research question. At this stage, the sample was further condensed to a final number of 59 threads. The oldest thread in the sample is from 2001 and the newest is from 2023. Following Kuckartz and Rädiker (2023, p. 102), I wrote memos for each thread, noting themes and narratives that I observed and evaluating how each thread relates to the research question.

As a next step, I developed my main categories. As mentioned above, I chose a deductive-inductive approach. The initial deductive codes are derived from the reviewed literature's arguments regarding how the games construct the nation (primordial, essentialist, homogenous, nationalist), as well as the presumed player perspectives on these portrayals (internalization, criticism, indifference). As I went through the first cycle of coding the entire material, I applied these initial deductive codes and gradually supplemented them by inductive codes derived directly from the analyzed discussions. Inductive coding took place in German since it is a German-language forum, thereby staying as close to the material as possible.<sup>4</sup> This was followed by a second cycle of coding with the adjusted code system. I then evaluated the data, focusing on category-based analysis and the relations between central categories (Kuckartz & Rädiker, 2023, pp. 115–117), particularly between deductive and inductive ones as this allowed for a comparison of the results of previous media-centered literature on the nation in *Civilization* and the player's communication.

For additional context on the results to follow, it is important to clarify a few of the characteristics of the sample. As mentioned, the analyzed discussions stem from the general discussions sections on *Civilization's* first six main installments because those were the ones where discussions on representation, history, as well as polls on favorite/least-favorite playable civilizations ("civs") took place. This means that the kinds of conversations the study draws upon are mostly discussions on which nations should be featured in the games and why or why not or whether players were happy or unhappy with how individual civs were represented in the game.

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<sup>4</sup> The codebook, which is therefore partly in English and partly in German, is available upon request from the author.

Within these types of discussions, the contributors' attitudes towards how the games construct the nation, particularly in relation to history, as well as the ways they themselves assign meaning to the concept of the nation surfaced most clearly. Concerning the second part of the research question—whether or how their own national identity impacts these negotiations—it is important to note that I do not have any demographic data on the contributors in the forum. Since it is a German-speaking forum, that does narrow it down, yet German-speaking does not necessarily amount to identifying as German, of course. However, particularly in discussions on specific nations or playable civilizations, it is very common for contributors to state their own national identity as part of the argument (e.g., “we Germans”, “as a German”, etc.). Therefore, when I speak of contributors' national identity, I refer to their own statements on it. At this point it is also important to note that a discussion on national identity in Germany is different from the same debate in other national contexts, not least due to Germany's history. Therefore, these results—as any results of qualitative research—should not be generalized. A last point to clarify is that while there are clear narratives that I will present in the following, it is crucial to note that within the forum there are plenty of lively discussions as well as a very active content moderation. This is important to emphasize because it shows that the discourse is not at all homogenous.

## Findings

### *The in-game and the abstract nation*

As explained above, initially, it was important to understand how players use the term *nation* in the context of their communication about *Civilization* and beyond to explore how they assign meaning to the concept. Searching the sub-forums included in the sample for the term *nation* produced a very large number of hits because contributors to the forum tend to use the terms *nation* and *civilization*—referring to individual civs—largely synonymously and interchangeably, as illustrated by thread titles such as “Favorite nation”.

*Nation* and *civilization* are, however, not only used interchangeably when it comes to discussions of concrete representations thereof within the game, but also on a meta-level. To illustrate what I mean by that, let us return to our initial example. In their plea for the transhistoricity of the German nation, the user writes: “You do not want to tell me that Germany has only existed since 1871, right? ... Germany exists as a ‘civilization’ or even nation longer” (Civ5Thr004, Pos. 123). Here, they are not talking about Germany as a civ within the game, but about the German nation and its history *outside* the game. Again, the terms *civilization* and *nation* are employed in a way that implies they signify the same thing (or at least something very similar), which is emphasized by contrasting them both with the state, as I will elaborate on later. This example, therefore, shows that the terms *nation* and *civilization* are also

often used synonymously in discussions that go beyond the content of the game, meaning in reflections on the abstract concept of the nation.

From these initial observations, a central differentiation can be derived concerning different levels on which the term is employed in the analyzed discussions: On the one hand, we have the in-game nation (the playable nation *in* the games) and on the other hand, there is the abstract nation (the concept of the nation *outside* the games). Differentiating between these two levels is useful because it helps us understand to what extent players tend to internalize or at least not critically challenge the games' design of the in-game nation and are, then, impacted by it in their perception of the abstract nation, as the literature often tacitly implies (e.g., Bijsterveld Muñoz, 2022; Carpenter, 2021; Donecker, 2014; Douglas, 2002; Friedman, 1998; Koabel, 2017).

As helpful as this distinction between levels is from an analytical perspective, within the data themselves, there are significant overlaps between the two and they are not always fully discernable in the communicative reality of the forum. Conversations about the abstract nation are, on the one hand, triggered by discussions of the in-game nation. On the other hand, the latter is being evaluated and critically negotiated based on commentators' understanding of the abstract nation. In these evaluations of the in-game nation based on understandings of the abstract nation, players' ideas of historical authenticity and accuracy take on a central role.<sup>5</sup> Conspicuously, a general desire for historical accuracy, to 'play history as it was', was noticeable in different discussions throughout the entire sample. The "relation game – 'real' history" was, therefore, one of the main categories. Under this category, I coded statements relating representations of history within the game to 'real' history in terms of accuracy or authenticity, often forming the basis of commentators' evaluations of game content. This finding is interesting in itself since *Civilization*, according to the general idea of the game, lets players do a lot beyond that or even play 'against' history. Yet, at least within the analyzed sample, that does not appear to be interesting to most players. This strong desire for historical accuracy also applies to evaluations of how a specific nation or nationhood in general is represented in the games. It often comes down to the question: "is this historically accurate?" Therefore, layers of discussing *Civilization's* portrayals of the nation (the in-game nation) versus discussions of the nation's place in history (the abstract nation) often overlap, because the latter is the basis for evaluating the former. It is precisely this desire for historical accuracy that leads to significant points of friction in how players negotiate the in-game nation in relation to the abstract nation.

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<sup>5</sup> For detailed discussions of ideas of historical authenticity and historical accuracy in relation to games with historical settings and players' perception thereof, see Burgess and Jones (2022); Pfister (2020); Salvati and Bullinger (2013); Zimmermann (2021).

## **What or when is a nation? Ascriptions of meaning and demarcations**

But how are those terms *nation* and *civilization*, used widely synonymously and interchangeably within the sample, ascribed meaning? Or, in other words: what does the nation signify to the players? As mentioned in the previous section, the threads that give us most insight into this question are those in which players discuss which playable civilizations (civs) they want or do not want to see featured in the game(s) as well as those that are focused on discussing the design of specific civs. The former inevitably brings with it the question of who gets to be a civilization (or a nation, since the terms are used interchangeably)—and, perhaps even more importantly, who does not. It is precisely within these demarcations where discussions of the in-game and the abstract nation overlap and ideas of the abstract nation and its place in history become the most salient. One of the central demarcations in this regard is the previously mentioned “distinction between the nation and the state”—another central category in the analysis. Under this category, I coded statements that juxtapose the nation and the state, thereby attributing the nation fundamentally different qualities, particularly concerning its place in history. This juxtaposition once again becomes apparent in our initial example: “Germany as a state is young, as a nation old or was Goethe not German, Luther, Barbarossa? ... Again for all I’m talking about the NATION” (Civ5Thr004, Pos. 123–124). The importance of the question “when is the nation” to address the issue of “what is the nation” is quite clear in this post: while the German *state* has only existed since 1871, the history of the German *nation* apparently goes back a lot further than that.

Therefore, we can conclude that the state is lacking something crucial that the nation has: “Historical continuity”. “Historical continuity” was also denoted a main category as it appears as a central feature of the (abstract) nation as discussed on the forum. Under this category, I coded statements that argue that a certain nation can be understood as a nation or civilization rather than, for instance, a state precisely due to its long and enduring history. Within the coded material, the “historical continuity” argument can be found concerning the in-game as well as the abstract nation. When this historical continuity is apparently not there in terms of understandings of the abstract nation and we are therefore confronted with a state rather than an actual nation, this often leads to discussions of whether such a state should even be featured as a civ within the game(s) as it does not meet that central requirement for civilizationness or nationness. A particularly interesting example in this regard is discussions of the US. In many cases, players on the forum are unhappy with the US being featured in the games as a civ because, according to them, the US is not a nation or civilization, but merely a state, precisely because of its short history, meaning its lack of historical continuity. As one user sums up in a discussion on civs and their leaders in *Civilization VI* (2016): “The USA is very artificial and has not existed since ancient times.” (Civ6Thr002\_1, Pos. 731) In the same discussion, another user taking on the same position argues: “But [*Civilization*] is about

civilizations, not countries. America, however, is part of the English civilization” (Civ6Thr002\_1, Pos. 728).

This second quote furthermore indicates another point of differentiation between state and nation and thus another, closely related characteristic of the latter: “Cultural cohesiveness”. As a category, this speaks to the idea of the nation as being defined by a set of shared cultural characteristics that endure throughout time. The common sentiment within the analyzed sample in this regard is that the state as a bureaucratic construct does not build upon shared culture, language, and history in the same way the nation as a community does. Therefore, the US is not considered its own nation or civilization, but rather part of the ‘English’ civilization, which is why the US should, then, also ideally not be featured as a civ. As we will discuss in more detail later, this category of cultural cohesiveness as a central characteristic of the abstract nation according to the commentators also closely relates to the homogenous and essentialist character often attributed to the in-game nation in *Civilization* by the literature.

In summary, the terms *nation* and *civilization* are used widely interchangeably within the analyzed sample, referring to both the in-game nation (the playable nation *in* the games) and the abstract nation (the concept of the nation *outside* the games). The specific meanings assigned to the nation become visible especially by looking at various demarcations that are drawn around it: distinctions such as the state versus the nation reveal that the nation is characterized by historical continuity and cultural cohesiveness. Yet, it is also important to point out that while those are clear tendencies in the players’ conception of the nation and its place in history, the respective discussions on the analyzed forum are not at all homogenous. On the contrary: particularly discussions on historical continuity and cultural cohesiveness as markers of what a ‘real’ nation or civilization is reveal central points of friction as contributors try to make sense of the in-game nation by reconciling it with their ideas of the abstract nation. Within these points of friction, the desire for historical accuracy often plays a central role.

### ***Primordialism versus historical continuity***

One point of criticism players very frequently address on the forum concerning how *Civilization* simulates the nation, given their desire for historical accuracy, lies in the games’ fundamentally primordialist mechanics. Starting out in 4000 BC with a nation that does not change throughout history, not even in its name or leader, is conspicuously often criticized as ahistorical and counterintuitive. As one user points out:

Even with empires/countries that are still called the same today as they used to be, you can’t assume the kind of continuity that Civ makes us believe. There were certainly longer phases of continuity ... but there were always major upheavals. (Civ5Thr004, Pos. 652)

This is a quite common position in the forum: the primordialism inscribed in the games' rules suggests a kind of historical continuity that cannot be reconciled with players' desire for historical accuracy. In other words, the way the in-game nation is designed does not align with their ideas of the abstract nation in this case. Some users even point out the ideological purpose behind such primordialist views of history and the nation: "Have you ever noticed that the appropriation of the Germanic tribes for the Germans or the Gauls for the French serves the 'system' of the nation state to legitimize itself through history?" (QuThr05, Pos. 243). Comments like this reveal one of the previously mentioned points of friction: while the primordialist nature of the in-game nation as it is inscribed into the games' rules is repeatedly criticized (from different perspectives), the idea of historical continuity is nevertheless a central feature of what players understand to be a nation in the sense of the abstract nation. This raises two questions. First, what is the difference between these two conceptions of the nation's place in history? And, second, is the idea of historical continuity that is so often stressed as a marker for 'real' nations or civilizations just a toned-down version of the games' more extreme primordialism that doesn't ask us to look back 6000 years but at least considerably further than the 19<sup>th</sup> century? Again, these cannot be answered in a generalized way. Rather, the analyzed discussions reveal big differences in the respective understandings of the nation and its place in history, depending on which civ is being talked about at the time. Here, another central factor comes into play on the basis of which the positions are differentiated: national identity. In concrete terms, this means that historical continuity is ascribed especially to the nation with which players identify.

Since the research material stems from a German-language forum where the majority of users are German, it is worth taking a look at their discussions on the games' representation of Germany first to illustrate this field of tension. Conspicuously, players within my sample are often very unhappy with the separation of the Holy Roman Empire and Germany as two civs, since they conceive both as being in historical continuity with one another. Within a discussion of whether the Holy Roman Empire and Germany should really be one civ instead of two in *Civilization IV* (2005), one user writes: "The German people have not only existed in Europe since 1871, but for almost 2000 years!" (Civ4Thr11\_2, Pos. 44). In this example, Germany is attributed a clear historical continuity, going back even further than the Holy Roman Empire, but as far as Arminius (18/17 BC–AD 21). By naming the year in which the first German state was founded and contrasting it to the German 'people's' existence in Europe, the historical continuity of the nation is emphasized once again via this distinction, as in our opening quote. Another post in the same thread takes up this distinction even more explicitly: "This brings us back to the fundamental distinction between state and nation. Germany did not exist as a state until the foundation of the Reich in 1870/71 - but as a nation much earlier" (Civ4Thr11\_1, Pos. 1053).

In all *Civilization* installments up to the newest release of *Civilization VII* (2025), which is not part of the sample, the most basic principle of the game has remained

unchanged: players start out in 4000 BC with a fixed, unchanging nation to “build an empire to stand the test of time”. The analyzed discussions, however, indicate that, at least within my sample, fans of the game series also have significant issues with this kind of extreme primordialism. It is criticized as ahistorical in discussions that focus on the general principles of the in-game nation in *Civilization*. Players argue that nations have ultimately changed throughout history, sometimes users even explicitly speak of ideologically tainted retrojections in the ways the games construct the nation.

This does not mean, however, that the common view of the abstract nation we can observe in the sample is a radically modernist one that contends that nations are constructed and products of modernity. While the extreme primordialism inherent in the games’ rules is generally criticized for a lack of ‘historical accuracy’, and therefore not in line with most players’ understanding of the abstract nation, a transhistorical idea of the nation is nevertheless often accepted—especially in the case of one’s own nation. This brings us back to the question what this transhistorical core of the nation is that apparently sometimes persists. This historical continuity refers above all to the idea of cultural cohesiveness throughout history, which was mentioned in the previous section. Here, we can observe another central point of friction when it comes to players’ attempts to bring together the in-game nation with their ideas of the abstract nation.

### ***Cultural cohesion versus essentialism***

The example of the US as a playable civ shows us that it is often not understood as an actual nation because language and culture are viewed as crucial elements linking the history of the US to England. In that sense, the US is understood as a state in terms of a bureaucratic entity but not a nation in terms of a transhistorical cultural community, thereby disqualifying it as a civ in the opinion of many of the posts by (German) players that were analyzed as part of the sample. The historical continuity of nations is, like in this example, often understood to be based on shared ‘culture’, language, and identity as binding elements throughout history. Such ideas of transhistorical cultural cohesion, then, distinguish ‘real’ nations from those that are not.

The notion of cultural cohesion across history also suggests a close connection to two central characteristics of the in-game nation in *Civilization* according to the literature: *essentialism* and *homogeneity*, which were both part of the initial deductive code set. In fact, it is precisely in this context that considerable points of friction become apparent once more. When tying this vague idea of transhistorical cultural cohesion to specific characteristics (e.g., traits in the game) that persist throughout history as modeled by the games, we can, again, see differences in players’ evaluations thereof according to their degree of identification with a given civ. One example often provided by the literature for the essentialist nature of the in-game nation is the leader traits. They define a given civ through inherent, unchanging

characteristics that endure throughout history and at the same time delimit individual civs from one another (Bijsterveld Muñoz, 2022, p. 1318).

Overall, discussions on the forum mostly reveal a clear desire of players for individual civs' uniqueness, which is argued for by referring to the unique character of the individual nations they are based on. We could, therefore, assume that the players within the analyzed sample are firmly in line with the logic of the games as it seems as though the construction of the in-game nation as essentialist in its characterization coincides with their ideas of the abstract nation as having some sort of unique essence. Yet, the situation is again more ambivalent and the discourse all but linear. When it comes to ascribing specific traits or characteristics to individual civs and discussions of whether those are 'realistic' or 'historically accurate', it is conspicuous how users are quicker to do so comfortably and find it appropriate with non-European civs.

When we look at the other end of the spectrum, however, and turn towards the example of Germany again, we can, once more, observe a special way of dealing with these ascriptions, which further illustrates the role of users' own national identity in evaluations of constructions of the in-game nation. For instance, in discussions on the design of Germany as a civ, users on the forum are mostly very unhappy with Germany's traits in the games—in each installment and regardless of what those traits are specifically. One post in a thread on the design of civs in *Civilization V* in relation to 'reality' sums up this frequent position: “When I look at the leaders and their traits ... I would say that they fit almost everyone. Except for the Germans” (Civ5Thr008, Pos. 124). This quote is particularly revealing regarding the points of friction we are confronted with here: it illustrates that the dissatisfaction with the design of the German civ along concrete fixed characteristics and traits is significantly greater than with others and that it is therefore not a general agreement or disagreement with the portrayal of the nation as essentialist in its characteristics. In another thread about which nations Fixaris has misjudged in *Civilization III* (2001), one user expresses their dissatisfaction with Germany being characterized by a fixed small number of traits, because: “If we are honest, we Germans were/are militaristic, expanding, scientific as well as industrial, except for religious, we actually have all the attributes of the Civ peoples” (Civ3Thr06, Pos. 183). This quote implies that users are generally not unhappy with the design of Germany because specific characteristics are missing or deemed unsuitable, but because of the idea of characterizing a nation through specific traits throughout history altogether suddenly seems counter-intuitive to players when it comes to the nation they identify with.

Overall, we are once again left with an ambivalent situation. While there is a general strong desire within the analyzed sample for clear cultural boundaries between individual civs to emphasize the uniqueness of the nations they represent, which can be viewed as an essentialist position, there are also many voices that criticize this way of designing the in-game nation—particularly when it is based on the nation

they identify with. Nevertheless, an idea of cultural cohesion throughout history still defines that very nation, but it remains vague, while specific, unchanging characteristics are deemed too simplifying. Therefore, we can conclude that within the analyzed sample, the nation users identify with is mostly perceived as transhistorically culturally cohesive, yet diverse in its characteristics, although this is not fully in line with the games' logic.

## Discussion

As the examples above have shown, it is safe to say that within the analyzed sample, players do notice and discuss *Civilization's* portrayal of the nation throughout history and what it symbolizes. Furthermore, we can also observe that within these discussions, players do not simply internalize the games' ideological underpinnings inherent to the structure of their rules. In many cases, players do recognize the mechanical implementation of the nation in *Civilization* as being what the previous literature on the series also observes: primordialist, homogenous, essentialist, and nationalist, even though posters may not use these exact terms. However, it is neither consistently the case that this corresponds to their understanding of the abstract nation which they therefore approve of, nor that it contradicts it throughout and which they criticize. As the discussions within the sample have shown, conversations about the portrayal of individual civs and their 'nationness' can vary considerably and they vary mostly depending on the degree of identification with a given civ. While there are patterns in understanding the abstract nation and relating it to the in-game nation, the crucial point is that players interpret the nation and its place in history differently according to their respective feeling of belonging to a certain nation and, thereby, also evaluate constructions of the in-game nation differently.

This becomes most apparent when we look at players' evaluations of the ways the nation they identify with is implemented in the games. A focus on players' discussions on Germany developed during coding. As explained previously, initially, I searched for the keyword 'nation', which produced a very large number of hits. The focus on Germany arose as a result of these first insights into the field because there was a noticeable discrepancy in how discussions unfolded compared to conversations about other nations. This comparison allowed for insights into the relevance of discourses of identity in this context that might have been less visible had I focused only on Germany right away. In other words: the specific way Germany is discussed in the forum takes on another dimension by contrasting it to discussions of other nations. As the analysis has shown, users' evaluation of the portrayal of their own nation and its place in history is often subject to its own criteria, which are not applied in the same way when evaluating other nations or the image of the nation in general in the games. This observation is also in line with Sudar's (2017) analysis of forum discussions on *Europa Universalis II* (2001), where

users also seemed to be particularly unsatisfied with the portrayal of ‘their own’ nations in the game.

In many cases in the sample I analyzed, we can furthermore observe a clear dissonance between this unique perception of one’s ‘own nation’ and its place in history and players’ general desire for historical accuracy when playing *Civilization*. This dissonance means that some ideological and historically simplifying modes of representing the nation are accepted while others are criticized in different cases. We saw this with the example of the game’s primordialist structure, which is criticized as historically inaccurate but is in many cases accepted in a toned-down version for one’s own nation. We also saw it with the question of the essentialist nature of Civs, which is less accepted with the nation one identifies with while still attributing a transhistorical cultural cohesiveness to it at the same time. Neither of those are fully in line with the games’ logic, with how the in-game nation works, but they do not point towards a downright rejection of those logics either. As Carr (2007, p. 223) explains: “To assume that tropes discernable in either the rules, or the wider cultural context—or both—will necessarily result in a particular repercussion (of whatever kind) at the level of play is problematic”. As this study has illustrated by looking at the example of Germany, players negotiate *Civilization’s* portrayal of the nation through its rules in complex ways that are, more than anything, dependent on their own identities and feelings of belonging. It thereby not only speaks to the diversity of individual interpretations of the abstract nation, as the analytical lens of the *everyday nation* suggests, but also to the heterogeneity of players’ modes of engaging with and evaluating a game’s rule-system and the ways ideologies are inscribed therein.

## Outlook

On February 11, 2025, *Civilization VII* was released. Following its showcase at Gamescom in August 2024, it was clear that the new installment would bring big changes to the series—particularly when it comes to its portrayal of the nation. In *Civilization VII*, players can change civilizations throughout history as the new mechanic of ‘ages’ is introduced. This is the first time in the history of the series that its basic primordialist mechanic of playing an unchanging nation throughout history is being dissolved. This huge change in how the nation is imagined through the game’s new rules was worth taking another look at the forum to see what players think about it. As a thread on the introduction of this new mechanic right after the game’s showcase at Gamescom indicates, players’ opinions were very divided. On the one hand, there was a lot of skepticism about dissolving the demarcations between individual civilizations and players thereby not being able to fully identify with a civ anymore. On the other hand, the change was welcomed by many as being “more historically accurate” and some negative comments were being called out as chauvinistic and nationalist. A poll integrated into the thread even showed an almost 50-50-tie between positive and negative responses to the change. For future

research, it would be interesting to investigate how this radical change in the *Civilization* series' construction of the in-game nation is perceived and negotiated by players.

In conclusion, the forum discussions summarized above indicate once more that players' negotiations of the way *Civilization* models the nation and its role in history are not at all homogenous but reflect diverse voices and positionings towards what a nation is, how it functions, and how a game can or should reflect that. What they also show, however, is that even if players reject or criticize this new mechanic, it does not make them want to play the game any less.

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## Data availability

The datasets generated and analyzed during the current study are available from the corresponding author on reasonable request.

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<sup>6</sup> Dom Ford is also an editor for *Eludamos*. To avoid a conflict of interest, he recused himself entirely from both the initial editorial assessment of this article and the peer review process.

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# **Reified Gameplay**

## **Revisiting Playbour Through Critical Theory**

Tuomas Manninen

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# Reified Gameplay

## Revisiting Playbour Through Critical Theory

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### Abstract

Traditionally, theories of play and games have drawn a clear distinction between two different forms of activity; play and labour. Over the last two decades, the concept of *playbour* has challenged this division, with empirical studies and observations showing the intertwining of play and labour. This article offers an analysis of playbour through different perspectives of Critical Theory and explores its theoretical implications. The novel concept of reified gameplay is presented to understand the alienating tendencies of playbour, using the games *EVE Online* and *CryptoKitties* as key examples. Reified gameplay is a form of gameplay action shaped by processes of reification and rationalisation within and as part of the culture industry.

### Keywords

Reified gameplay; playbour; reification; critical theory; culture industry

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**The relationship between play and labour** has been widely discussed, particularly in the last two decades since the introduction of the concept of *playbour* (Kücklich, 2005). In the original article written by Julian Kücklich, the concept was introduced in the context of modding culture, a theme which has been researched further (Sotamaa, 2007). Other practical and empirical applications have been made in other contexts, such as gold farming (Dyer-Witheford & de Peuter, 2009; Goggin, 2011), the broadcasting and making of videos on platforms such as Twitch or YouTube (Törhönen et al., 2019), and even social media (Fuchs, 2016).

This article explores the impact of economic imperatives on gameplay in the video game industry, specifically examining the blurring of the line between play and labour. It aims to answer the question of how this blurring affects the nature of play itself. It has been suggested that the nature of play and labour are changing due to the processes of their intertwining (Yee, 2006). Yee (2006) makes the societally important observation that people often perform tasks in online video games similar to the ones they perform in their actual occupation, while describing their gaming

experience as almost like a second job. However, no thorough theoretical analysis of what this means for play itself has been conducted.

Previously, Schultzke (2014) has researched the intertwining of play and labour within the virtual worlds produced by the culture industry. Similarly, Taylor et al. (2015) have shown the alienation that occurs as a consequence of this intertwining. This article builds upon and expands this previous work by analysing these processes with the concept of reification. Schultzke's (2014) analysis uses the example of MMO games and the commodification of play. I expand and deepen this analysis with the concept of reification, which enables a deeper examination of the phenomenon of alienation.

Reification is a form of alienation, in which social relations take a commodity form, to the point it becomes a society-defining category (Lukács, 1971). As such, it is a process that affects practical action, player agency and the social relations between players. It provides a theoretical link between structure and agency (Feenberg, 2015), which is essential, because agency is what makes games special as a form of art and entertainment (Nguyen, 2020). Commodification fails to capture all these aspects. Commodification happens in a more concrete sense, whereas reification pertains to the idea of living, vivid processes becoming static, schematic and repetitive. Reification typically involves the process of rationalisation as well, which is why that concept is also included in the discussion. Additionally, I suggest that the phenomenon of reified gameplay is not limited to the MMO-genre and propose additional games for analysis.

Methodologically, the article provides a philosophical analysis of its themes within the framework of Critical Theory. This means that philosophical analysis and critique needs to be empirically and socially informed, with a clear connection between theory and praxis. Critical Theory endorses multidisciplinary approaches to the study of social phenomena. These ideals were first presented by Max Horkheimer in his 1937 essay 'Traditional and Critical Theory' (Horkheimer, 2002), and have been reformulated later by Habermas (1990). For Habermas, the role of philosophy among the sciences is to function as a stand-in and interpreter. This means interpreting and drawing wider, theoretical conclusions from the results of empirical sciences.

This article is divided into four sections. The first introduces the basic concepts, and their relations to each other: labour, work, play, playbour and gamification. The concepts are defined by drawing on the work of Marx as well as the first-generation critical theorists, such as Adorno and Horkheimer, as well as more modern interpretations. These definitions then lay the groundwork for further analysis. The second section provides an overview of the discussion around the concept of playbour and its various empirical applications. With these manifold applications in mind, it is clear that play and labour intertwine in many different phenomena related to gaming and digital media. The third section presents and defines the key theoretical concepts of this article: alienation, reification and the culture industry. The definitions are made

with both the original formulations of Marx, Lukács and Adorno, as well as current-day applications. These concepts allow for a novel interpretation of playbour within the framework of Critical Theory. In the fourth and final section, the concept of reified gameplay is introduced as a means for interpreting what happens to gameplay itself when play and labour become hard to separate from each other. Reification is analysed as a form of alienation and reified gameplay is situated as occurring within and as part of the culture industry.

## **Concepts of labour, work, play, playbour and gamification**

The sensibility of the concept of playbour itself relies on the differentiation between play and labour. In this section, I offer definitions of work, labour, play, and, ultimately, playbour. Additionally, I briefly outline gamification, a concept that is closely linked to theme of playbour, but which is essentially a different phenomenon.

In the history of philosophy, work and labour have been approached from a wide range of theoretical routes (for an overview, see Cholbi, 2023.) In this text, they are used within the framework of Critical Theory, which means a Marxist understanding of these phenomena. In its broadest sense, work can be defined as an activity that produces value. By working, a subject engages in action with the outside world, and the action changes both the world and the actor themselves (Marx, 2015). In the Marxist tradition, work is conceived as a universally human form of activity, whereas labour refers to the historically contingent organisation of work under capitalism (Frayssé, 2014; Fuchs & Seignani, 2013). Work is about producing use values for human survival and well-being. In contrast, labour in the capitalist system is about producing the more abstract surplus value, that is, making a monetary profit. As a result, the labour process is subordinate to the capitalist financial system and its logic of production. This classification can also be defined as a division between concrete labour and abstract labour (Fuchs & Fisher, 2015, p. 9; Marx, 2015, p. 33), but for the sake of simplicity, I will from now on refer to concrete labour as work and abstract labour as labour.

In this Marxist account, work is productive, goal-oriented and instrumental action with many potentially positive qualities. In an ideal case, work can even contribute to self-cultivation and self-expression: one could further say that working in one way or another is an innate human need. Additionally, it is possible to envision truly playful work, that is, work with qualities of play (Fuchs & Seignani, 2013). When work is not self-organised, but instead forced labour serving the capitalist system, it has innately alienating qualities. I will explicate these alienating tendencies in the next section, but for now, let us turn to play.

In the classics of game studies, play has been traditionally defined as a free-form activity, which is fulfilling in itself and engaged in with a non-instrumental attitude,

characterised by playfulness. Perhaps the most influential definition is found in Johan Huizinga's *Homo Ludens* (originally published in 1938):

Summing up the formal characteristics of play we might call it a free activity standing quite consciously outside "ordinary" life as being "not serious", but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds with its own proper boundaries of time and space according to fixed rules and in an orderly manner. It promotes the formation of social groupings which tend to surround themselves with secrecy and to stress their difference from the common world by disguise or other means. (Huizinga, 1998, p. 13)

Although Huizinga does not explicitly contrast play with work/labour in this quotation, their separation is suggested by defining play as a free-form, nonprofit activity situated outside ordinary, everyday life and its material interests.

Roger Caillois has his own famous definition of play presented in *Man, Play, and Games* (originally published in 1958), which is in some respects critical of Huizinga. However, when considering the relation of play to work/labour, his account has much in common with Huizinga:

There is also no doubt that play must be defined as a free and voluntary activity, a source of joy and amusement. A game which one would be forced to play would at once cease being play. It would become constraint, drudgery from which one would strive to be freed. ... In effect, play is essentially a separate occupation, carefully isolated from the rest of life, and generally is engaged in with precise limits of time and place. (Caillois, 1961, p. 6)

Caillois' definition clearly separates play from labour, if one considers labour to be an activity that can be, and often is, forced or done out of outer necessity. It might, however, leave some room for work, as a potentially self-fulfilling and self-organised activity, and play to converge.

Among the critical theorists of the Frankfurt School, Herbert Marcuse offers a definition of play in relation to labour (originally published in 1933). Similarly to Huizinga and Caillois, Marcuse defines play as a free-form activity, in which the players place themselves "above the objective world", in the sense that play happens outside the realm of necessities. Moreover, Marcuse makes an important addition [emphasises in the original here and in every other citation used]:

Play is self-distraction, self-relaxation, self-recuperation *from* regimentation, tension, toil, intense self-awareness, etc. It is self-distraction, self-recuperation *for the purpose* of a new concentration, tension, etc. Thus play in its totality is necessarily related to an other from which it comes

at which it is aimed, and this other is already preconceived as *labor* through the characteristics of regimentation, tension, toil, etc. (Marcuse, 2005, p. 128)

Summarised briefly, Marcuse observes that play has a societal role as a form of relaxation and distraction from labour, through which the labouring subject finds new energy for their tasks of necessity. Marcuse's formulation bears similarities with how hobbies are observed by Theodor W. Adorno (Adorno, 2002b) and Aleena Chia (Chia, 2020). Chia conceptualises hobbies as productive leisure, as a mediating category between leisure and work/labour (Chia, 2020). After all, when a leisurely activity acquires the label of "hobby", it becomes elevated in the sense that it is seen to be productive, instructive, and most of all, useful in supporting the subject's ability to work (and which can, in a Marxist account, be interpreted as work). In even bolder fashion, Adorno observes that a hobby is something one must have. He claims:

Organized freedom is compulsory. Woe betide you if you have no hobby, no pastime; then you are a swot or an old-timer, an eccentric, and you will fall prey to ridicule in a society which foists upon you what your free time should be. (Adorno, 2002b, p. 190)

A person is obligated to have a hobby, through which they can relax, perhaps develop some skills, "recharge" and get mentally fresh for labour again. The compulsive nature of having a hobby contains a paradox. A hobby is seen as "the opposite of reification, the oasis of unmediated life within a completely mediated total system" (Adorno, 2002b, p. 189), even though the hobbies are an integral part of this mediated system and could be argued to be reifying in themselves. I will return to this idea later, when addressing the concepts of reification and alienation.

Regarding the nature of these definitions of the ideal form of play and games, they are not to be interpreted as universal, normative truth-statements. Instead, they are conceptions formed in a certain historical and social context. Play is a social phenomenon with an ambivalent and historical character, which has been emphasised, for example, by Brian Sutton-Smith in *The Ambiguity of Play* (Sutton-Smith, 1997). Sutton-Smith identifies seven different rhetorics regarding play, and through them provides a detailed analysis of various perspectives on play in history.

The interpretation of the classic conception of play I have outlined follows the ideas presented by Sebastian Möring and Olli Leino. They argue that the conception of play, endorsed by, among others, Huizinga and Caillois, is a mixture of ideals of romantic and liberal philosophy that are deeply connected to the historical processes of industrialisation and the rise of the nation state. Another self-evident concept for a current-day reader, free time as separated from working hours, would not be so self-evident without these historical developments (Möring & Leino, 2016, p. 1,3).

In summary, Möring and Leino argue that this liberal-romantic conception of play is outdated and that play and labour are, nowadays, irrevocably intertwined. They argue we are subjects within a “neo-liberal condition”, who are “prone to be attracted by neo-liberal games”. The writers claim the following:

Not only do neo-liberal games condition us to be good neo-liberal subjects, but since we have never experienced anything else but neo-liberalism we do not even question this conditioning by the respective games and do not know about alternative possibilities. (Möring & Leino, 2016, p. 11)

The concept of neo-liberal subjectivity in gaming refers to the merging of play and labour, which results in the loss of the liberal-romantic idea of freedom. This can be seen in the way games are used to accumulate social capital and build personal brands, essentially objectifying the player.

Möring and Leino provide an intriguing argument about the historical change in the nature of play, and in this broad sense, the argument has similarities with what I am about to present. However, my suggested route is theoretically quite different, since Möring and Leino do not root their analysis in reification and the culture industry. Additionally, Adorno makes a very similar argument regarding the culture industry. Adorno claims we, as subjects of a capitalist society, tend to internalise the values and ways of thinking of our society, and seek entertainment that is coherent with these societal values. Adorno illustrates this with the example of Robinson Crusoe, Daniel Defoe’s classical novel character, who was stranded on an uninhabited island and had all the possibilities to start something new. Instead, he ended up trying to reconstruct the world he already knew, because it felt safe and familiar (Adorno, 2002c; Schultzke, 2014).

Now that the concepts of work/labour and play have been addressed, what is playbour? Playbour is when activity which is originally play, or should be play, gains qualities resembling labour. In other words, we have first an activity that is or should be engaged in and meaningful for its own sake, which then gains traits of abstract labour, that is, it starts to be about producing surplus value, and in a sense loses its character as play. However, as we see with the empirical examples in the next section, playbour is rarely defined properly. Therefore, I suggest the novel concept of reified gameplay to avoid the ambiguity created by previous discussions. Additionally, reified gameplay has the advantage of addressing both the societal, structural sources of playbour, as well as its alienating effects on the individual.

The concept of playbour has attracted criticism before, besides the obvious critique that it lacks proper definition. For example, Aleena Chia considers the idea of playbour to be based on a false dichotomy. She claims:

Playbour is based on a logical incongruence between play and labour, which are not precisely opposed. Unlike labour, play is not a discrete activity but a mode of experience, a dispositional state towards the indeterminate that suffuses various forms of human engagement with the world. (Chia, 2020, p. 51)

Contrary to Chia, I argue that play is indeed a discrete activity and not a mode of experience. Play is often connected to a certain mode of experience, which could be described as playfulness. Nevertheless, playfulness can extend beyond the activity of play: one can feel playful while performing very different kind of activities. This mode of experience is contrasted to the feeling of something being laborious. Regarding the activity of play, ideally it would entail feeling playful, but sometimes a mode of experience can be laborious, even in play.

In addition to Chia, Arwid Lund (2015) provides another interesting critique of playbour. "On a conceptual level," he states, "play and labour are thus each other's opposites: a qualitative non-instrumentality and a quantitative instrumentality." (Lund, 2015, p. 67). Additionally, he claims that playing as an activity should not involve reification. He notes that the concept of playbour is inaccurate and should more appropriately be termed "gamebour" (Lund, 2015, pp. 65, 68). These observations are easy to agree with, but ultimately, his critique is problematic in several significant ways.

Lund's critique of playbour rests on the idea that the concept is ideological, in the sense of "Californian Ideology" (which I interpret to mean neoliberalism) and promoting the fusion of play and labour. This is a bizarre claim and overlooks the history of the concept. As I demonstrate in the third section of this article, the term originates in Kücklich (2005), where it is used in a highly critical manner to explore how the labour of modders is exploited. Later on, further research has usually retained the idea that the concept is inherently critical. Regarding this matter of ideological usage, one might want to turn to a concept that is closely related to playbour, gamification. These concepts can be interpreted as two sides of the same coin: in playbour, a form of activity that is originally play gains characteristics reminiscent of labour. In gamification, on the other hand, a form of activity that is originally something other than play (often labour) is made more "fun" by imposing game- or play-like elements on it. Gamification as a concept is used both in a non-critical (ideological) and critical sense (for the latter, see e.g. Rey, 2015). To be more specific, these critical accounts rest on the idea of gamification as "gamification-from-above", which can occur when management at the workplace imposes game-like elements on work with aims such as surveillance, regulation and instrumental rationalisation (Woodcock & Johnson, 2017). This process can lead to reification as well, (Woodcock & Johnson, 2017), but through a slightly different manner than in playbour. Besides this usage, gamification can also happen from below, in which the game-like elements are added to work for a subjective need, perhaps even undermining work and acting as a playful form of resistance. In other words, in gamification, the point

is not to claim that game- or play-like elements are themselves a problem in other contexts. It is always a question of why and how they are implemented (Woodcock & Johnson, 2017).

## Previous empirical observations of playbour

Kücklich introduced the concept of playbour in 2005 in an analysis of modding as a labour-like activity, through which modders (short for people making mods) produce new content for existing video games. Modders typically receive no monetary compensation themselves, even though they produce new content for a video game or sometimes fix existing bugs and glitches of a game and therefore benefit the game developer and publisher. Modding can be seen to be like play, in the sense that it is a free-form activity that modders engage in without necessity or coercion. At the same time, they are producing something new for a game, and by extension, economic surplus value, from which they themselves receive no benefit. In that sense, modding resembles labour. Occasionally, successful modders might be hired by game companies, which can happen through mod competitions, as described in Sotamaa (2007). Along with modding, Foxman (2022) has acknowledged that nowadays playbour concerns user-generated content (UGC) in general, of which modding is only a part.

Another form of UGC is broadcasting and making videos via Twitch and/or YouTube. Törhönen et al. have studied this in the limited sense of “how the perception of personal broadcasting as work, play or as playbour, affects the activity levels and income of a personal broadcaster “ (Törhönen et al., 2019, p. 2560). Törhönen et al. also observe that streamers and YouTubers have differing opinions regarding the question of whether they consider streaming or making videos as work/labour, play or a mixture of both. Interestingly, Törhönen et al. consider the respondents who perceive their streaming and YouTubing to be play as “hobbyists”, making no differentiation between hobby and leisure in their study. Regarding the nature of streaming and YouTubing as work/labour, Törhönen et al. also acknowledge that it takes the form of digital entrepreneurship, which makes the activities a clearly different profession than “gold farming” or e-sports, for example.

Gold farming refers to the gathering of in-game, virtual goods within a video game, and selling them, or possibly an entire user account, for real-world money. Whole enterprises have been formed around this practice. The ambiguous nature of playbour can be seen in the views of the Chinese “gold farm” workers, who are divided over the question of whether their profession is labour or play, with some stating that there is no longer any difference (Dibbell, 2006, 2007; Dyer-Witthford & de Peuter, 2009; Goggin, 2011). Furthermore, gold farming as a practice blurs the line between labour and play in the sense, that the gameplay activity the gold farm labourers engage in is the same activity other players do for leisure (Schultzke, 2014), only

with different motivations and objectives. The same can be said of e-sports practitioners.

In the article “Alienated Playbour: Relation of Production in EVE Online”, Taylor et al. (2015) analyse the community and economy of *EVE Online* (CCP Games, 2003) through the concepts of immaterial labour and playbour. *EVE Online* is a massively multiplayer online role-playing game (MMORPG) set in space. In *EVE*, players can engage in different kind of activities and assume roles reminiscent of virtual professions, such as mining, manufacturing or combat. Within the game, players can visit thousands of star systems. In their article, Taylor et al. offer an insightful interpretation of how *EVE*'s gameplay systems form a certain kind of virtual simulation of capitalism, with its class divisions, inequalities, and even alienation of the virtual playbourers.

A clear picture emerges of how the mechanics of *EVE Online* reproduce the fundamental class divisions of the capitalist system. Or rather, the “class antagonism is recast” (Taylor et al., 2015), in the sense that all the players are capitalists, and the manual labour is performed by spacecraft, while the players end up being divided between being producers of wealth and consumers of it. The authors argue that both groups can be seen as alienated from their labour.

Furthermore, the article remarks on how the gameplay in *EVE Online* occasionally resembles labour in a straightforward sense. One interviewed software engineer states that in *EVE* he performs tasks that are very similar to those he carries out in his actual profession and utilises the same skills in both (Taylor et al., 2015, p. 377). This is closely related to what Theodor W. Adorno stated is a characteristic feature of the culture industry: leisurely free time activities end up not only supporting labour, as we could say with Marcuse, but even become a prolongation of it, and through that reminiscent of labour (Adorno, 2002b, p. 194; Horkheimer & Adorno, 2002, p. 109).

The question of what is produced and in what sense is interesting in the case of *EVE Online*. Within the game, its production processes are highly rationalised and resemble real-world economical processes, but what is really manufactured? Following Schultzke (2014), this “production” process can be said to be mere façade, in the sense that the labour players invest in producing the in-game commodities is not actually necessary. Mining virtual goods online merely simulates the toil of mining physical goods in a mine, and is more of a developed gameplay mechanic, rather than an actual necessity. Adorno has earlier observed that one trait of the culture industry is how it “is industrial more in a sociological sense, in the incorporation of industrial forms of organization even when nothing is manufactured” (Adorno, 2002a, p. 101). It can be claimed, however, that the players are, in fact, producing virtual commodities. The ore and resources mined can be used to craft ships, which in turn are sold on third-party websites in exchange for real-world money. This practice is not endorsed by the developers, and it violates the game’s terms of service.

In other words, the virtual commodities of *EVE* are not meant to be turned into actual commodities, but in practice this is what takes place.

The players position themselves within limiting and fixed system, at least regarding their social role and part as a cogwheel of the *EVE* economy. They might still find pleasure doing it, and engage in it freely, in the sense that taking part in the system is not necessary for their actual survival and income outside the virtual space of *EVE*. Through that we can identify an interesting feature of *EVE*: because no person's actual income is at stake, economic catastrophes within the game and even purposely destroying other peoples fortune might be shrugged off and taken lightly. It is kind of simulation of "high-stakes capitalism without the guilt" (Taylor et al., 2015, p. 383). Interestingly, the players themselves are aware of this nature of the game as a capitalism simulator and refer to it using terms such as "free-market" or "neoliberal", as noted in Milik (2016). Along with Milik's text, the book *Internet Spaceships are Serious Business: An EVE Online Reader* (Carter et al., 2016) features several chapters regarding different aspects of *EVE*. In this article, however, Taylor et al. is my main reference, because my focus is the theme of playbour, not the game itself.

It has been stated that *EVE* does not just resemble work/labour, but that it "*is already work* - that is, activity that generates wealth within and for a broader economic order that is itself increasingly virtual" (Taylor et al., 2015, p. 368). The authors continue by stating that "under conditions in which work and play are becoming economically indistinct, holding on to a *theoretical* separation between the two seems untenable." (Taylor et al., 2015, p. 372). This conclusion seems too definite and rather hopeless for the possibility of play that is not tainted by the economic imperatives of the culture industry. I will return to this question in the conclusion, but for now, I will turn to the key concepts of this article: alienation, reification and the culture industry.

## **Alienation, reification and the culture industry**

By recreating the social reality of capitalism in a video game form, with relations of production, class antagonisms and such, *EVE Online* provides a tangible example of alienation. Especially the industrial players, which form the lower strata, struggle with a highly unequal virtual system, in which they become alienated from their labour in several senses,

...appropriated both by other corporations (often violently) toward the conspicuous consumption of and destruction of ISK (New Eden's currency), and by CCP toward the cultivation of capital through more subscription fees and, crucially, through intellectual property enhanced by the immaterial labor of *all* players. (Taylor et al., 2015, p. 380)

However, it is not entirely clear how Taylor et al. understand the concept and phenomenon of "alienation" since they provide no clear definition. Alienation is a rich,

multifaceted concept. Next, I will turn my attention to the concept in its original form, as defined by Karl Marx in his "Economic and Philosophic Manuscripts of 1844" (Marx, 2009). Using Marx, I analyse which aspects of alienation are in play in this context.

For Marx, alienation is a four-fold phenomenon (Fuchs & Sevignani, 2013, p. 245). Firstly, a worker can be alienated from the product of their labour. When the process of (abstract) labour of producing commodities is complete, the result is an object alien to its maker. Marx even states that labour's product becomes "a *power independent* of the producer" (Marx, 2009, p. 29), in a way taking its own role within the system. Marx continues:

Labor's realization is its objectification. Under these economic conditions this realization of labor appears as loss of realization for the workers; objectification as *loss of the object and bondage to it*; appropriation as *estrangement*, as *alienation*. (Marx, 2009, p. 29)

This first aspect of alienation can be described as objective alienation, in which one becomes alienated from the commodity they have produced. I interpret that Taylor et al. have this aspect of alienation in mind when describing "alienated playbour" within *EVE Online*. This alienation from the product is closely linked to the second aspect of alienation, which regards the labour process itself (Fuchs & Sevignani, 2013), often involving forced labour.

Thirdly, there is a subjective aspect of alienation. In Marx's formulation:

Labor is *external* to the worker, i.e., it does not belong to his intrinsic nature; that in his work, therefore, he does not affirm himself but denies himself, does not feel content but unhappy, does not develop freely his physical and mental energy but mortifies his body and ruins his mind. The worker therefore only feels himself outside his work, and in his work feels outside himself. (Marx, 2009, p.30)

This subjective side of alienation means self-estrangement, which can be observed as engaging in action against one's nature, and in an extreme case losing oneself in the process. Besides oneself, a person can be alienated socially, from other people and society (Fuchs & Sevignani, 2013). After Marx, Georg Lukács is known for developing the concept of reification, and with it, analysing especially the social aspect of alienation further.

Reification can be described as a form of alienation, in which social relations take a commodity form. Lukács' concept is strongly influenced on the one hand by Marx, especially *Capital* (Marx, 2015), and on the other, Max Weber. From the former, he takes the analysis of commodity form, and from the latter, the process of rationalisation. The following quotation illustrates Lukács' account:

The essence of commodity-structure has often been pointed out. Its basis is that a relation between people takes on the character of a thing and thus acquires a 'phantom objectivity', an autonomy that seems so strictly rational and all-embracing as to conceal every trace of its fundamental nature: the relation between people. (Lukács, 1971, p. 83)

Comparing Lukács' account to Marx, Lukács emphasises more the role of rationalisation, as it is thoroughly embedded in the process of reification as an essential source of alienation. Lukács argues:

This fragmentation of the object of production necessarily entails the fragmentation of its subject. In consequence of the rationalisation of the work-process the human qualities and idiosyncrasies of the worker appear increasingly as mere sources of error when contrasted with these abstract special laws functioning according to rational predictions. (Lukács, 1971, p. 89)

As the previous quotation implies, the phenomenon of reification is closely linked to rationalisation, but in a specific sense. For Lukács, rationalism is the guiding principle of the current capitalist system, "universal method with which to obtain knowledge of the whole of existence" (Lukács, 1971, p. 114). Rationalisation in modern society entails the bureaucratisation, quantification and mechanisation of reality in a subjective, objective and social sense. Lukács' account is highly influenced by Max Weber and especially his concept of formal rationality (Weber, 2011). In his 1905 work, *The Protestant Ethic and the Spirit of Capitalism*, Weber presents his critical description of rationality, in which rationality of a certain action is evaluated based on how that action applies rational formal norms and principles. Rationality is about coherence. The question of the goal of the action is irrelevant when evaluating rationality: it is all about the process.

In recent years, the concept of reification has been somewhat out of favour. While some aspects of Lukács' concept might seem obsolete for a modern reader, there are considerable strengths remaining in the argument that are worth remarking on. In a recent article, Andrew Feenberg has stated that

...the theory of reification thus explains the relation of structure to agency. Reification provides structure through determining a specific type of practice that reproduces institutions, while dereification involves another type of practice, with the power not only to penetrate the illusion of reification but to transform the practices and the structures it establishes. (Feenberg, 2015, p. 490)

As illustrated by Feenberg, reification still has explanatory power while researching the interplay of subjects and institutions, providing an illustrative point of departure for analysis of related processes.

Regarding what kind of objectification Lukács strives to pursue, Feenberg continues: “It is the specific form of thinghood that is in question, a form of thinghood that situates the subject in a technical relation to a law-governed world” (Feenberg, 2015, pp. 492–493). Following Feenberg, I interpret that this is an aspect which is relevant in Lukács for present-day discussions, and it was a crucial aspect and motivation for critical theoretical thinkers, such as Theodor W. Adorno and Max Horkheimer. Next, I will turn my attention to their interpretation and continuation of the critique of reified rationality, and how it is embedded in the critique of the culture industry.

Adorno and Horkheimer describe reason in a similar vein with Lukács in *Dialectic of Enlightenment*, or to be more precise, its dominant form, instrumental reason. As with Weber and Lukács, instrumental reason is a mode of rationality capable of calculation and quantification: institutionally effective handling of bureaucratic processes. Instrumental reason is not interested in substance, questions of objective or why a certain objective is pursued: it is only about getting there in the most effective manner, wherever “there” might be. For Adorno and Horkheimer, this is the source of reification, and the rationality behind the culture industry.

When talking about the culture industry, Adorno has a twofold definition in mind. The culture industry is both a literal branch of industry, and a figurative one. The latter

...refers to the standardization of the thing itself – such as that of the Western, familiar to every movie-goer – and to the rationalization of distribution techniques, but not strictly to the production process. ... It is industrial more in a sociological sense, in the incorporation of industrial forms of organization even when nothing is manufactured – as in the rationalization of office work – rather than in the sense of anything really and actually produced by technological rationality. (Adorno, 2002a, pp. 100–101)

Like instrumental reason, the culture industry is not in the end interested in substance or content. It is about “the reconciliation of the general and the particular” (Horkheimer & Adorno, 2002, p. 102) in a forceful manner, which results in the products of the culture industry resembling each other more and more: movies recycle the same tropes of storytelling, while in music, the same chord progressions are repeated. In film and games, high-profile studios put an emphasis on effects, appearances and following familiar paths in storytelling and mechanics: anything else would be a financial risk. At the same time, for the individual, there is the looming promise of fame and success, but for most people, such effort might result in 15 minutes of fame or 15 people watching your Twitch stream. Regarding the consumers’ needs in general,

...while all needs should be presented to individuals as capable of fulfillment by the culture industry, they should be so set up in advance that

individuals experience themselves through their needs only as eternal consumers, as the culture industry's object. (Horkheimer & Adorno, 2002, p. 113)

The nature of the consumer as an object of the culture industry, for whom new needs are generated and left unfulfilled, can be seen in the case of *Pocket Planes* (NimbleBit, 2012), as analysed by Möring and Leino (2016). *Pocket Planes* is a free-to-play mobile game, which simulates airline management. Möring and Leino interpret the game as illustrative of the current-day condition in the sense that the game has the promise of self-realisation and fulfilment by achieving certain goals and objectives, but the player soon realises that the promise is an empty one: "The coming-up of new possibilities devalues the labour invested in so far. The player will soon realize that the goalposts are moving" (Möring & Leino, 2016, p. 8). These ever-shifting goals are characteristic of the culture industry. According to Adorno, the products of the culture industry contain a promise of self-realisation and fulfilment, and that promise is repeatedly broken by generating new needs to fulfil. This is the affective side of keeping the culture industry running.

The example of *Pocket Planes* also illustrates the player-consumer as both the subject and object of the culture industry. Besides being an object, for whom new needs are generated, the gameplay necessarily involves player agency by its very nature, in contrast to watching a movie, which is a rather passive action. In the example, the player can observe, through their own agency, that the objective of the game is actively escaping them, and their own involvement in the process. However, that agency then becomes meaningless as soon as this observation is made.

Darrow Schechter has stated that "if Marx offers a political economy of reification based on alienated labour, the *Dialectic of Enlightenment* outlines a genealogy of reification based on alienated nature" (Schechter, 2010, p. 94). With these two approaches to reification in mind, I will turn to the concept of reified gameplay.

## Reified gameplay

To analyse how the nature of (game)play is evolving within such products of the contemporary culture industry as *EVE Online*, I propose the concept of *reified gameplay*. As illustrated in the previous chapter, this concept is built upon the theoretical insights of Georg Lukács, Karl Marx, Theodor W. Adorno and Max Horkheimer. Reified gameplay can be characterised as gameplay that has been instrumentalised and rationalised thoroughly to serve economic purposes, with remarkable alienating features. In the case of *EVE* industrialists analysed by Taylor et al. (2015), one can observe the gameplay revolving around the instrumental action of mining ore, building things off it and keeping the economy of the game running while also recreating within the game the social relations of class antagonism of the economic order that exists outside the game. Gameplay revolves around players being in a very technical

relation to the system and other players within it, playing their part and filling their role. It is a role they have willingly taken on and have no economic necessity (in terms of surviving as a person, outside of the game) to continue fulfilling, but in order to continue playing, it can be argued they have major obligations to fulfil. In that sense, their agency is structurally limited and resembles labour. In some cases, it just is labour, if we acknowledge the fact that player-built in-game ships can be turned into actual commodities by selling them for real-world money.

If one contrasts this kind of play situation to the classical definitions introduced in the first section, there are few characteristics of “play” involved here. In contrast to Huizinga, it is not the case here that the play activity would have no material interest, or that there would be no profit involved. The questions of the seriousness of the activity and its separation from the world outside the game are somewhat hazy. On the one hand, the gameplay is in a certain sense an activity in a closed space that players can enter and exit at will. On the other hand, the rules of the game mimic the economic imperatives of capitalism outside of it in such a strong sense, that the many roles within the play activity resemble similar tasks that players carry out in their actual working life, as illustrated by Taylor et al.

Adorno (1997) presents a critical argument of play as a form of activity. He argues that play activity inherently involves repetitiveness: performing the same tasks over and over again, for the sake of one’s amusement. Adorno claims:

In all play, action has fundamentally divested itself of any relation to purpose, but in terms of its form and execution the relation to praxis is maintained. The element of repetition in play is the afterimage of unfree labor. (Adorno, 1997, p. 418)

Here Adorno is critical of Huizinga’s idea of play being free of any relations to praxis or purpose outside itself and argues that the connection to praxis outside the sphere of play remains, no matter the players or their intentions. Moreover, there is a connection between play and labour through the element of repetition involved in both.

Taken as it is, I find the claim that all play is repetitive too generalising, since play and games have gained many new forms after the publication of Adorno’s text in 1970, and it is not clear that all those forms are repetitive. Nevertheless, I argue repetitiveness to be inherently present when activity takes the form of playbour. Performing laborious tasks is necessarily repetitive, and gameplay in the form of playbour inherits that trait, as has been seen in the previous examples in this article.

As observed in the second section, Herbert Marcuse demonstrated a connection between play and labour already in the 1930s. He claimed that play has a clear societal role of relaxation and distraction from work, so that the worker can return to their toil refreshed (Marcuse, 2005). However, Marcuse did not have the concept of the

culture industry at his disposal, which limits the analytical force of his conception of play.

With the concept of the culture industry, the connections between play and economic imperatives can be made eminent. While play activity starts to resemble labour activity in a rather accurate sense, as in the playbourer utilises the same skills in both, the activity happening leisurely can be seen as practice for actual labour, and therefore a continuation of it. As Horkheimer and Adorno claimed already in the 1940s, "Entertainment is prolongation of work under later capitalism" (Horkheimer & Adorno, 2002, p. 109), and one can hardly find a more illustrative example of this than what Taylor et al. have found in their study.

As Taylor et al. have stated, this gameplay activity has alienating features. They observe that in their example, *EVE Online*, it can be argued that the players engaging in action reminiscent of labour are alienated from the products of their labour, which corresponds with the idea of an objective side of alienation, as described by Marx.

Regarding the subjective side of alienation, which means self-estrangement, the question becomes more complex. On the one hand, it could be argued that these two sides are interconnected by the alienating process itself, and therefore the alienation of the worker from their production and from themselves are part of the same process. On the other, this subjective side of alienation has some qualities that fail to adequately fit our example. For example, Marx states that workers engage in action that is unnatural to them, and that the activity is coerced (Marx, 2009, p. 30). Yet while playing *EVE*, or any other game for leisure, the player always has a choice to quit and do something else instead, at least in principle. In practice, quitting might not be so simple. The player might be heavily invested mentally, or even addicted to the play practice, or they can have social obligations regarding the game, such as a certain role in a guild. Nevertheless, Marx (2015) has observed, while engaging in labour, the labouring subject moulds both the world around them and themselves. Therefore, when the form of activity is playbour, it entails changes in the playbouring subject.

Of course, there is also the social aspect of alienation, that is reification, or the commodification of social relations. This aspect can be clearly observed in *EVE* with its class antagonisms and social stratification within the game world, in which the social relations become instrumentalised. It is not suggested that the gameplay systems forbid any other type of action besides instrumental action. Rather, it is just the systems strongly promote this type of social action.

Reified gameplay is, ultimately, a form of gameplay action characterised by processes of reification and rationalisation, processes that emerge because the game is a product of the culture industry. The logic of capitalist production, which is the underlying logic within the culture industry, does not restrict itself to just production

and publishing the game, or other external aspects, but rather penetrates the gameplay itself. Therefore, the structure of the culture industry affects player in-game agency to a considerable degree. In reified gameplay, players find themselves performing repetitive tasks in a play experience that is alienating and resembles labour.

The concept of reified gameplay has several advantages compared to playbour. Firstly, playbour as a concept has been used rather opaquely and without proper definition. Secondly, the idea of play as reified inherently turns one's attention to the structural and societal factors that change the nature of gameplay activity. To take the theme of playbour seriously, we need to take labour seriously. That means understanding labour as a historically contingent form of work, which is about the abstract production of surplus value. That aspect can be found in *EVE*, as well as in the next example.

A further interesting example of reified gameplay can be found from the field of games that use cryptocurrencies and blockchain technology. Cryptogames can be defined as “games that use blockchain technology, cryptocurrencies as payments, or (typically) both” (Serada et al., 2021, p. 458). Serada et al. have analysed a certain game of this genre, *CryptoKitties* (Dapper Labs, 2017), and its gameplay and economy. The game revolves around so-called cryptokitties, which are virtual cats and non-fungible tokens (NFT). As NFTs, each kitten in the game is unique, has its own set of qualities and a monetary value based on those qualities. The ownership of a kitten is guaranteed by blockchain, as with any other kind of NFT. Gameplay in *CryptoKitties* revolves around breeding, trading and gifting these virtual cats, with the ultimate goal of attaining a cat with as rare and valuable qualities as possible (Serada et al., 2021).

Although the aforementioned article does not analyse *CryptoKitties* using concepts such as playbour or reification, such a connection can be made in a fruitful manner. While the gameplay objective itself is basically about generating cryptocurrency value, there is very little “play” in the sense outlined earlier in this article. When every single action in the game costs real money, there is little “playfulness” and it seems that “the players of *CryptoKitties* are paying for the maintenance of the game” (Serada et al., 2021, p. 467). I propose that the concept of reified gameplay could be a fruitful theoretical point of departure for further empirical studies of *CryptoKitties* and similar games, since the gameplay revolves around creating cryptocurrency value, and the in-game social encounters are about trading these generated NFTs.

## Conclusions

I have proposed a novel concept of reified gameplay to realign the discussion on playbour and to further elaborate on the theoretical implications of how play and labour intertwine in the context of present-day video games. I place the concept of reified gameplay within the economic context of the culture industry. The analysis is

informed by both the relevant classics and modern theoretical specifications, as well as previous empirical observations regarding instances of playbour. An important inspiration and starting point has been the idea of “alienated playbour” as illustrated by Taylor et al., and my work can be seen as elaboration and theoretical development of the idea presented there.

Taylor et al. make a striking conclusion about the intertwining of play and labour. As I have stated, their conclusion that holding on to the theoretical separation of these concepts is untenable in present-day conditions seems rather hopeless and too definite. In a similar vein, Möring and Leino argue that we, as players and subjects, are grown to be part of the current-day, neoliberal condition and its inner logic, and therefore it is hard to even question the current-day condition, yet alone to imagine other possibilities. Furthermore, Fuchs and Seignani, (2013) claim that play and labour can no longer be distinguished, since play has been commodified and our free time is exploited by capital.

Should it therefore simply be accepted that modern-day gamers are merely cogs and consumers of the culture industry? Is any discussion of gameplay as separate from labour and something other than a continuation of it or the growth of “human capital” simply nostalgic longing for a bygone era?

In Critical Theory, the aforementioned problem is formulated as a question of immanent critique, to which there is no easy solution. As subjects of a certain socio-historical condition, how can we achieve or imagine something beyond our current-day situation, when our theoretical tools and understanding are limited by that same current-day situation?

Adorno is well-known for his critique of the culture industry and the reification occurring within it that has been illustrated in this article. At the same time, Adorno sees in art a possibility to overcome this overwhelming rationalisation and reification. In modern terms, art can be said to have affective possibilities, which Adorno sees as potentially emancipatory, and which can be made meaningful and brought to understanding via a process called mimesis. But whether this idea of the unique potential of art can be applied to the video games of the 2020s is a point of departure for further research.

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# **Fake Games**

## **On Dark and Deceptive Representations of Non-Actual Games**

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# Fake Games

## On Dark and Deceptive Representations of Non-Actual Games

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### Abstract

This paper provides an introduction to fake games. Based on the concept of fictional games, or non-actual games that are presented to be imagined, I define fake games as non-actual games that are presented with the intention to trigger false beliefs in the existence of the game or its presented mechanics and story. First, I clarify the notion of fake games by comparing it to fictional games. I discuss how some representations of non-existent games blur the boundaries between fiction and lies. Such games are not clearly embedded within works of fiction and are presented without a clear context to help readers decide whether they should believe or imagine the game to exist. I discuss games that are represented through fake/fictional gameplay, paraludic material, or metaludic material. Lastly, I clarify the potential purposes fake games can serve. I distinguish darkly designed fake game representations from deceptively designed ones. The former have the intention of deceiving people into making certain decisions. Fake game advertisements, for example, aim to trick people into downloading mobile games that lack the features showcased in the ad. Deceptively designed fake game representations, on the other hand, deceive players with the aim of giving rise to aesthetically valuable experiences. Players' false beliefs could, for example, give rise to interesting emotional responses.

### Keywords

Fiction; representation; imagination; dark design; deceptive design; fake advertisements; metaludic; paraludic

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**In one of the trailers for *The Last of Us Part II*** (Naughty Dog, 2020), player-character Ellie is shown sneaking through enemy territory, when suddenly her mouth is covered by a hand. While struggling at first, Ellie seems to realize something, turns around slowly, and whispers: "What the hell are you doing here?" The screen then cuts to her 'attacker', Joel, her surrogate father, who looks at her and replies, "You think I'd let you do this on your own?" (see PlayStation, 2019, 02:18–02:38).

This trailer is a lie. In the actual game, the one who comes to Ellie's aid is her friend Jesse, not Joel. In fact, at the point in the game shown in the trailer, Joel is long dead and buried, brutally murdered by the woman that Ellie is chasing to take revenge on. The game implied by the trailer, one where Ellie and Joel team up once again to take on hordes of infected and hostile humans, does not exist.

## Introduction

In *Fictional Games: A Philosophy of Worldbuilding and Imaginary Play*, Gualeni and Fassone define fictional games as “playful activities and ludic artefacts conceptualized as part of fictional worlds” (2023, p. 2; see also Gualeni, Fassone, & Ford, 2025, p. 1). An example of this is *HoloChess*, a holographic board game shown in the *Star Wars* movies (2023, p. 47). They add that “[f]ictional games are meant to trigger the imagination of the appreciator of a work of fiction and cannot actually be – or at least were not originally meant to be – played” (2023, p. 2). This definition of fictional games aligns with how fiction is usually characterized within the philosophy of fiction: as that which mandates *imaginings* instead of beliefs. The function (or, depending on who you ask, the intention) of works of fiction is to stimulate their appreciators to entertain in thought what is represented in these works, but “non-assertively” so: without a commitment to the represented states of affairs being actually the case, or to the uttered sentences being true (Carroll, 1990, p. 80).<sup>1</sup> Defining fiction in terms of its connection with imagination has the advantage of clearly distinguishing fiction from *lies*. Even though lies also present content that is untrue, the liar's intention is different from that of the fiction author, because lies are not meant to prompt imaginings, but (false) beliefs in the presented content.

When it comes to representing non-actual games, this distinction between fiction and lies presents an interesting possibility: that of *fake games*, or games that do not actually exist, but are presented with the intention of making people believe that they do. In this paper, I discuss fake games and give examples of different kinds of games that could be considered fake, such as the non-existent *The Last of Us Part II* implied in the actual game's trailer. First, I clarify the notion of fake games by comparing it to fictional games and discuss how some game-representations arguably blur the boundaries between fiction and lies. Such games are not clearly embedded within works of fiction or conceptualized as parts of fictional worlds. As such, these games are presented without an unambiguously clear context to help readers decide whether they should believe or imagine the game to exist. I then discuss the potential purposes that fake games can serve. I distinguish darkly designed fake

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<sup>1</sup> This definition of imagination is meant to contrast it to belief, which could in turn be seen as the assertive entertainment of thoughts, with a commitment to the content of the thought being veridical or actually the case.

games, presented with the intention of deceiving people into making certain decisions, from deceptively designed fake games, which deceive players with the intention of giving rise to aesthetically valuable experiences.

## Contextualizing fictional and fake games

Fictional and fake games are both types of non-actual games: they do not exist in our world as formally complete ludic artefacts but are merely represented as existing. Whereas fictional games are presented to be imagined as actual games, however, fake games are presented with the intention of being believed to be actual.

Interestingly, following these descriptions, some of the fictional games discussed by Gualeni and Fassone can more precisely be described as ‘fictionally fake games’. Take for example Cups, a “fictional card game played in the television series *Friends* (S6E06 – ‘The One on the Last Night’; Schwimmer 1999)” (Gualeni & Fassone, 2023, p. 36). In the episode in question, the character Chandler invents Cups and makes his friend Joey believe that it is an actual game. He does this with the intention of playing Cups against Joey and losing money to him. Cups is by no means an actual, formally complete game: Chandler keeps changing and adding rules on the spot to make Joey win. For the viewer of *Friends*, Cups is a fictional game, conceptualized as a part of the fictional world of *Friends*. For the characters within this world, however, Cups is a fake game: it is a game that does not actually exist (as a formally complete ludic artefact), but is presented by Chandler with the intention of making Joey believe that it does. Chandler is, quite frankly, lying, and the representational content of his lie happens to be a game, hence making this game a fake one.

Vice versa, and admittedly somewhat tongue-in-cheek, I invite the reader to think about the concept of ‘fakely fictional’ games. Take, for example, the videogame *Big City* in Louisa Bastiaens’ eponymous novel (2008). This game, and the brutally hierarchical society depicted in its gameworld, reflects the values of its player community, which keeps modding the game based on their current needs and interests. As it is a game that does not actually exist but is part of the fictional world in the novel, it is clearly a fictional game. And it is a *fake* fictional game, because I lied: the novel *Big City* does not exist. I intended to make you falsely believe that *Big City* was a game that was mandated to be imagined to exist.

Obviously, the cases described in the previous two paragraphs are unconventional. However, they do show that a game being fake or fictional does not depend on any characteristic of the presented ludic artefact itself, but merely on its context or mode of presentation. One and the same game that does not actually exist could be fake or fictional (or even both, on different narrative levels), depending on whether it is represented to be believed or imagined to exist. Most of the time, when we are dealing with a representation of a non-actual game, it is quite clear that we are supposed to merely imagine this game to exist. After all, as is evident in Gualeni and Fassone’s

various examples, such games are most often presented as parts of works of fiction (out of the 92 fictional games they mention, only 2 are *not* parts of works of fiction or embedded in fictional worlds: Mornington Crescent and Three-Cornered Pitney, (2023, p. 189; 192)). We are unlikely to mistakenly believe games like *Holochess* in *Star Wars* to exist, because they were clearly contextualized within stories that we are unlikely to mistake for non-fiction.

What to do, however, when such a clear fictional contextualization is missing? Many games that are arguably fictional are not explicitly conceptualized as parts of worlds of fiction, or even presented within a work of fiction, despite Gualeni and Fassone's descriptions of fictional games implying that that should be the case. Take, for example, Suzanne Treister's visual artwork series 'Fictional Videogame Stills', which are fictional screenshots of videogames created with Deluxe Paint II software on an Amiga computer in 1992 (see Figure 1). Or take the X (formerly Twitter) account 'This game does not exist' (@thegamesarefake), which is described as an ongoing game concept art exhibition to which everyone can submit artful renditions of games that do not exist.



Figure 1. Three photographs from Suzanne Treister's "Fictional Videogame Stills" series.

These are examples of representations of games that do not actually exist. In fact, all these examples involve two of the most important characteristics of fictional games that Gualeni and Fassone describe: their incompleteness and related unplayability (2023). These games are incomplete in the sense that many aspects of their rules, storyworlds, and goals are left unspecified. In fact, we can never figure out exactly what these games entail, as the works in which they appear simply do not (and are not meant to) give this information. The games are unplayable, because they are not truly present, but merely represented. Not only are their rules under-specified, but they also lack the necessary interactivity to allow for a true player experience.

Yet, as stated before, the inherent qualities of represented games do not help us determine whether we are dealing with a fictional game or a fake game: both kinds of non-actual game are incomplete, unplayable, and merely represented to exist. To make this distinction, we need to figure out the intention with which the game is presented: to make us believe or imagine that it exists. Returning to the two examples above, it is arguably safe to say that both feature fictional games. Suzanne

Treister called her photograph series “Fictional Videogame Stills”. This is a clear indication that, although she did want to make her renditions of arcade games believable and authentic-looking (see also Treister, 2006), she also had fictional intentions when creating them. As Treister explicitly presents these images as fictional, she likely wanted her audience to imagine (and not believe) the depicted games to exist. The case of the X account “This game does not exist” is similar. Their handle @thegamesarefake seems to suggest that this account presents its followers with fake games. Yet, the very announcement that the games are fake and do not exist makes sure that followers are not deceived about the existence of the games. Ironically, by announcing that the represented games are *fake*, this account assures that viewers of the posted images will imagine what these games are like, without any (misguided) belief that they are real, thus making the games *fictional* instead.

These cases show how non-actual games are not always presented through works of fiction or as parts of fictional worlds, making it potentially harder to distinguish fake from fictional. The two examples above feature games that are presented through isolated, pretend-screenshots. Non-actual games can also be presented by other means that are not discussed by Gualeni and Fassone, who solely focus on fictional games presented in works of fiction. In the following sections, I present three such means, with the aim of further clarifying fake and fictional game representations.

## Fictional and deceitful gameplay

Gualeni and Fassone write that fictional games are meant to be imagined by appreciators of fiction and cannot actually be played (Gualeni & Fassone, 2023, p. 23). Yet, it is important to note here that fictional games can be either pretend-played or fictionally played (see also Van de Mosselaer, 2025). Think, for example, of Mornington Crescent, a game that was first featured in the BBC Radio 4 comedy show *I'm Sorry I Haven't a Clue* in 1978 (Bateman, 2011, p. 72). Players of this game take turns declaring the name of a London Underground station such as Piccadilly Circus, Blackfriars, or Hampstead. The winner of the game is the first player who manages to announce ‘Mornington Crescent’. Of course, one could do this immediately on their first turn. But the point of the comical radio show is to give rise to the semblance of an actual, complete game being played. That is: players constantly refer to complex rules that they make up on the spot. In the episode of 8 December 2003, for example, one player describes his choice for Regent Street as a “definitive lateral bridger” and explains that the next player could “reverse on this if the situation is right”. He adds that his move is characterized by a “double value”, which is very useful early on in the game.<sup>2</sup> This is a clear example of pretend-play: rather than playing by actual rules, a fictional game is implied through the player acting *as if* they are playing by

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<sup>2</sup> See ‘Mornington Crescent (2003-12-08)’ from *I'm Sorry I Haven't a Clue*, BBC Radio 4 on <https://www.youtube.com/watch?v=xsPeyHq5Mgk> (02:03-02:28).

existing rules. Gualeni and Fassone rightly discuss this game as fictional (2023, p. 36). Note, however, that this game is not embedded in a fictional world or a work of fiction. Rather, it *projects* a fictional world: through absurd fictional gameplay, the radio show implies a fictional world where the laughably complex game Mornington Crescent actually exists and makes sense to its players.

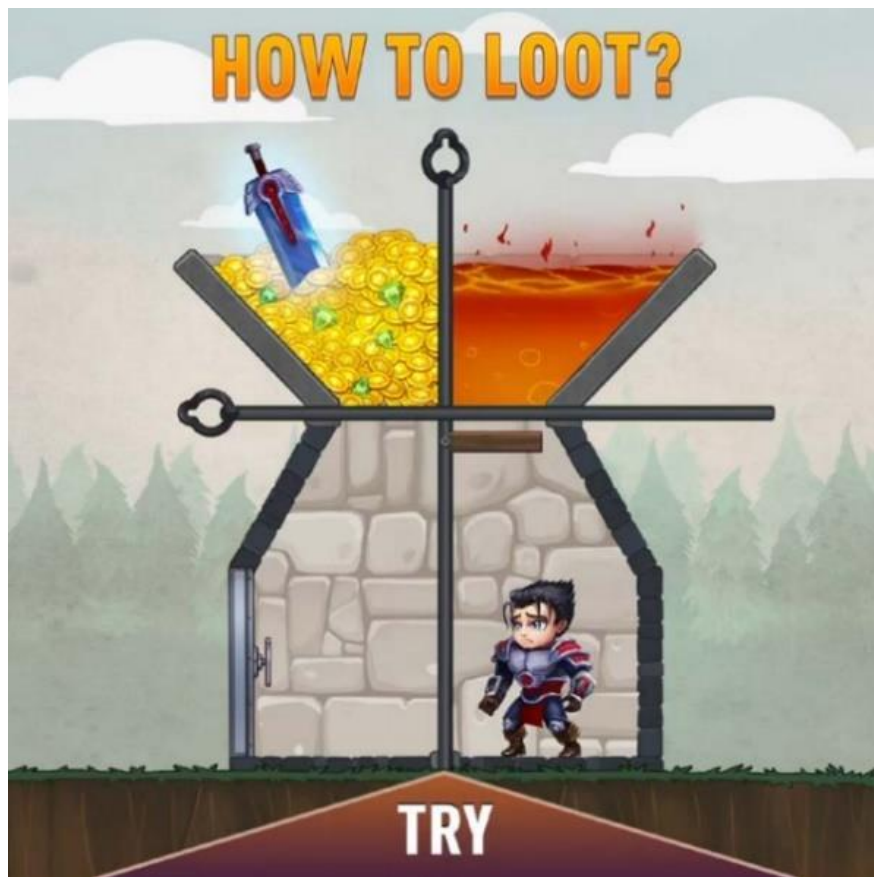


Figure 2. Fake gameplay for Hero Wars (Nexters, 2016), found in what was most likely the first ‘pull the pin’ fake game ad (Mago, 2020, p. 137).

Like fictional games, fake games cannot actually be played because they do not exist. They can, however, be presented through deceitful gameplay. Deceitful gameplay or representations of fake gameplay are meant to trigger beliefs that a certain game can be played as shown, while the game actually implied by said gameplay does not exist or cannot be played in that way.

An example of deceitful gameplay is found in *Undertale* (Fox, 2015). In this game, players are rewarded with EXP (a common abbreviation of ‘experience points’ in games) upon killing monsters, which allows them to increase their in-game LV (commonly used as an abbreviation of a player-character’s “level”). This heavily implies killing to be desirable. Yet, at the end of the game, it is revealed that EXP actually

stands for “EXecution Points,” and LV for “Level of Violence,” both of these being a measure of the player’s immorality rather than their skill. Thus, through deceitful gameplay, *Undertale* presents players with a game that does not actually exist: a game in which players get experience points and increase in level when killing. As this is done with the intention that players believe this game to exist, we can interpret this deceitfully presented game as a fake one.

Deceitful gameplay is also often found in so-called fake gameplay advertisements. Zdenko Mago defines these as ads “which promote the game by depicting gameplay footage that does not, however, reflect actual essential gameplay of the promoted game” (2020, p. 135). The ads show apparent recordings of people playing games that do not actually exist, such as typical mobile game “pull the pin” puzzles (see Figure 2).<sup>3</sup> Interestingly, fake gameplay advertisements often contain contradictions, as game mechanics are inconsistently applied or the shown puzzles are unsolvable. This shows once again that fake games are similar to fictional games in that they can be inconsistent, unplayable, and incomplete, with the difference being that fake gameplay is meant to mandate beliefs in the existence of the game rather than imaginings.

## Fictional and fake paraludic material

Secondly, non-actual games can also be presented paraludically, through material surrounding the game that is (falsely or fictionally so) supplied by the designers and publishers of the game. An interesting example of this is *Vermis I - Lost Dungeons and Forbidden Woods* (Plastiboo, 2022), an official guide for a game, *Vermis*, that does not actually exist. As the book itself (see Figure 3) does not clearly indicate that *Vermis* does not in fact exist, it somewhat blurs the boundaries between fake and fictional. That said, readers of the book are unlikely to come into possession of this guide or read it without knowing that *Vermis* does not exist. The Hollow Press website where one can buy the book states that “It could be considered an official guide of a game that doesn't exist, since it's not a game at all!” For obvious reasons, it is also impossible that any reader would buy the book because they are actually in need of guidance while playing the game. Arguably, *Vermis* is a fictional game, presented to be imagined to exist for entertainment purposes (see also Timvig, Engqvist, & Dan-

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<sup>3</sup> For an exhaustive discussion of fake game ad characteristics, see Moradzadeh and Kou (2024). It is noteworthy that these authors focus on the actual games that are connected to fake game advertisements, i.e. the playable artefacts that one can download when clicking on these ads. They define fake games as “games promoted with content that fails to accurately represent their actual gameplay” (2024, 22). Yet, this definition betrays that said games do have “actual gameplay”, thus making them actual games that are simply misrepresented in ads. This paper, instead, aims to discuss the games that are presented in these ads, i.e. the fake ludic artefacts that are implied to exist in these ads, but do not actually exist as playable games.

ielsson, 2025 for a more extensive discussion of *Vermis* as a fictional game). The Hollow Press website describes the guide as an artbook that presents a “pure act of world-building”. In this sense, *Vermis* is similar to the fictional games presented through screenshots in Treister’s Fictional Videogame Stills series and tweets by @thegamesarefake, except for the fact that *Vermis* is presented through fictional paraludic material instead.

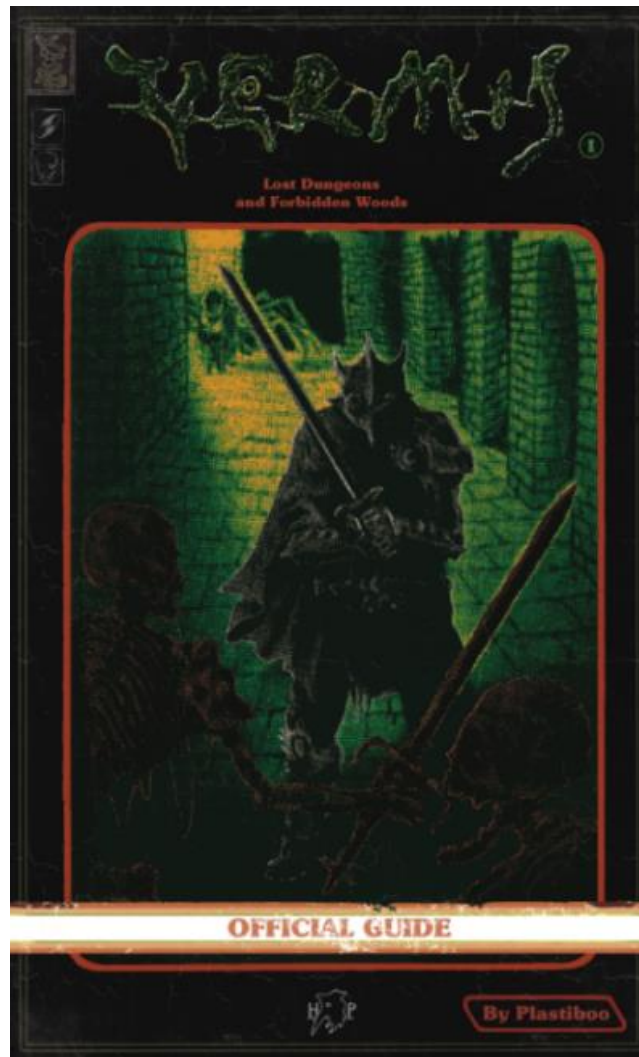


Figure 3. The cover of *Vermis I - Lost Dungeons and Forbidden Woods (Official Guide)*.

Some more unambiguously fake games are presented similarly through fake paraludic material, such as fake advertising material. Very often, these are part of so-called fake game leaks, in which a counterfeit trailer or would-be advertisement poster might be presented as official game material made available before it was meant to be officially released. Most of the time, these are fan-made. Sometimes, however, fake paraludic material is provided by game creators themselves. Think, in this regard, of the trailer for *The Last of Us Part II* mentioned in the introduction to this

paper, which deceivingly presents a game where Ellie and Joel team up. Another example is the fake game *Goat Simulator 2*, which does not exist, but is heavily implied to exist by the official titles of the other two games in the series, *Goat Simulator* (Coffee Stain Studios, 2015) and *Goat Simulator 3* (Coffee Stain North, 2022), and especially by advertisements for the latter game.

Note that paraludic material (and fake games in general) are only treated as fake in this paper if they are 1) made with the intention of presenting a non-actual game and 2) made with the intention of making people believe that the game exists and has the features that are presented. In “Ludic Unreliability and Deceptive Design,” Gualeni and Van de Mosselaer (2021) present the case of the game manual of *The Legend of Zelda* (Nintendo R&D4, 1987), which contains a mistake, thus making people believe that the game functions differently than it actually does. While this case satisfies the second condition, it does not satisfy the first one: the creators of the manual did not intend to present untrue information. This happened by accident. As such, unlike *Vermis I* and the discussed trailer *The Last of Us Part II*, this manual is not fictional or fake but merely flawed.

## Fictional and fake metaludic material

Lastly, non-actual games can also be presented through broader metaludic material, or material that offers information about the game but not published by its own creators. Examples are FAQ's, fan wikis, or forum discussions that contain lies or fictional information about games. An especially interesting example of this could be found on the subreddit dedicated to the game *Elden Ring* (FromSoftware, 2022) before it was released. In September 2019, this Reddit subforum was populated by fans who were eagerly awaiting the game's release. At that point, not much was known about the game yet. A short announcement trailer had been published, and fans believed the game would be similar to FromSoftware's previous games. At first, fans wildly speculated about what the game would be like. After a while, however, this practice turned into a forum-wide game of make-believe, where people started pretending that *Elden Ring* had already been released, and they were playing it. Posts popped up of people praising the game design, lamenting the difficulty of bosses, and asking other players tips about the best builds and strategies. Many posts detailed players' struggles against the game's first boss, the completely made-up Glaive Master Hodir. Any new fan stumbling upon these posts was likely to be quite confused, as posters were especially good at creating believable gameplay descriptions.

This case is interesting to discuss in the context of this paper because it helps to clarify the difference between a game *being* fictional/fake, and its *being taken as* fictional/fake. That is, we can arguably call the 'Elden Ring' that was pretend-presented on this subreddit a fictional game: posters seemed to have the main intention of revelling in communally shared daydreams and humorous parodies informed by the

discourse that typically surrounds FromSoftware's actual games (fictionally struggling players were often told that they should just "git gud") (see also Van de Mosselaer, 2025, for a further discussion of this example as a pretend-played fictional game). But this fictional intention was not clear to everyone. Indeed, many commenters kept pointing out that posts were 'fake', and that their authors were lying, because the game had not been released yet. In fact, after a while, the subreddit's moderators decided that posts about pretend-Elden Ring had to be marked as 'fake lore', thus creating a context where the metaludic discussions were more easily recognized as fictional (and to be imagined instead of believed).

Clearer cases of fake metaludic discussion are so-called game myths, or urban legends surrounding games. Brunvand (1996, p. 730) defines an urban legend as "an apocryphal contemporary story told as true but incorporating traditional motifs and usually attributed to a friend of a friend (FOAF)". He adds that these legends "are somewhat bizarre unverifiable stories, plausible nonetheless because they are grounded in certain verifiable facts" (1996, p. 730). Urban legends about games abound and are often shared widely online. Most often, these game myths ascribe fake features to existing games. Think, in this regard, of the myth that Luigi is a playable character in *Super Mario 64* (Nintendo EAD, 1996), that the Pokémon Mew is hiding under a truck in *Pokémon Red* (Game Freak, 1996),<sup>4</sup> or that completing *Banjo-Kazooie* (Rare, 1998) in less than 10 hours would give access to bonus content. Games that have these characteristics do not actually exist. Likely, these urban legends started out as lies and were spread further by those who falsely believed them.

Sometimes, however, the very existence of a non-actual game is posited by an urban legend. *Polybius*, for example, was an arcade game said to have been released in several suburbs of Portland, Oregon, in 1981 (de Vos, 2012, p. 8). The game was addictive and known to cause intense stress and nightmares. Moreover, it is said that men dressed in black would frequently collect data from the arcade machines. Shortly after the game's release, however, the game disappeared without a trace. *Polybius* is probably a hoax or a fake game, beliefs in which have been caused by what de Vos calls a contemporary internet legend (2012, p. 8). Vague metaludic discussions are all there are to *Polybius*, which most likely never existed.

To conclude this section, the distinction between fictional and fake games is based on the intent with which these non-actual games are presented: respectively to mandate imaginings or beliefs about the game in question. When non-actual games are presented as parts of works of fiction, the intent for appreciators to imagine these games to exist is quite clear. However, these games can also be presented without a clear context: through fake or fictional gameplay, paraludic material, or metaludic

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<sup>4</sup> Notably, in the remake of this game, *Pokémon FireRed* (Nintendo, 2004), designers added an underwhelming "Lava Cookie" item near the truck in reference to the famous urban legend. More about this and other "urban game legends" can be found on the 'Gaming Urban Legends' fan wiki: [https://gaming-urban-legends.fandom.com/wiki/Gaming\\_Urban\\_Legends\\_Wiki](https://gaming-urban-legends.fandom.com/wiki/Gaming_Urban_Legends_Wiki).

material. In these cases, the intent underlying the game's representation is frequently misinterpreted, like when people take professional wrestlers to participate in actual, non-fixed competitions.

This shows that fictional games, approached without the necessary literacy or contextualization, can have the very same impact as fake games. But what are the effects of fake games exactly? And why would anyone want to deliberately produce false beliefs about games? In the following section, I focus on these questions, discussing the purposes that fake games can serve.

## The purpose of fake games

Gualeni and Fassone (2023) discuss the roles that fictional games can play at length. They acknowledge that the purposes of fictional games are just as various as the purposes to which fictional works can be put. They mention fictional games' "speculative, transformational, political, meta-reflexive, misleading, comic, utopian and estranging qualities" (2023, p. 6). Most often, fictional games serve narrative functions, fleshing out the fictional world in which they appear or the characters that play them. Additionally, as shown in the previous paragraphs, fictional games cannot only flesh out fictional worlds, but also entirely project them. This is the case for fictional games that do not appear within fictional works, such as Treister's images and Mornington Crescent, but still imply a fictional world in which these games are actually played. In sum, the purposes of fictional games are related to the intention with which they are presented: to make people imagine these games (and the worlds in which they are played) and so stimulate reflection or bring about entertaining narrative, emotional, or even transformative effects.<sup>5</sup>

What, however, could the purpose of *fake* games be? That is, what reason could someone have to stimulate *false beliefs* in people, such as the belief that Joel plays a bigger role than he actually does in *The Last of Us Part II*? Many instances of fake games are somewhat aesthetically uninteresting in that they are simply cases of trolling, or "deliberate, deceptive and mischievous attempts to provoke reactions from other users" (Golf-Papez & Veer, 2017, p. 1336). Fake game leaks or misinformation on fan-made wikis often serve no purpose besides entertaining their creators by eliciting emotional responses both from those who believe the lies and those who see through them. Below, I discern two categories of fake games that serve further purposes, depending on the reason one had for lying about the game's non-actual nature. Both differ from mere trolling because the fake game is presented either to manipulate people into making further decisions (often leading to financial

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<sup>5</sup> See also *Eludamos'* special issue on Fictional Games (edited by Gualeni, Fassone, & Ford (2025), <https://doi.org/10.7557/23.161>) for further discussions of particular fictional games and how they contribute to (the experience of) the works in which they appear.

gain for the liar), or to give rise to experiential and emotional effects that are in the interest of players.

## Dark design

Frequently, the presentation of fake games can be explained as a type of dark design. Maier and Harr describe this as follows: “Dark design patterns have a conscious component of deceit intending to nudge people toward making a certain decision. By intentionally implementing such manipulative techniques, user values are de-emphasized in favour of processes that profit the business” (2020, p. 192). Specifically applying this to game design, Zagal et al. talk about dark game design patterns as patterns “used intentionally by a game creator to cause negative experiences for players which are against their best interests and likely to happen without their consent” (2013, p. 7).

The fake gameplay advertisements discussed above are clear examples of the dark use of fake games. Mago calls this advertising strategy especially creative but risky, as the lies can generate more game installs, but also frequently lead to negative game reviews when players find out about the deceit (2020, pp. 143–144). It is clear, however, that the lie has already served its purpose once negative reviews are written: the game has reached a larger audience of potentially new players (who might even make use of in-game microtransactions).

Despite being mostly dark and unethical, the fake games presented in fake ads have theoretically interesting connections to actual games. Firstly, Mago notes that once the fakeness of so-called “pull the pin” games became more widely known, developers started to produce games that were actually based on the fake mechanics. This shows a process that is similar to the fictional-to-actual-game transitions described in Gualeni and Fassone (2023, pp. 29–30). Just like fictional games such as *Pai Sho*, a boardgame presented in *Avatar: The Last Airbender* (Dimartino & Konietzko, 2005–2008), have been translated into actual games, fake games like “pull the pin” mini-games shown in fake advertisements were translated into actually playable mobile games such as *Pull Him Out* (Lion Studios, 2020). In fact, this fake-to-actual transition can be leveraged for market research. Game developers can, for example, deceitfully announce a future game by making a Steam page for it without actually having the intention of creating said game, unless the fake game garners enough attention.

Secondly, some darkly fake game advertisements garner so much attention that they become regarded as aesthetically pleasing artefacts in themselves or even as canonically part of the actual game they misrepresent. An interesting example are the fake advertisements for the mobile game *Merge Mansion* (Metacore, 2020). Many of this game’s early advertisements showed story elements that could not be found in the actual game. Despite this, the fan community often regarded these advertise-

ments as canonical, using them to understand the game's story.<sup>6</sup> The evermore suspicious behaviour of the in-game grandmother, for example, was frequently interpreted based on this character's depiction in the game's advertisements. It led to some speculating that the grandmother was, in fact, a cannibal (see rhymeswithloop92, 2023).

Such hermeneutic endeavours by players reveal an interesting aspect of fake game interpretation: while fake gameplay or game mechanics are often dismissed as dark deceit, fake presentations of game stories are often enjoyed and taken seriously instead. That is, while players usually get angry about fake presentations of ludic elements, they often tend to try and incorporate fake narrative elements when imagining the fictional game world. This curious discrepancy in player reactions certainly merits further research. I am willing to hypothesize here that this difference in appreciation of fake gameplay elements and fake narrative elements has a lot to do with the nature of fiction interpretation. If we are deceived about gameplay elements, it means that the actual gameplay is inconsistent with the gameplay that we expected. This is annoying, as the beliefs that we had are shown to be wrong and we need to reject them. If we are deceived about narrative elements, however, it just means that the fictional world is inconsistent with what we were already imagining to be true in this world. What we encounter is a fictional inconsistency and we are well-equipped to deal with those without having to deny either of the conflicting elements. In fact, especially when interpreting videogames, we already do this all the time (see Van de Mosselaer and Wildman, 2021). Matravers (2015, 131–135) lists different strategies we can use for this. One example is the rejection strategy, in which we consider the inconsistent fictional information to be the consequence of a misreport by the narrator/focalizer. For example, the fact that *Merge Mansion*'s grandmother was a jailed criminal in the ads, but not in the original game's story, could easily be explained through this rejection strategy: we experience the in-game story through the eyes of a doting granddaughter, who is easily deceived by her cunning and only apparently innocent grandmother. The in-game story could be interpreted as a misreport of the true fictional events, which were revealed in the game ads.

The case of *Merge Mansion* is especially interesting as the game advertisements that misrepresented the game's narrative got quite popular among the game's community. We can speculate that this (as well as potential investigations into their deceitful advertising strategies) is the reason why the game designers decided to incorporate more of the narrative content depicted in these initially fake ads into the actual game. Earlier levels of the game, which originally did not feature any explicit mention of the criminal activities of the grandmother that were evidenced by the ads, now have clear references to grandma being a bootlegger, being investigated by special agents, going to jail, etc. In light of the ads, entire in-game storylines were seemingly

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<sup>6</sup> This is also mentioned in the fan-made *Merge Mansion* wiki: <https://merge-mansion.fandom.com/wiki/Advertisement>.

added, while previous storylines that were inconsistent with the ads were retconned.<sup>7</sup> It is also noteworthy in this regard that Metacore has significantly raised the budget for more recent, narrative-heavy ads for *Merge Mansion*, where the grandmother has been portrayed by Kathy Bates, and the police officer who investigates the old lady's activities by Pedro Pascal.

In the context of this paper, the brief history of the (at least initially) fake *Merge Mansion* ads reveals an important aspect of fake game appreciation, which will be further addressed in the next part: the potential for players to find aesthetic value in deceitful game representations.

## Aesthetically pleasing deceptive design

Many disappointed players interpreted the fake trailer for *The Last of Us Part II* as dark design. Reddit user Bigfoex (2023) laments the fact that Naughty Dog “had to trick their audience to get people to get the game”, taking the lies in the trailer as proof that the studio already knew that the game's actual story was flawed. Indeed, falsely presenting the popular character Joel as having a major role in the game might have contributed to the game's success.

Alternatively, however, *The Last of Us Part II* trailer can be interpreted as an instance of deceptive design, as defined by Gualeni and Van de Mosselaer: “in deceptive design the designer deceives the players in order to provoke certain aesthetically valuable emotional responses in them” (Gualeni & Van de Mosselaer, 2021, p. 3). Deceptive design involves lies, or deliberate misrepresentations of a game to its players, with the goal of creating an interesting player experience by provoking surprise, confusion, excitement, estrangement, or a combination of such responses. As such, deceptive design differs from the dark design strategies discussed in the previous paragraph. While dark design negatively impacts the deceived with the intention of bringing profit to the deceiver, deceptive design has the express purpose of offering the deceived with aesthetically interesting experiences.

The lie in the *The Last of Us Part II* trailer can be interpreted as deceptive design because it interestingly influences players' experiences of the actual game. Players who have seen the trailer would be less likely to expect Joel to die before the scene depicted in the trailer has come to pass. This further supports the (already high) shock value of Joel's early in-game death. Furthermore, some players note how the trailer made them spend “almost half of the game confused and in denial that Joel died”

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<sup>7</sup> Note that it is very hard to keep track of what changes have been made to the narrative of *Merge Mansion*. The preservation of previous storylines that have now been removed is entirely dependent on players remembering and talking about these. An overview of some of the changes made, presumably because the initially fake ads for this game got so popular, are found on the previously mentioned Reddit thread started by rhymeswithloop92 in 2023: [https://www.reddit.com/r/MergeMansion/comments/11tv61k/the\\_game\\_lore/](https://www.reddit.com/r/MergeMansion/comments/11tv61k/the_game_lore/).

(murcialagoXO in a comment to the above-mentioned Reddit post by Bigfoex, 2023), until the scene from the trailer came to pass differently than it did in the trailer. In this sense, the trailer might have motivated a specific and fitting emotional experience of the game: one in which players move through the gameworld disoriented and baffled, not unlike player-character Ellie.

Gualeni and Van de Mosselaer (2021) describe several other instances of aesthetically interesting lies in games. They describe, among other deceptive games, *waldo.io* (Big Breakfast Collective, 2019). This game pretends to pit players against other players, thus providing them with the thrill of multiplayer competition. In reality, the 'other players' that are shown in-game are just NPCs: no actual online connection is established by the game.

Several examples of fake games described above might also better fit the deceptive rather than the dark category. Coffee Stain Studios deceitfully implying the existence of *Goat Simulator 2* fits within the trolling, glitchy, and absurd gameplay of the *Goat Simulator* games. Anyone who went online to look for the non-existent second game in the series likely had a giggle about the studio's comic deception. And even game myths such as the one about *Polybius* might have been created for aesthetic purposes, as so-called *creepypasta*, or online horror legends that are often presented with the aim to trigger frightening (or: entertainingly thrilling) beliefs.

## Conclusion

This paper's aim was to introduce fake games, showing that the budding field of fictional game studies (see Gualeni, Fassone, & Ford, 2025) can be usefully complemented by the study of other non-actual games. I compared fictional games, or non-actual games that are presented to be imagined, to fake games, defined as non-actual games that are presented with the intention of triggering beliefs in the existence of the game and/or its presented mechanics and story. Although oftentimes presented with the sole purpose of deceiving people for monetary gain, fake games can also be aesthetically interesting. Urban legends about certain game features can motivate players to embark on communal investigations of the gameworld, which importantly shape the way the game in question is played. Deceitful trailers might candidly lie about the nature of a game to put players in the right kind of mood to fully appreciate the game's emotional impact, or make them reflect on their own interpretative processes. Even fake game representations that were originally created with dark intent, such as fake game advertisements, could serve aesthetic purposes. They can, for example, provide players with snippets of story that do not actually happen in-game, but are used by players when reconstructing the game's canonical story. In fact, creatively used, fake games can likely play all the roles fictional games can play according to Gualeni and Fassone (2023, p. 6), evoking effects that

are “speculative, transformational, political, meta-reflexive, misleading, comic, utopian and estranging”.

As such, I hope this paper provides a new way of investigating non-actual or deceptively represented games as an aesthetically relevant category. Moreover, this discussion of fake games raises many questions for further research. As the present paper mainly focused on aesthetic evaluations of fake games, not much has been said about the ethical aspects of fake game representations, or the connection between both. One could also question what the interesting (aesthetic or moral) differences are between fake games that are entirely made up (such as, presumably, *Polybius*), and ones created by ascribing fake characteristics to games that exist (such as the fake version of *Pokémon Red* where Mew can be found under the truck). In this regard, another interesting line of research could pertain to the differences between false representations of game mechanics, on one hand, and false representations of narrative or fictional elements on the other. Both are frequently deceitfully represented in game advertisements. Yet, the reception by the player community, as in the case of *Merge Mansion*, seems to be quite different when it comes to misrepresented mechanics and misrepresented story. The same seems, at least at first sight, to be true for the potential legal repercussions for the deceit, as regulations focus mostly on misrepresentations of games’ mechanics and performance rather than their story. In short, fake games are aesthetically interesting, potentially morally problematic, legally complex, and undoubtedly a rich source for future research.

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# **Antagonistic Game Design**

## **The Author as a Player**

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# Antagonistic Game Design

## The Author as a Player

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### Abstract

This article examines a particular relationship between game authors and players: the possibility for game authors to co-opt the role of players in the very game they created. Among the various ways in which this can occur, the article concentrates on 'antagonistic game design': the creation of games meant to frustrate and provoke their players. Player engagement, I argue, does not solely arise from the pleasure of overcoming in-game obstacles, participating in the unfolding of the game's narrative or defeating other players, but can also emerge from resisting and opposing an imagined persona: the off-putting and often sadistic (implied) author behind the work. By projecting an unsympathetic and adversarial attitude towards players, antagonistically designed games can establish an asynchronous adversarial relationship with them and foster distinctive avenues for meaning-making and the self-validation of players.

### Keywords

Game design; game authorship; implied game designer; play; antagonistic game design; literary theory; aesthetics; player motivation; Bernard Suits; Eugen Fink

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**The following text examines game authors** and their possibility to intentionally antagonize their audience. Aligning with perspectives emerging from disciplines such as the philosophy of art, I will discuss authorship as a condition that depends on two key requirements: (1) the deliberate production of certain aesthetic effects, and (2) the voluntary participation in the creative processes intended to give rise to those effects (Anscomb, 2022).<sup>1</sup>

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<sup>1</sup> In the case of game authorship, and specifically in the context of large commercial game development enterprises, Gualeni et al. argued elsewhere that authorship could be understood as an obsolete analytical category (Gualeni et al., 2019). Our point is that, in those kinds of productions, the possibility to attribute definite creative responsibilities is effectively 'engineered away' during its ramified and distributed production processes (see Jennings, 2016). For game releases by independent developers (and for digital games of any size that are

The article begins by highlighting the possibilities for players to co-opt authorial roles in their relationships with a game. Through those possibilities, players can claim various degrees of creative responsibility over their own performance and, potentially, the configuration of the game itself (for example, by proposing custom rulesets or designing new levels). In the third section of this article, I argue that the conceptual boundary between producing and consuming playful experiences—between creating and playing a game—can be transgressed in both directions. Not only can players, to varying degrees, take on co-authorial responsibilities in a game, but game authors can also find ways to co-opt the role of players within their ludic creations. From this point in the discussion, the idea that game authors can also be players in their own games becomes central to the article’s argument, and foundational to understanding the main contribution of this article: the concept of antagonistic game design. One notable way in which authors can traverse the conceptual boundary separating them from their audience consists in creating playful experiences that oppose the players’ immediate interests and desires, and by projecting deliberately frustrating and even sadistic intentions.

While at the beginning of the article my perspective on in-game authorship largely relies on the fairly classical understanding of authorship presented above, the sections of this article that focus more specifically on antagonistic game design adopt a different approach. In those discussions I draw, instead, on the notion of the game’s author understood as a fictional figure inferred by the player, that is on what Van de Mosselaer and Gualeni (2020) describe as the “implied (game) designer”. Their paper defines the *implied game designer* as:

the conceptualization of a designer that the player constructs on the basis of their dynamic interpretation of the game (understood widely, together with its paraludic elements, including marketing material). To this inferred figure, the player ascribes all those intentions that they think lie at the basis of the creation of the game in question. (2020, p. 3)

By examining both how games can both motivate and discourage players by annoying and provoking them, this article presents antagonism as a dimension of the aesthetic relationship between game authors and players, articulating this idea through theoretical analysis, illustrative examples, and critical engagement with existing scholarship.

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characterized by an identifiable creative vision whose attribution is not ambiguous), instead, the understanding of authorship proposed above can still be considered a useful and relatively unambiguous way of framing creative responsibility that can be helpful when analysing and referencing games.

## Players as co-authors

Fully accessing and appreciating the contents of playable media such as board games, videogames, physical puzzles, interactive visual novels and choose-your-own-adventure books, requires non-trivial modes of engagement on the part of their audience (Aarseth, 1997, pp. 1–2; Calleja, 2011, p. 55). In the scholarly field of game studies, player agency is typically considered to be a central factor in how the artefacts we refer to as ‘games’ are designed and intended to be experienced (see, among others, Nguyen, 2020 and Bódi, 2023). From this perspective, playing is often compared to a creative performance whose meaning emerges from the dynamic interplay (or the *cybernetic intercourse*, as Aarseth (1997) puts it) between a playable artefact and its players.

In media studies and game studies, the performativity that characterizes the audiences’ relationship with games is not only key to unpacking their roles and responsibilities when engaging with interactive works and their contents. It is also crucial to how those disciplines frame ideas such as those of creative responsibility and authorship. In relation to how games and videogames afford and disclose various kinds of player agency, it is important to emphasize that *not* every choice or action taken by the player can be fully anticipated and regulated by the authors of a playable artefact. Game scholar Cindy Poremba (2003, p. 5) showed that the performative possibilities of players can extend beyond what the game author (whom she identifies as the game designer) intended to be desirable or even possible during gameplay. Inventively expressing themselves within a gameworld, finding ways to step outside of its boundaries or triggering perplexing glitches are, according to Poremba (2003, p. 5), some of the most obvious ways in which players can claim various degrees of creative responsibility over the playful experience. The fact that recent game titles are often released together with production tools and level editors<sup>2</sup> has similarly been discussed as indicative of a desire on the part of the playing audience to “break down the strict and counterproductive barriers between consumers and designers” (Fisher, 2002). In this context, it is relevant to briefly discuss the emergence of ‘folk practices’ within player communities, that is, expressive uses of game artefacts that have prompted several researchers to describe the conceptual and practical boundaries between developers and users as flexible and porous (see Aarseth, 1997; Pearce, 2002; Poremba, 2003; Lopes et al., 2018, Gualeni, 2018; Gualeni & Vella, 2020). Among these folk practices, particularly relevant to discuss is that of *modding*, where players use (or even develop from scratch) digital tools that allow them to modify and extend the contents of an already released videogame. Modding is not exclusive to digital games, but is also common in tabletop and role-playing

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<sup>2</sup> A number of contemporary videogames offer their players creative tools to modify and extend the game in question. Among the most notorious titles natively featuring level-editing and rule-customization tools are videogames such as *LittleBigPlanet* (Media Molecule, 2008), *Minecraft* (Mojang Studios, 2011), and *Super Smash Bros. Ultimate* (Sora, 2018).

games, where the community of players devises alternative rulesets or propose 'house rules' that give rise to different gameplay situations (see Engelstein, 2020).

Another illustrative practice that is relevant to examine in relation to creative responsibility in ludic practices, is the possibility for players to 'style' their in-game behaviour (see Parker, 2011; Nguyen, 2020). 'Playing with style' means to act under self-imposed rules that further restrict the already limited horizon of agency proposed by a game artefact. From the player's perspective, playing with style means to convert gameplay habits into conscious aesthetic decisions (Nguyen, 2020). Through acts of self-styling, players can decide to disregard some of the possibilities for acting in the gameworld and, potentially, towards other players. In other words, players can give themselves the freedom to perform sub-optimally and ignore the achievement of extrinsically set objectives to, instead, fashion their digital experiences in accordance to self-enforced principles and codes of conduct. These self-imposed constraints typically make gameplay harder and more laborious for self-styling players, but at the same time constitute an occasion for them to assert greater agency over their behaviours and aspirations within a gameworld (Vella & Gualeni, 2019; Gualeni & Vella, 2020, pp. 18–19)<sup>3</sup>.

This brief overview of how players can creatively appropriate gameplay pursued two methodological objectives. On the one hand, it introduced some of the difficulties of attributing creative responsibility over interactive performances. On the other hand, it highlighted the idea that authorship in games is mostly—if not exclusively—discussed as ambiguous and contested 'space' due to the emergence subversive kind of plays. At this point in my argument, it is important to note that existing literature on the notion of co-authorship in interactive performances solely focus on players who—constrained by rules, arbitrary criteria for success and scripted narratives—subvert conventional play in pursuit of a greater sense of autonomy and responsibility. In contrast, this article argues that the conceptual boundary between producing and consuming playful experiences—between making and playing games—can be crossed in both directions: players may take on authorial roles, and authors may, in turn, become players within the very games they have created. Focusing on this latter possibility, the next section introduces two philosophical theories that shine a

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<sup>3</sup> Intentionally stylized forms of player agency can be recognized, for example, in acts of in-game sportsmanship, such as when a player chooses not to exploit an obvious advantage over an opponent who—due to bad luck or inexperience—has no viable moves (e.g., being cornered in a fighting game). More subversive forms of self-styling appear in ludic practices such as 'pacifist runs' (i.e., playing survival, combat-themed, or adventure games while using as little violence as possible) and 'vegan runs', where players avoid in-game actions that harm sentient species (e.g., attacking creatures unprovoked or using animal products as food or equipment in game; see Westerlaken, 2017). Also notable are 'permadeath runs', which are played under the self-imposed restriction of restarting the game from the beginning after each in-game death.

light on how game authors can plausibly be recognized as participants in their own ludic creations.

## Games authors play

In his 1958 essay titled 'Oasis of Happiness: Towards an Ontology of Play', German philosopher Eugen Fink (1905–1975) argues that the creator of a game can indeed also be a player within the same game. He illustrates this point in his argument with the example of a young girl playing with a doll. Through the act of playing, according to the German philosopher, the young girl imaginatively produces a fictional world—a play-world—in which the doll become a proxy for a child (Fink, 2015, pp. 24–25). Playing the mother, Fink explains, does not only have a transformative effect on the lifeless doll that imaginatively becomes a child: in this process of make-believe, the young girl herself takes on the fictional role of the child's mother. The role of the mother is distinct from the girl's actual self, who, in the philosopher's example, does not have children of her own and does not actually take part in activities related to rearing and feeding. In this act of play, Fink recognizes two overlapping roles for the young girl: she is at once the creator of the playworld and a player within the play-world itself.

Over twenty after the publication of Fink's 'Oasis of Happiness', another philosopher reflected on the possibility for the creator of a gameworld to participate in it as a player. I am talking about the American Bernard H. Suits (1925–2007), a familiar figure in game studies as the author of *The Grasshopper: Games, Life and Utopia* (2014), a book that is widely considered one of the early, foundational texts in our field. In it, the American philosopher famously defines a game as an autotelic activity bound by a particular set of rules. Those rules, Suits explains, are devised to give rise to specific difficulties (i.e., specific kinds of inefficiency) in the players' pursuit of certain (preludory) established goals (2014, pp. 24–25).

Adopting Suits's definition, one could object that the equipment and the playful activity described in Fink's example do not technically constitute a game in the formal sense. Playing the fictional role of the mother can be indeed recognized as a voluntary, unserious mode of acting that the young girl undertakes because of its inherent pleasure. Playing the mother, however, is not an activity defined by prescribed goals that the girl must pursue in accordance to constitutive rules. In other word, the young girl can certainly be said to be playing, but just not a rule-bound and goal-oriented kind of game (i.e., a 'game' in the Suitsian sense). This is not to say that Fink's example is without value for the purposes of this text, or that it was misguided. I decided to mention Fink's theorization of the 'author as a player' because it presents an early account of how those two roles can overlap within interactive, narrative-focused experiences (a topic to which I will return later). To understand how authors and players might instead coexist within more formally structured play, it is useful to turn back to Suits.

Not long after publishing *The Grasshopper*, the American philosopher released an essay that has not, to this day, received the same scholarly attention and scrutiny as his magnum opus. In 'The Detective Story: A Case Study of Games in Literature' (1985), Suits argues that the author of literary fiction of the mystery genre deliberately invites the audience into a game-like situation, and he proposes a taxonomy of ways in which mystery fiction can legitimately (i.e., non-metaphorically) be considered a type of game (1985, p. 200). For a contemporary game scholar, the idea of classical, non-interactive literature being treated as a form of structured play might seem surprising. However, this perspective is far from unusual in literary theory: over the past two centuries, prominent critics such as Wolfgang Iser and Peter Hutchinson have frequently, and sometimes rather carelessly, drawn parallels between literary works and games.<sup>4</sup>

In the attempt to develop a nuanced and sound approach to the relationships between literature and games, Suits's 1985 paper focuses on short detective stories (i.e. five-minute mysteries) as a particularly playful literary form where the reader is prompted to solve a fictional case. In his text, Suits articulates an ambiguous role for the author of detective fiction, one that encompasses both the functions of a game author (or *gamewright*, to borrow Suits's words in the same essay) and that of a player of the same game. Having read that, one could object that the absence of explicit and agreed-upon objectives for the activity of reading mystery fiction (other than reading the text word by word to the very end) would automatically disqualify it from being considered a game under Suits's own definition. The objection is a valid one, I think. And so must have thought Suits himself as, in his text, he anticipated this potential criticism. In response to it, and too reconcile his ludic approach to detective stories with his definition of games, Suits makes a contrived conceptual move: he proposes to categorize detective fictions under a special and rare subcategory of games. He calls these ludic rarities 'two-move games,' and defines them as asymmetric playful activities that involve two players and only allow for two moves, one per playing side (1985, pp. 203–204). More specifically, Suits identifies the detective story as a two-move game where the implicit ludic goal of the reader is to

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<sup>4</sup> For example, when commenting on Laurence Sterne's 1759 anti-novel *The Life and Opinions of Tristram Shandy, Gentleman*, Iser discusses Sterne's text as an "arena in which reader and author participate in a game of imagination" (Iser in Hutchinson, 1983, p. 22). Literary theorist and philosopher Roland Barthes famously stated that the reader 'plays' the text both as one 'plays' a game and as one 'plays' an instrument, insisting on the idea that reading is itself a performative act, a creative process (Barthes, 1977, p. 162). Within this tradition, the work of Peter Hutchinson is particularly interesting for the scopes of this article. One of the central themes of Hutchinson's scholarly production is literary play, a notion that encompasses both playful writing and the possibility of ludic relationships between author and reader. His 1983 book titled *Games Authors Play* in particular focuses on literary play and the playful use of literary devices such as narrative unreliability, adumbration, enigma, allusion, and parody. On these topics, also see Turchi (2014, pp. 52–53).

'outmanoeuvre the authors' by solving the mystery before the fictional detective does (1985, pp. 203–204).

I earlier qualified this conceptual move of Suits as contrived. Presenting mystery stories as two-move games could indeed be deemed a convenient ad-hoc categorization. After all, Suits himself acknowledges that this kind of game is very uncommon. So uncommon, in fact, that the American philosophers cannot invoke other examples of such games in his essay. To illustrate his point, the Suits refers, instead, to specific phases of popular sports such as pitching in baseball, where the pitcher and the batter temporarily engage in an asymmetrical two-move game (one could also think of penalty shooting in soccer, in case that works as a more familiar example). Similarly, he argues, the gamewright and the reader of a detective novel can be framed as players competing in a two-move game: the former as the pitcher of a puzzle in the guise of literary fiction, and the latter swinging the metaphorical bat.

Reacting against this idea of Suits, one could object that the author does not actually take the role of a player in a detective story, since the author is not striving to accomplish established prelusory goals.<sup>5</sup> Without agreed-upon success criteria for the activity of writing mystery fiction, how can the author of a detective story ever be considered a player, let alone an adversary? The idea that a reader might 'win' this implicit 'game' when they get to the bottom of a case before the text lays it down for them rests on some of the aesthetic conventions that characterize that particular literary genre, and not on a preludically established game goal. Wouldn't it be more reasonable, from this perspective, to see the authors as figures who are analogous to those of game designers (or game directors), and interpret their initial 'move' as the 'setup phase' of a puzzle of sorts, rather than a phase in a competitive game? And in case we were to adopt Suits's perspective, what would stop the audience from approaching every kind of creative work—and not only detective novels—as two-move games? Single-player videogames, for example, can also be approached as two-move games between the author and the player (i.e., as two-move meta-games). As an example of this possibility of playing on two different layers, let us consider FromSoftware's popular action-adventure role-playing videogame *Elden Ring* (FromSoftware, 2022), a title notorious for the obscurity of its narrative and its punishing gameplay (see Figure 1). If we take Suits's argument at face value, when playing *Elden Ring* one does not simply imaginatively and interactively immerse oneself in the videogame's challenging and mysterious fantasy world, but also inevitably participates in a two-move (meta)game against the game's authors. To be more pre-

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<sup>5</sup> According to Suits, however, one could see the attempt to satisfy the expectations of the readership as the implicit goals of a literary author. From that perspective, writing literary fiction is an activity that can be itself deemed a game of sorts. The authors of texts not only pursue specific goals, however implicitly stated, but also create their work under strict kinds of inefficiency. These restrictions, in the case of literary production, are not merely self-imposed by the authors themselves, but also depend on the genre conventions that authors might decide to adhere to (1985, pp. 201–202).

cise, as explained in the introduction, players do not actually entertain an antagonistic relationship with the authors of the game themselves, but rather against the sum of the creative intentions that they perceive to lie at the basis of the game (i.e., *implied game designer*; Van de Mosselaer & Gualeni, 2020).



Figure 1. The beginning of the (optional) boss fight against Malenia in *Elden Ring* (FromSoftware, 2022), where she declares never having known defeat.

“You are not good enough to defeat this formidable adversary or to fully explore this treacherous dungeon”, seems to be the message communicated by one’s frequent in-game deaths in *Elden Ring*. When defeated by bosses such as Malenia (see Figure 1), the offhand and disparaging remarks they mutter often seem directed squarely at players. To examine this kind of deliberately unfriendly, antagonistic game design, the following sections draw on examples and theoretical insights that extend those of Fink and Suits, further exploring how the roles of game author and player can intersect and overlap.

## **Both flesh and not: The author as a player**

The authors of a game can be considered players of their own ludic creations in several ways. The three categories that I present below do not aspire to form an exhaustive taxonomy of the possibility for authors to co-opt the role of players, but serve as reference points for introducing the kinds of adversarial relationships that game authors can project with their ludic creations. Authors of games can be plausibly considered players of those same games

**CATEGORY 1** – when they succeed in abandoning their disenchanted, professional stance towards the game, and return to it with a playful attitude,

**CATEGORY 2** – when they take on the role of one or more characters within the role-playing sessions they are officiating as gamemasters (GMs), or

**CATEGORY 3** – when their game (and the game’s paraludic materials like trailers and posters, for instance) manifest the authors’ intention to tease and frustrate its players.

In the following sub-sections, I discuss each category in detail, clarifying the specific ways in which they contribute to the article’s central themes.

### **CATEGORY 1: *Relinquishing their ‘clinical gaze’***

Game testing is arguably a primary component of game development. It is an aspect of quality assurance that is specifically concerned with the operational functionality of game elements. Performing professional tasks related to game-testing during various phases of game development, the authors of a game do not interact with their creation in the enchanted and playful attitudes that can be expected from (ideal) players. The authors’ in-game behaviours in the context of game-testing do not serve amusement or narrative purposes, nor does it pursue optimal gameplay. Their engagement with the playable artefact is instead driven by the practical purpose of identifying logical imperfections and/or software malfunctions, and not by seeking entertainment, wonder, or in-game achievements. It is an oft-repeated truism that the detached, professional stance demanded by game testing, as well as its repetitive character, swiftly removes any mystery or enjoyment from interacting with a game, regardless of the digital or analogue constitution of the latter.<sup>6</sup> In any case, the dispassionate approach to the game as a product discussed above will eventually be relinquished, and with enough time passed (and the acquisition of psychological distance) from the production of the work, game authors – much like literary authors—could be able to approach and potentially even enjoy their work as part of the audience. In those cases, a game designer takes two neatly separated roles: that of the author when working on the game, and then that of a player when approaching the same game for leisure.

Significantly different from the case of game-testing is that of play-testing, an aspect of quality-assurance where—instead of technical functionalities—what is probed

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<sup>6</sup> This professional stance may be less of a hindrance to approaching the game as a player when the game is designed with the help of AI agents (see Sun & Gualeni, 2025). Such games might offer ludic, narrative, or more broadly aesthetic experiences that can feel, at least in some sense, fresh and surprising for the human authors involved.

and evaluated is player experience (i.e., gameplay). In the specific context of competitive multiplayer game balancing, it is fairly common for people with creative responsibility (typically the lead game designer or the creative director) to take part in play-testing. They are invited to be part of what is informally referred to as the 'core testing group', which is composed by developers and expert players (often recruited from the competitive scene of the previous version of that game or similar titles in the same genre). The 'core testing group' is formed in the final phases of game production, when all game functionalities are implemented and the game is sufficiently stable to be played at a competitive level. The task of its members is to "play against each other and try their hardest to win" to inform the development team about how to optimize and adjust the game for the kind of competitive play that they are after (Sirlin, 2014, part 2).

Unlike the first quality-assurance-related case of game-testing, the role of the author and that of the player do coexist and overlap in competition-oriented play-testing practices.<sup>7</sup>

## **CATEGORY 2: *Officiating a role-playing game session***

In the context of role-playing games (RPGs), and particularly in the table-top and live-action role-playing game communities, the way players interpret their character is often analysed according to what is commonly referred to as 'stance theory'. Stance theory explores the different perspectives, or 'stances', that players adopt during gameplay (Edwards, 2001, chap. 3). This notion underscores that, while participating in a role-playing experience, one is not bound to a single point of view or a fixed set of preferences and aspirations. Stance theory is thus useful for understanding how players navigate the tension between narrative immersion, group dynamics, and personal expression in RPGs. It includes three main perspectives from which players can approach their role-playing experience, namely the actor's stance, the author's stance, and the director's stance (Edwards, 2001, chap. 3).<sup>8</sup> These three stances refer

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<sup>7</sup> As players, we also sometimes get to play against the game authors (or rather the digital ghosts of their playtests), like in the infamous *WipEout HD* (Studio Liverpool, 2008) Gold trophy 'Beat Zico'. To obtain the trophy, players must achieve a lap time equal to or faster than 30.82 seconds on Anulpha Pass (Forward) in Speed Lap mode, Venom Class, while piloting the Piranha ship (either the original or Fury variant). This trophy challenge originated during internal play-testing, when developers repeatedly competed under these specific conditions and, finding them engaging and suitably difficult, decided to formalize them as a trophy requirement. When the final benchmark time was recorded, Zico Liu, one of the game's programmers, emerged as the fastest, posting the 30.82-second lap. In recognition of his performance, the trophy was named after him (see [deleted], 2021).

<sup>8</sup> The three stances respectively address the players' attitudes towards action and decision-making within a role-playing game (Edwards, 2001). Those attitudes

- can be based on what the player-character would do only on the basis of their limited knowledge and perceptions of the gameworld (i.e., the actor's stance),

to perspectives and attitudes that players can adopt in relation to the gameworld, a gameworld that they are at the same time fictionally inhabiting and co-authoring in a way that is analogous to that of the young girl playing with the doll in Fink's work. Stance theory does not, however, account for the idea that GMs also need to adopt various perspectives and attitudes towards gameplay, one of which is ideally geared towards disclosing the best possible experience for the players in terms of their enjoyment and engagement. This additional stance, which could be called 'the master's stance', should be familiar to anyone who has ever directed a role-playing game session. It is relevant to highlight that, during gameplay, GMs frequently interpret one or more characters within the playworld that they are orchestrating. When impersonating their character(s), the GMs need to switch among a variety of potentially conflicting stances. Among those, the 'master's stance' is necessary in cases when the GM intends to move the narrative along, nudge players towards certain choices, add clarity and detail to the process of worldbuilding, or alter the social dynamics among the player-characters.

To be sure, what I outlined in the previous paragraph is of course not true for all kinds of role-playing games. The spectrum of this type of ludic activities also comprise, for example, games where the GM has functions that are closer to those of a narrator or an adjudicator, than that of a game director enforcing a certain pace to the experience or a specific narrative direction. That said, it is often the case that—while officiating a game session—a GM participates in gameplay by taking a number of overlapping and interlocking stances, some of which have a greater of creative responsibility and control over the performance while some other align more closely with *being-in-the-gameworld* as a player (Gualeni & Vella, 2020, pp. xxv-xxvi)<sup>9</sup>.

In role-playing games, the roles of author and player are often ambiguous. In various occasions they can overlap and interlock, with both GMs and players frequently shifting between shaping the gameworld and inhabiting it as fictional characters.

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- can be instead rooted in the player's own personal priorities and preferences (i.e., the author's stance),
  - can be taken in ways that affect the context, timing, and spatial circumstances of those actions, or even features of the gameworld apart from the player-character (i.e., the director's stance).

<sup>9</sup> The first category presented game designers and creative directors of games as unambiguously having creative responsibilities over games they worked on. The authorial role of the game master (GM) in a role-playing session, instead, more contentious. After all, the GM in question may not have authored the game system used in that particular session. The GM might not even have structured the specific campaign being played, which could instead have been purchased as a pre-made package. Finally, as already mentioned, there are also instances where the GM has only facilitation and jurisdictional responsibilities over gameplay. Can the GM be considered a game author in those situations?

### **CATEGORY 3: Projecting antagonistic authorial intentions**

In *The Grasshopper*, Suits maintains that players accept to behave under the constraints of arbitrary rules because they expect that the activities and situations that result from their submission to the game will be pleasurable (2014, pp. 17–18). This ‘lusory attitude’ (as he calls it) is what makes meaningful play possible. The promise of pleasure, however, does not entail that the authors of a game are always bound to keep that promise, or must be unceasingly fair, trustworthy, and benevolent towards players. The obvious imbalance of power between authors and players is particularly evident in single-player games and videogames. It can manifest in acts of deliberate deception on the part of the authors, and even in forms of cruelty towards players. It is not unusual for game authors to intentionally put players in awkward or unpleasant in-game situations. Existing literature in game studies has already explored ludic creations that appear to be consciously designed to work against the players’ interests, for example with the idea of:

- **Abusive Game Design**, where games can be understood as technologies mediating a personal relationship between the designers and the players—a relationship that can be ambiguous, mischievous, or even sadistic (see Wilson & Sicart, 2010), or

There are also publications that talk about how unreliable and deceitful authors could carry out their devious intentions in what they perceive to be, really, the best interest of the player in terms of enjoyment and aesthetic appreciation. That is the case of

- **Deceptive Game Design**, discussed by Gualeni & Van de Mosselaer (2021), which focuses on game design strategies and tricks meant to deliberately misinform and misguide players with the objective of eliciting specific aesthetic effects.

Regardless of whether these game design approaches are used to scratch some of the designers’ itches or to better engage players aesthetically and emotionally, both the scholarly works mentioned above examine an undependable and oppositional relationship between game authors and the players of their games. While these types of game design could raise important ethical concerns—particularly regarding player consent and emotional manipulation—this article does not directly engage with those questions. Debates on the ethics of game design are undoubtedly valuable, but they fall outside the scope of the present discussion.

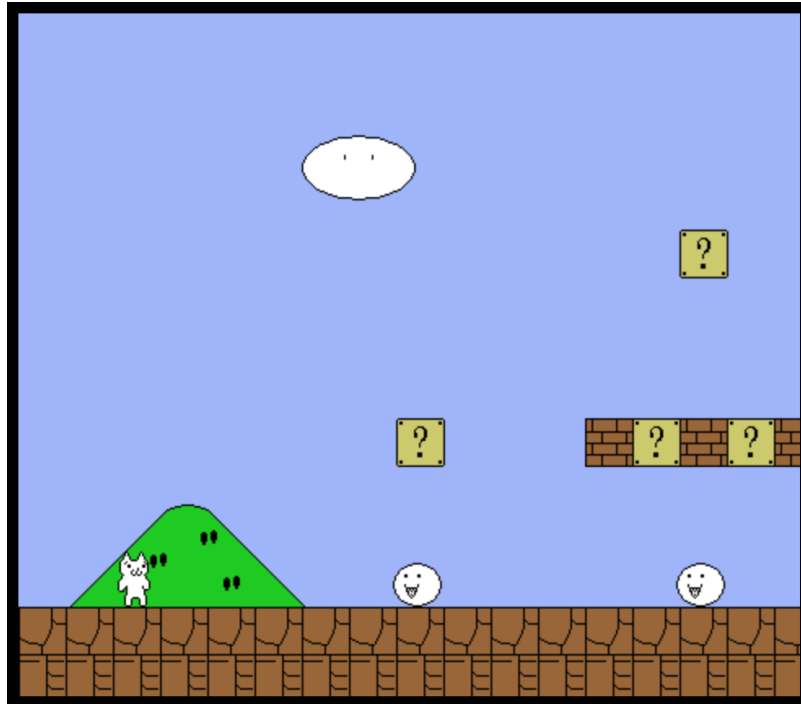


Figure 1. A screenshot taken at the start of Syobon No Action (Chiku 2007).

Within this third category, the rest of this article focuses specifically on an antagonistic approach to game design, that is on the deliberate projection—on the part of the game designers—of a (fictional, implied) game author<sup>10</sup> that is adversarial to the players, derisive of their efforts, or outright cruel to them. An antagonistically designed game invites players to adopt a combative stance against those authorial intentions that they perceive in that work, engaging them in a Suitsian ‘two-move game’ of sorts, where the author—or, more precisely, the implied author—assumes the role of an adversary. By making uses of case studies and practical examples, the coming sections of this article have the objective of adding clarity, detail, and scholarly depth to the idea of antagonistic game design.

## Antagonistic game design

As anticipated at the end of the previous section, antagonistic game design consists in the deliberate projection—on the part of the game designers—of a (fictional, implied) game author that is hostile to the players, derisive of their efforts, or outright

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<sup>10</sup> Collaborative works of fiction such as movies or digital games are arguably better understood as the product of distributed authorship (see Jennings, 2016). In this article, however, I follow Currie in arguing that it is unproblematic to imagine just one author per work (Currie, 1990, pp. 11–12). Accordingly, the notion of the implied game designer does not refer to an actual person, but—as already explained—is understood as the sum of the creative intentions that the audience perceives to lie at the basis of a work.

cruel to them. Game authors have several ways to convey their antagonistic intentions: they can do so indirectly, by embedding those cues and intentions in the gameworld, in its narratives, its affordances and functionalities, or they can take a more straightforward approach, communicating them directly to the players

By posing as a *Super Mario Bros.* clone, *Syobon No Action* invites the player to interpret its gameworld (and act within it) as if the two games followed similar design principles. When playing *Syobon No Action* for the first time, this might appear to be the case: the feline player-character seems to respond to player input in a way that is analogous to Mario in *Super Mario Bros.* and appears to have similar dimensions and relationships with the elements populating its gameworld (see Figure 2). Soon, however, *Syobon No Action* subverts this initial impression, disrupting the player's sense of familiarity through the introduction of behaviours and challenges that not only diverge sharply from those in *Super Mario Bros.* but also exhibit internal inconsistency. An in-game course of action that has proven effective or desirable may suddenly become ineffective in new gameplay situations, or even lead to the character's death. The game was evidently designed to surprise and frustrate the player obstacle after obstacle, exception after exception, maddening level after maddening level. Despite the game's reassuring and familiar appearance, the implied author of *Syobon No Action* is intent on systematically challenging established assumptions about videogames and their creators while deliberately subjecting players to an experience of sustained frustration. Like other titles designed in an antagonistic fashion,<sup>11</sup> *Syobon No Action* is akin to a playable prank at the expense of the player: an infuriating experience that relies on mockery and deception, and does not allow for the development of systematic knowledge about the game's functioning or its narratives.

When it comes to examples of antagonistic intentions that are, instead, communicated to players in direct and explicit ways, I will rely on examples taken from *Getting Over It with Bennett Foddy* (Bennett Foddy, 2017) and *The Stanley Parable: Ultra Deluxe* (Crows Crows Crows, 2022). In *The Stanley Parable: Ultra Deluxe*, one of the most notorious optional sequences is the so-called 'Baby Game,' a nested game presented by the game narrator as a demo that is still in development and in need to be tested. In its initial form, the Baby Game consists in preventing a cardboard cut-out of a crawling infant, positioned on the right side of a wall, from reaching a fire burning on the opposite side of the wall. The player can accomplish this by repeatedly pressing a red button, which resets the mock-baby back to its original position every time it is pressed (see Figure 3).

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<sup>11</sup> Comparable titles that are often mentioned next to *Syobon No Action* are *I Wanna Be the Guy: The Movie: The Game* (O'Reilly, 2007) or *Trap Adventure 2* (Oshiba, 2016).



Figure 3. The setup of the Baby Game in *The Stanley Parable: Ultra Deluxe* (Crows Crows Crows, 2022).

To 'complete' this game, an achievement that is both technically possible and narratively absurd, the player must sustain this action for four consecutive real-time hours. Approximately two hours into the sequence, the narrator introduces an additional challenge: a puppy on the verge of falling into a pool filled with piranhas. A second (blue) button is also added to the scene, which must be pressed periodically to save the puppy. This requires the player to alternate between the two buttons to protect both characters. If the player persists for the full four hours and succeeds in saving both the baby and the puppy, a spectral figure referred to as the "Essence of Divine Art" appears, delivering a satirical monologue that commends the player's perseverance and commitment to this (ultimately futile) ludic task. The evidently absurd premises of the 'Baby Game', the perverse duration of its gameplay and the final, sneering oration are all blatant clues for the audience to infer an unreliable and sadistic implied game author.

A second and similar example is the action-platformer game *Getting Over It with Bennett Foddy*, where the player controls a male, human character the bottom half of whose body is stuck in a metal cauldron. The player-character wields a Yosemite hammer, which he can use to move around, grip onto objects and propel himself up the mountainous pile of objects that constitute the intractable gameworld (see Figure 4). As players climb upwards towards the summit, they are at a constant risk of losing some or all of their progress, since the game offers no checkpoints (see Pöhlmann, 2021). The game's description on online stores openly advertises the title as "a punishing climbing game", also specifying that the experience comprises "between 2 and  $\infty$  hours of agonizing gameplay", in which you, the player, will get to

“feel new types of frustration you didn’t know you were capable of” (Bennett Foddy, 2025).



Figure 4. A screenshot of *Getting Over It with Bennett Foddy* (Bennet Foddy, 2017).

Aside from the author’s description of their game on online stores, *Getting Over It with Bennett Foddy* also includes Bennett Foddy’s own voice-recorded commentary. These audio cues are triggered during gameplay to remark on the player’s progress (in this case, positive comments on discipline, self-improvement, and overcoming difficulties) as well as to address the player’s inevitable setbacks. In the latter case, Foddy existentially reflects on the nature of failure and on how to deal frustration with a tone that is often plainly sarcastic.

## Sticking it to the (implied) man

In the previous section I discussed a few examples of videogames that can be recognized as antagonistically designed in the sense that they are meant to deliberately incite an adversarial response in their players. This happens through a variety of design strategies that, as already examined, feature the deliberate frustration of players, game elements and clues meant to misguide and deceive them, as well as a flagrant and jeering disregard of their expectations and aspirations.

The taunts and provocations of an antagonistic (implied) author might be received differently by different players. For some, such antagonism does not serve as a deterrent or a reason to abandon the game, but rather as a motivation to persist in

their ludic tasks. Playing masocore<sup>12</sup> games like *Getting Over It* or *Syobon No Action* means to continue playing and trying to overcome challenges frustrations as a way of resisting the attitudes and intentions perceived to be projected by the game. It is to learn patterns and long series of inputs by heart for the satisfaction of ‘sticking it to the (implied) man’. In this sense, perseverance itself becomes a form of counter-performance through which players emphasize their agency and validate their skills.

The idea that some players can be motivated to play out of a desire to overcome challenges and prove themselves is obviously not new. The notion of antagonistic play proposed in this paper does in fact resonate with Nicole Lazzaro’s concept of ‘hard fun,’ which links challenge-based enjoyment to emotions such as frustration and pride. It also bear clear resemblances with Nguyen’s (2020) notion of ‘striving play,’ where players voluntarily (and temporarily) take up an unserious activity for the inherent pleasure that emerges from dealing with its difficulties and limitations (and from getting better at it). More broadly, the idea that certain forms of play engage and motivate players by confronting them with challenges has been central to game studies since its inception, ranging from Roger Caillois’s (1958) concept of agonistic play to the work of contemporary scholars who have examined player motivation, including, among others, Richard Bartle, Nick Yee, and Elisa Meckler.

To that theoretical landscape, antagonistic game design adds the idea that a player can find an additional source of motivation to play in the perceived intentions of adversarial, off-putting, and often sadistic implied designer. Through an oppositional relationship with the (implied) authors of the game they are playing, players often attempt to validate their autonomy and mastery as playing subjects. To ground these ideas in a practical example, the players of *Getting Over It with Bennett Foddy* can be motivated to continue to climb and eventually reach the top of the mountain by a combination of these well-trodden sets of challenge-related reasons:

- **DIEGETIC/ROLE-PLAYING MOTIVATIONS:** players are likely going to be emotionally invested in the pursuit of the “Great mysteries and a wonderful reward” that, according to the game’s narrative, await those “who reach the top of the mountain”. Players can thus find the motivation to ‘get over’ the game’s obstacles for reasons related to the role they are playing in the gameworld (their motivation: fulfil their character’s in-game aspirations and/or getting to the bottom—or, rather, on top—of the game’s mysteries).

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<sup>12</sup> ‘Masocore’ is an informal term used to describe games characterized by extreme difficulty and purposely-frustrating functionalities, often featuring potentially unfair gameplay and hidden game mechanics. The name combines ‘masochism’ and ‘hardcore’, highlighting the enjoyment that some players find in conquering challenges that appear insurmountable (see Waszkiewicz, 2025).

- **ACHIEVEMENT/LUDIC MOTIVATIONS:** players can be fuelled by the sense of personal accomplishment and pride (*fiero*) that they expect to feel once they will reach the summit of the mountain (their motivation: proving themselves capable of overcoming a colossal in-game challenge and/or receiving validation on one's commitment and skills from the game in the form of trophies and achievements).
- **SOCIAL/STATUS MOTIVATIONS:** players might also be after the legitimization of their standing within one's gamer community or group of friends. Interestingly, the game takes players who completed their climb to a chat room where "only those who have climbed are welcome," as an additional way to socially validate their accomplishments (their motivation: sharing their skills and dedication with a community of like-minded people, and have one's skills and reputation be socially recognized).

But players of Foddy's game can also be fuelled by

- **ANTAGONISTIC/VENGEFUL MOTIVATIONS:** some players respond to the game's direct taunts and provocations by trying to overcome the often-unreasonable challenges issued by an (implied) author. Those players interpret the author's intentions as unfair, cruel, and dismissive of their efforts, which they use as incentives to continue to put time and effort into the game (their motivation: sticking it to a sadistic and mocking implied game designer).

To be sure, a player's ability to adopt an adversarial attitude toward the implied authors of a game does not require games to be explicitly foregrounding jeering, unreliable, or sadistic authors. Audience antagonism attitude can emerge in virtually any kind of game and, more broadly, in all forms of cultural production. The oppositional kind of reading described by Stuart Hall (2010), for example, entails resisting and challenging the intended (or "preferred") meanings encoded in a text. Hall presents this process of reading against the grain as a method for bringing to the fore perspectives and beliefs that are alternative and often antagonistic to the ones originally proposed by the author. Although an antagonistic stance toward reading has often been discussed as a strategy for resisting and opposing the hegemonic or imperialistic ideologies embedded in specific texts, it can, in principle, be adopted toward any form of text. Likewise, as explored in game studies through concepts such as *critical play* (Flanagan, 2013), *transgressive play* (Aarseth, 2014) and *counterplay* (Meades, 2015), players may choose to 'play against the grain', and subvert the beliefs and intentions that they perceive within a playable artefact. Returning to antagonistic game design, it is important to note that the presence of an explicitly antagonistic author is not a prerequisite for adopting such a stance in interpreting or interacting with a work.

## Conclusion

This article expands the current understanding of challenge-based engagement by incorporating the notion of antagonistic game design into its theoretical framework. As discussed, antagonistic game design entails the deliberate projection—on the part of game designers—of a fictional or implied authorial presence that adopts an adversarial stance toward the player: deriding their efforts, obstructing their progress, being outright cruel to them. Conversely, to engage in antagonistic play is to accept these provocations, responding to the implied designer's perceived sadistic intentions with (resentment-fuelled) determination and ingenuity.

By identifying the possibility of a deliberately designed adversarial relationship between implied authors and players, this study contributes to ongoing debates in game studies and the philosophy of play. It also highlights antagonistic play as a distinct mode of engagement, one that adds to the complex—and often oppositional—interplay between game authorship and player agency.

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***Lies of P and a Real Boy  
in Fake Bloodborne***  
**Nostalgia and Critique in Soulsborne Fandom**

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# ***Lies of P* and a Real Boy in Fake *Bloodborne* Nostalgia and Critique in Soulsborne Fandom**

INDIRA NEILL HOCH

## **Abstract**

Nostalgia as a longing for a place or time can simultaneously act as an invitation toward belonging and also as a barrier that divides. Utilizing Svetlana Boym's (2001) framework of restorative and reflective nostalgia, this study undertakes an analysis of press coverage (n=8) and fan comments on YouTube videos (n=400) addressing the digital videogame *Lies of P* (2023) as a nostalgic trigger. Understanding *Lies of P*, both in press coverage and fan discussion was often laden with nostalgia for the 2014 videogame *Bloodborne* and various adaptations of the children's story *The Adventures of Pinocchio*. In the case of fan comments in particular, reflective nostalgia, which allows for the possibility of both longing and critical thought to manifest together, emerges strongly as fans contest their understandings of videogames and childhood stories. *Lies of P* as a nostalgic trigger precipitates fan participation in analysis and critical reflection of media they might otherwise consider above critique. Understanding such gaming and gaming-adjacent spaces where critique and affection blends offers further insight into the social and technical structures that facilitates boundary maintenance.

## **Keywords**

Nostalgia; digital games; boundary maintenance; *Dark Souls*; Soulslike; affect

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**The directive to “git gud” when encountering repeated failure** in digital game fandom spaces can act as both a derision and a call to cohesion. Particularly among Soulsborne players, there are pressures to delineate boundaries between themselves and other players and to share in collective engagement to better understand and succeed in the games they play. The present study uses qualitative multimodal discourse analysis to explicate how videogame press coverage and fan discussions regarding NEOWIZ and Round 8 Studio's *Lies of P* (2023) both challenge and reinforce

conventional ways of understanding in-group belonging, videogame genre, and children's literature through the framework of nostalgia (Boym, 2001). *Lies of P's* replication of Japanese developer FromSoftware's design conventions and utilization of narrative elements from *The Adventures of Pinocchio* (1883) importantly generates reflective nostalgic discussion, creating opportunities for fans to be critical of their own prior understandings of other games and children's literature. These interactions and analysis occurring on a platform as public and accessible as YouTube comments also has implications for how nostalgia interacts with boundary maintenance among fans.

FromSoftware's *Bloodborne* (2014) served as a reoccurring point of interest when commenting on *Lies of P*. While some user comments contested other's enjoyment of *Lies of P* based on a presumed unfamiliarity with 'actually' playing *Bloodborne*, more frequently affection for *Bloodborne* was tied to a critical re-evaluation in comparison to *Lies of P*. Comparing *Lies of P* to *Bloodborne* was often reflective and critical in addressing the differences between the games and articulating the flaws of *Bloodborne*. Additionally, fan comments that placed *Lies of P* alongside *The Adventures of Pinocchio* and its multitude of adaptations moved users toward reflective nostalgia, as their memories were rearranged and modified by new information and possibilities, and thus resisted the more conservative impulses of restorative nostalgia.

## Nostalgia

Nostalgia broadly has served as a framework through which scholars explicate retro-games (Payne, 2008; Suominen, 2008), "neo"-retro game development (Garda, 2013; Sloan, 2016), and retrogamers' community practice (Heineman, 2014; Payne, 2008; Swalwell, 2007). However, thinking outside the boundaries of retro and neo-retro games, nostalgia can be an equally compelling force in the marketing and enjoyment of newly released digital games (Neill Hoch, 2021).

Boym (2001) describes nostalgia as being laterally oriented, rather than being directed toward the past. Nostalgia originates from a sense of longing for home, which is possibly spatial but more importantly temporal. This feeling is never an accurate depiction and says more about the present and potential futures than it does the past. Contemporary social and political divisions can thus be controlled and exacerbated by nostalgia. Boym explains that nostalgia is paradoxical in the sense that it facilitates a sense of belonging and emotional bonding, but this sense of belonging can be transformed into an acceptance of authoritarianism and division between in- and out-groups. In order to belong, others must subsequently be excluded, and authoritarian systems promise this belonging to in-group members by denigrating the out-group. However, nostalgia is also not uniform. Boym goes on to differentiate between restorative and reflective nostalgia. These are tendencies, or "ways of giving shape", rather than firm distinctions between types (2001, p. 41). The same trigger can invoke both these different tendencies.

She explains that restorative nostalgia “attempts a transhistorical reconstruction of the lost home”, while reflective nostalgia “thrives in ... the longing itself, and delays the homecoming” (Boym, 2001, p. xviii). Restorative nostalgia in fact does not admit to being nostalgia at all, but rather a preservation of absolute truth and tradition. This renders restorative nostalgia as ultimately conservative and useful to authoritarian projects. Restorative nostalgia feeds conspiracy. She writes that “conspiracy is used pejoratively, to designate a subversive kinship of others, an imagined community based on exclusion more than affection, a union of those who are not with us, but against us” (2001, p. 43). She then directly links these patterns of inclusion and exclusion to pogroms, Nazism, Stalinism, and the Red Scare, which all “operated in response to conspiracy theories in the name of a restored homeland” (p. 43). Restorative nostalgia favors the illusion of presenting the past as intact and coherent and does so through selective representation.

Reflective nostalgia instead reckons with the fact that the past was not actually as it was remembered. It potentially prompts critical thought alongside its affective longing. There is no expectation of return to a mythical homeland in reflective nostalgia, and in fact it “suggests a new flexibility ... The focus here is not on recovery of what is perceived to be an absolute truth but on the mediation on history and passage of time” (Boym, 2001, p. 49). And, perhaps most critically, reflective nostalgia “reveals that longing and critical thinking are not opposed to one another, as affective memories do not absolve one from compassion, judgement or critical reflection” (pp. 49-50). Evidence of judgement and critical assessment are indicative of a reflective tendency in otherwise affectively oriented expressions and reflective nostalgia calls the idea of an absolute truth into doubt.

Ultimately Boym (2001) draws an ethical distinction between the two, writing that reflective nostalgia “resists both the total reconstruction of the local culture and the triumphant indifference of technocratic globalism” (p. 342). While restorative nostalgia, having some possibility of allowing for belonging outside of ethnicity or nationalism, “can also be politically manipulated through newly recreated practices of national commemoration with the aim of reestablishing social cohesion, a sense of security and an obedient relationship to authority” (Boym, 2001, p. 42). And, as noted above, that cohesion is achieved by erecting rigid boundaries around who does and does not belong. Given the increased attention to far-right extremism in videogame communities (Davies, 2022; Massanari, 2024; Romero-Medina & Vilasís-Pamos, 2023; Türker & Gök, 2024), a fuller understanding of the manifestations of nostalgia in videogame fandom spaces is necessary because of its potential to underpin and reinforce these dangerous cohesions.

### ***Soulsborne and Soulslike games***

Soulsborne titles are action role-playing videogames (action-RPG) developed by Japanese developer FromSoftware—particularly those created under the direction of Hidetaka Miyazaki, including *Demon Souls* (2009), the *Dark Souls* series (2011, 2014,

2016), and *Bloodborne* (2015). Known for the inclusion of challenging boss fights, ‘metroidvania’ map design, indirect storytelling, losing significant progress upon dying, and precise-timing button inputs during combat, Soulsborne games are often considered more difficult to play and narratively understand than other action-rpg titles. Soulsborne has also emerged as an aesthetic category over time (Kunzelman, 2020). *Lies of P* is explicitly identified by both gaming press and fans as a ‘Soulslike’ game. Soulslike games draw some level of inspiration from the FromSoftware Soulsborne games but are developed by other companies.

What titles can be considered Soulslike (or even Soulsborne) games is contested by fans. The notion of *genre* has been somewhat fraught in videogame studies, though it undoubtably is utilized in the marketing of videogames (Apperley, 2006; Arsenault, 2009; Clarke, Lee, & Clark, 2017). The fuzziness around the applicability of genre to videogames is present in the contestation of what games belong and do not belong to the Soulslike genre. There is no universal agreement regarding which aspects of the Soulsborne games must be included, varying from mechanics, settings, narrative devices, and even art styles, to be considered a Soulslike. Some titles that are developed by FromSoftware themselves are contested as to whether they are Soulsborne games. Among Soulsborne and Soulslike fans, *Bloodborne* is often considered the “best” of the genre (particularly prior to the release of *Elden Ring* in 2022, though some will argue *Elden Ring* is not a Soulsborne title). With a Metacritic metascore of 92 (universal acclaim) and user score of 8.9 (generally favorable; as of October 2024) *Bloodborne* outperforms *Demon Souls* and all three *Dark Souls* titles in these review metrics.

### ***Soulsborne and fandom boundaries***

Given the punishing mechanical and oblique narrative difficulty of Soulsborne games, there is a reliance on community support and labor, whether it be tactical, emotional, or analytical (Robinson, Czauderna, & Gillern, 2023; Schniz, 2016). Online paratexts such as wikis, guides, and reddit posts become important resources for completing the games. *Bloodborne*’s lore community has also gained scholarly attention (Ball, 2017; Payne, 2023). Soulsborne games, *Bloodborne* included, tend to include limited cut-scenes and little explicit narrative content as the player progresses through the game. Instead, the world’s lore is conveyed through written item descriptions on weapons, armor, consumables, and other key items visible from the games’ menu screens. This information is often fragmentary and sometimes contradictory. Ford (2024) compares these fan practices of assembling lore to digital folklore, though acknowledging that is not the “pure” form of folklore where no single author exists. Instead, he argues “*Souls-as-folklore* has the problem of there being a concrete authorial authority, while still demonstrating a similar *mode* of storytelling, one which is more akin to traditional folklore than to modern, author-centric mass media” (pp. 56–57; emphasis in original). Soulsborne fan communities discuss and contest the meanings of the fragmented lore within the game and seek to put these pieces into a coherent framework.

Furthermore, the mechanical difficulty of playing Soulsborne games have given way to a proliferation of fan-maintained wikis and walkthroughs covering everything from finding out-of-the-way items, the 'best' way to level your avatar, and specific enemy guides. Andriano (2024) has written how the "incompleteness" of *Dark Souls* can be read as a deliberate strategy to move the player toward Zen practice and depersonalization as they engage in play. However, fan practice around these games also seeks out a process of producing coherence through community action and creating affinity spaces (von Gillern, Robinson, & Czauderna, 2024). Soulsborne and Soulslike games thus both necessitate collective intelligence practices and continue to support communal online spaces where fans contest what it means to be a fan of such games. Given that the games are, in fact, difficult to play already restricts the potential audience that is willing to engage with these titles. YouTube comments directed at a Soulslike title, rather than a more bounded, specialized fan community, offers opportunity for engagement in discussion that is perhaps not so tightly bounded.

Fandoms more generally have long been shown to actively contest the boundaries of inclusion and exclusion in online and offline spaces (Gonzalez, 2016; Honeycutt, 2005; Smith, McLaughlin, & Osborne, 1997; Stanfill, 2013). Aggressive behaviors such as trolling have also been conceptualized as a way of creating both community and boundaries between and within online spaces (Graham, 2019; Li, Cheung, Shen, & Lee, 2022). Trolling is also heavily associated with gaming spaces, particularly in multiplayer games. However, more than merely being destructive, trolling behaviors can also serve communal and normative functions (Cook, Schaafsma, & Antheunis, 2018; Hivert-Bruce, & Neill, 2020; Schlegel, 2021). Among some Soulsborne players, concepts such as accessibility are rejected to uphold existing boundaries (Pakkinen, 2023). Boundaries delineating who can and cannot speak within fandom in regard to critiquing games becomes visible in online communication platforms. As discussed above, notions of inclusion and exclusion in imagined communities can be initiated and supported by nostalgia.

### ***Pinocchio and Disney fandom***

*Lies of P* takes its narrative inspiration from Carlo Collodi's 1883 children's novel *The Adventures of Pinocchio*. Not quite a folk tale in the proper sense, as the story of the mischievous wooden boy was not passed through generations as an oral tale before being written down, Collodi's novel nonetheless has become something like a folk tale since its publication (Heisig, 1974). Adapted perhaps most notably by Disney in 1940, there were at least three further adaptations (again, one by Disney) released in 2022 alone. Children's literature more broadly, whether it be in the form of folktale, fairytale, or Disney spectacle can contribute to lifelong character development (Griszbacher, Kemény, & Varga, 2022), reinforcement of cultural values (Do Rozario, 2004), and pleasure (Wawryk, 2008) extending into adulthood.

There is a rich body of research regarding Disney and nostalgia addressing topics as diverse as live-action remakes (Kennedy-Karpat, 2020; Lizardi, 2020), theme parks (Robson, 2019; Smith & Conrad, 2020), and new media spaces including streaming services (Nikolova, 2023) and podcasting (Kiriakou, 2017). Much of this work has emphasized Disney products' trend toward restorative nostalgia, promoting conservative views of the past (Zornado, 2017) and future (Robson, 2019).

## Method

In order to analyze the nostalgic manifestations circulating around *Lies of P*, the present study draws from a selection of videogame publication articles (including *Polygon*, *IGN*, *PCGamer*, *Dark Side of Gaming*, and *Kotaku*,  $n=8$ ) and user comments in response to YouTube video reviews ( $n=400$ ). The videogame publications cover a selection of perspectives originating from pre-game coverage, game reviews, and reactions to DLC announcements. Emotional responses to and narrative understanding of videogames originate not only from the game as text itself, but also surrounding paratexts (Consalvo, 2017; Seiwald, 2023). These publications offer insight into how *Lies of P* has been discussed in paratexts, particularly in the context of previous Soulsborne and Soulslike games, as well as allowing for a point of comparison between topics and themes emerging from media publications and topics and themes emerging from YouTube fan comments.

Publicly posted comments were collected from four YouTube review videos and included a mix of videos originating from videogame media outlets and those created by personality-driven content producers (IGN, *gameranx*, *Iron Pineapple*, and *Fextralife*). Three of the four videos garnered over one-million views by the time of data collection (January 2024). The fourth video, posted by *Fextralife*, received significantly fewer views (approximately 170,000). *Fextralife*, however, corresponds to a more specific set of resources, specializing in roleplaying games and specifically notable for their wiki resources for Soulsborne and Soulslike titles. Top-level comments (and up to the first ten responses) were collected from each video until the total set included 100 comments derived from each video. YouTube comments, like other digital communication tools, can be a space of knowledge sharing and co-construction, though it is important to note that this is not always the case (Henderson, Selwyn, & Aston 2017). Dubovi and Tabak (2020) have found that in regard to the phases of knowledge construction using Gunawardena, Lowe, and Anderson's (1997) coding scheme, YouTube comments tend to fall into Phases 1 and 2 of "sharing/adding opinions" and "negotiating meaning". There are also comments that do reach Phases 3 (elaborating), 4 (proposing synthesis) and 5 (consensus/applying constructed knowledge). Some work of collaborative knowledge construction does occur in YouTube comments and demonstrate evidence of critical thinking and analysis. All comments collected are in English and thus may not be representative of discussion around *Lies of P* taking place in other languages.

Sharing thoughts and reactions in a highly public YouTube comment section may not be as intense an involvement as the more complex collective knowledge manifestations of Soulsborne/Soulslike players noted in prior research. However, it is productive to not only focus on those players who exert the most effort in their participation, but also to intersect with fan spaces in less laborious ways, that nonetheless still signal engagement and belonging. High-effort practices are not the only means of participation that contributes to gaming fandom. Indeed, high-effort practices, such as making review videos in the first place—when not formally aligned with gaming media outlets—creates opportunities for other fans to engage in these lower-effort (but still reflective) practices in a public setting. There are fans who think quite critically and complexly about games like *Bloodborne* and *Lies of P*, but do not have the time, resources, or desire to engage with higher-effort fandom practices. While not quite ‘true’ lurkers as they are posting comments, the definition of lurking has variability within scholarship (Edelmann, 2015, 2013; Ferguson, 2022; Sun et al, 2014). It is not clear from these YouTube comments alone the extent of any given commenter’s level of engagement with fandom more broadly, but an understanding of nostalgia in these lower-effort participations does offer insight into how and where fans may encounter new information. And these online spaces can be crucial in processes of radicalization as fans move between more open and closed communities.

In the context of understanding radicalization, Doosje and colleagues (2016) identify phases of radicalization. Prior to group membership, sensitivity plays a key role in vulnerability to increasingly radical messages. At the micro level, they identify that personal uncertainty can lead an individual towards a group that “provides them with clear norms and values”, and at the meso level, social connections and in-group belonging leads to a “cognitive opening” where they may advance to joining a radical group (2016, p. 81). Seemingly innocuous spaces both online and off can contribute to sensitivity. However, they may also introduce information and social connections that contribute to de-radicalization, such as the introduction of new viewpoints, including those originating from others perceived as part of the group (2016, p. 82). Public, open online spaces like YouTube comments thus have the possibility of contributing both to radicalization and deradicalization.

Both media publications and fan comments were qualitatively assessed through multimodal discourse analytical techniques, which consider not only the text, but also the formatting, graphical, video, and auditory relationships between elements (Bateman, 2008). Online videogame publications often make extensive use of imbedded images and videos. The fan comments were frequently in dialogue both with the originating video but also other discussions occurring within the comments, even when not replying directly to another YouTube user. Qualitative reading of selected articles and comments revealed emerging themes throughout the set, particularly concerned with nostalgia.

## Contesting *Bloodborne*: Restoration and reflection

More than any other game, FromSoftware's 2014 PlayStation 4-exclusive title *Bloodborne* served as a reoccurring touchpoint throughout both publication coverage and the YouTube fan comments. Boym (2007, p. 15) acknowledges that the same "triggers of memory" can generate both restorative and reflective nostalgia. And in the case of media coverage and Soulsborne fans, *Lies of P* stirs nostalgic feelings for *Bloodborne* and subsequently generates a range of affective and analytical responses to that nostalgia.

### Videogame publication coverage and restoration

Video game publication coverage seems unable to cover *Lies of P* at all without demonstrating affection for *Bloodborne*. Fenlon (2023) titles *PCGamer's* article '*Lies of P* is so blatantly *Bloodborne* that I feel bad for liking it'. It is worth considering here that *Bloodborne*, even ten years after release, is not playable on the PC. In Northup's (2023) review of the game for IGN, *Bloodborne* is explicitly named seven times, including the first and last paragraphs. *Bloodborne's* specter is inescapable. Beyond the gameplay similarities to Soulsborne titles, Northup describes the emotional resonance of knowing what is about to come next in *Lies of P*, despite the game just being released. A fan familiar with Soulsborne conventions will be able to predict the fates of non-playable characters they have only just encountered for the first time. Partway through Northup's review is an interactive poll for "Which children's tale should be turned into a grisly soulslike next?" further reinforcing *Lies of P's* connection to other Soulslike games and encouraging readers to think of the game in the context of other Soulslike titles, rather than a distinct game. Argüello (2023), writing for *Polygon*, includes that *Lies of P* "leans heavily on *Bloodborne* nostalgia". And that nostalgia in the videogame publications is largely restorative. There is no question that if you love Soulslike games, you must love *Bloodborne*.

In one of the strongest restorative nostalgic manifestations in the analyzed publication texts, Papadopoulos (2023), for *Dark Side of Gaming*, includes in his article covering the *Lies of P* demo that a *Bloodborne* mod had already been published. He calls the mod "amazing" as it added iconic *Bloodborne* weapons into the demo. This article is very short, only 265 words in total, and it devotes a paragraph, 55 words or about 20% of the article's total length, to the *Bloodborne* mod that quite literally recreates the weapons of the earlier game into the new one. *Lies of P's* demo is used to restore a small piece of *Bloodborne* with better graphics, smoother gameplay, and make it playable on the PC. The desire to restore *Bloodborne* using the shell of *Lies of P* is materialized. There is little discussion of the faults of *Bloodborne* in press coverage, instead the positive qualities of *Lies of P* are equated to the successes of the Soulsborne games and *Bloodborne* in particular. Winslow (2023), for *Kotaku*, writes that

*Lies of P*'s developers "truly understand what makes the Japanese studio's game design so compelling". Soulsborne titles are largely conserved as the high benchmark Soulslike games must attempt to surpass, and they never quite do.

However, there are some moments when these publications touch on aspects of *Lies of P* which at least deviate from the Soulsborne template and offer glimpses of reflection. Winslow (2023) notes that the narrative of *Lies of P* is easier to follow, and its combat more closely resembles FromSoftware's *Sekiro: Shadows Die Twice* (2019) but still returns again and again to the *Bloodborne* comparison. Press articles desire *Lies of P* to be a return to *Bloodborne* but do highlight some of the ways in which it is not the decade-earlier title. Fenlon (2023) notes that *Lies of P* runs "at a much smoother 60 frames per second" when compared to *Bloodborne*, which was limited by the PlayStation 4's technology. Northup (2023) praises the game's weapon construction mechanic, which is unlike *Bloodborne* and indeed something of an innovation within the genre. While affection for *Bloodborne* was evident in reviews, so too was some capacity to articulate how *Lies of P* offered improvements in some areas.

### **Fan comments and contestation**

*Bloodborne* was also repeatedly invoked in fan comments. The most strongly restorative comments often took on characteristics of boundary maintenance. Schwalbe and colleagues (2000) describe boundary maintenance within a framework of understanding inequality. While some boundaries are maintained through the use of force, day-to-day separation between dominant and subordinate groups are most often maintained through institutions and ideologies. Two processes they identify for stratifying groups concern the interrelated concepts of the transmission of cultural capital and controlling network access (2000, pp. 431–432). Having the right kind of knowledge and skills might admit an individual into a valued school or invited to the socially advantageous golf outing. This then leads to admittance into a social network that further enhances belonging to the desired group.

Present throughout the YouTube comment data set are constations between fans regarding who belongs to the group of Soulslike players. Those without the correct knowledge and experience are discouraged from then participating in further discussion, but importantly on YouTube these derisions do not actually restrict further participation, as they might in a more bounded fandom space. Some user comments explicitly derided other's excitement for *Lies of P* based on a presumed unfamiliarity with 'actually' playing *Bloodborne*, "you have only Xbox and never played the real *Bloodborne*...shameful". This comment then contains four laugh/cry emojis further reinforcing the idea that not having played *Bloodborne* made the idea of participation in a discussion regarding *Lies of P* "laughable." This was in response to another commenter acknowledging they enjoyed playing the *Lies of P* demo. In another comment, a less aggressive but similarly boundary invoking response to a comment expressing enjoyment in playing *Elden Ring* and thus wanting to purchase and play *Lies of P* suggested, "maybe you should play *Bloodborne* first". While this comment is not

nearly as hostile as the first exchange, it nonetheless asserts playing *Bloodborne* as a form of cultural capital. From this perspective, those without *Bloodborne* experience do not have a voice in the discussion, even as it applies to subjective claims like enjoyment or affect.

This preservation of the boundaries between those who are knowledgeable and those who are not distinctively take on a quality of restorative nostalgia, in that it seeks to preserve or reassert a cultural legacy (Boym, 2001). However, this imagined past is itself a fiction and itself is marshaled to reinforce inequalities. In the case of *Lies of P*, restoring the primacy of *Bloodborne* within the Soulslike genre appears with some regularity throughout the YouTube comments, as it did in the gaming publications.

While in some cases the desire to return to *Bloodborne* was indicative of restorative impulses, more notably comparing *Lies of P* to *Bloodborne* and other Soulsborne titles became far more reflective in addressing the differences between the games. Users were even more openly reflective than the publications in working through how *Lies of P* both drew from other titles, while also making transformations and improvements. In one particularly detailed comment, a user explained *Lies of P* “takes all the best elements and gets rid of all the bad ones. No run backs, no one shots, a ton of optional mini bosses, perfect parry from Sekiro, dashing with i-frames from *Bloodborne* [list continues]”. Another fan actively draws connections across the genre in response to the video review, writing:

The moment I've exited the cart into Krat without anything to go on was a very similar feel when I played *Demon's Souls* in 2009. The combat mechanics in *Lies of P*, albeit using the same monologue of the founding fathers - I cannot say that this is an exact replica of the coding found in such titles. Again, this level of playing really did remind me of *Demon's Souls* (2009) where my first death whispered: “Yes, this is back to basics!”

Rather than highlighting the aesthetic and gameplay similarities between *Bloodborne* and *Lies of P*, this fan instead focuses on the affective engagement with the *Lies of P* title while still acknowledging their nostalgia for *Demon Souls*. They articulate that the feeling of playing *Lies of P* was more akin to the first Soulsborne title released nearly fifteen years earlier. Rather than invoking the more widespread discussion point of *Lies of P* resembling *Bloodborne*, this fan instead centers their own experiential knowledge of the genre to understand their enjoyment.

Comments that overly criticized *Lies of P* were, in fact, rejected by other commenters.

I originally wanted to hear your criticism of the game because criticism is good. But you're going out of the way to copy paste this in many comments ... It's just very bland hate with no critique to support the claim.

Comments such as these were indicative that criticism of games was welcome, but only if they were supported by actual evidence. Fans were frequently able to analyze *Lies of P* in light of *Bloodborne* and other FromSoftware titles and *Lies of P* was found to be a better game in some aspects.

I'd say this game on avg has better bosses than a fromsoft game. Not as good as the best that fromsoft has to offer, but I'd take a whole game of enjoyable good bosses over a long game with a lot of meh bosses with some amazing bosses sprinkled in. ... Like the bosses are genuinely something I wish fromsoft themselves would look at and take inspiration from.

In the same comment thread, another fan expresses, "they took every best part of the Souls games and combined it with the best parts of Sekiro and Bloodborne. There was only 1 completely BS boss (swamp monster boss), but that's ¼ of what FromSoft puts in". These comments often blended affection for FromSoftware titles with reflective discussion of their shortcomings. While there was no unified consensus regarding the way in which *Lies of P* improved upon the Soulsborne games, individual fans highlighted a number of aspects which they personally felt were superior, even if they rarely believed that *Lies of P* was better than "the best" FromSoftware had to offer.

*Lies of P* created and encouraged an opportunity for an active reflection on and critique of *Bloodborne*. Restorative nostalgic notions where *Bloodborne* (or other FromSoftware titles) were immune from criticism or comparison to anything other than *another* Soulsborne title were rejected in favor of closer assessment of the older titles' shortcomings, whether they be in areas of storytelling, boss balancing, or level design.

## Pinocchio and reflection

Discussions of *Pinocchio* as the narrative inspiration for *Lies of P* also served as a point of departure for nostalgic engagement. While some press coverage labeled *Lies of P* as a "dark reimagining of" (Northup, 2023) or "loosely based on" *Pinocchio* (Winslow, 2023), Fenlon (2023) questioned whether the idea to create a game like *Bloodborne* arose first, and the connection to *Pinocchio* was a matter of public domain convivence. Diaz (2023), writing well ahead of the release of the game notes that *Pinocchio* has had prior filmic horror adaptations, so a dark adaptation of the wooden boy's story was nothing new. However, most media reviews of the game focus more heavily on the connection to Soulsborne titles than the game's narrative content. Nostalgia for *Pinocchio* was largely absent from the press articles.

YouTube fan comments which discussed the game's connection to *Pinocchio* pointed out that fairy tales in general were already darker and more distributing than Disney's versions of the same stories and more frequently expressed nostalgia than the gaming press. This nostalgia almost exclusively trended toward reflective. *Pinocchio*, despite holding some similarities with fairy tales, is, strictly speaking, not a fairy tale at all. However, Heisig (1974, p. 24, emphasis in original) does conclude that it "has become something of a folktale tradition over the years". There is enough treatment of *Pinocchio* as if it were a fairytale/folktale that these frames can offer considerable insight to contemporary fans' nostalgic impulses toward the story, and subsequently their discussion of the application of *Pinocchio* in *Lies of P*. In referencing Disney's *Pinocchio* (1940) one user noted the film was "pretty dark for them. Child slavery, Body change horror, and getting munched on by a giant whale". Another user commented, "dude, virtually all classic children's stories were dark until Disney turned public domain tales into sanitized cartoons". A follow-up comment again points out that the Disney version of *Pinocchio* was dark. When placed into the context of other Disney films that fans may have watched their childhood, *Pinocchio* possessed some horror elements which seemed to align with the Soulsborne games already. Fans also used the original narrative of *Pinocchio* as a starting point for thinking about larger issues, "[it] has a lot of pretty dark implications about our development as humans, and to see a soulslike game embrace that world is very intriguing to me".

Fan comments, when addressing the game's adaptation of *Pinocchio* were almost always positive and often affectionate. If anything, when negative sentiments were expressed toward the game's narrative setting, it was that the game did not seem to be *Pinocchio enough*. One fan writes, "saw nothing Pinocchio-ish there, except of naming here and there. Anyone?" Another fan expressed that they wished the dichotomy between "puppet" and "human" choices was more pronounced. Essentially, they thought that the game should capitalize on its *Pinocchio* origins further:

The only thing that I dislike is that there is no real choice between puppet and human choices, you need to choose human otherwise you miss your character growth, some cutscenes ... overall everybody since the beginning treats you as a human.

Fan comments also recalled affective experiences with the *Pinocchio* story. "I find *Lies of P* very intriguing from a setting standpoint (I mean I did watch *Pinocchio* over and over as little kid)". It is of note that Soulslike titles are not typically marketed as approachable to the average videogame player. They are understood to be extremely challenging. It would likely be difficult for a fan of *Pinocchio* but not Soulslike games to play *Lies of P*. The core audience for the title would likely be fans of the genre, rather than fans of the setting/narrative content. However, this comment goes on to explain that they want to try to play *Lies of P* because of its connection to *Pinocchio*, knowing that it will be difficult to play and not necessarily a game they will succeed with at first. Their emotional connection to the story was enough to bring them to a game they

otherwise would not play. There was also noticeable excitement and interest in future 'fairytale' adaptations. The end of *Lies of P* invokes *The Wizard of Oz* as the next adaptation. Fans seemed positive about this idea, as well as the possibility of an *Alice in Wonderland* Soulslike, and discussion of a *Jack and the Beanstalk* game; though, several users within this exchange referenced *Shadow of the Colossus* (2005, remake in 2018) as similar to any possible Jack and the Beanstalk Soulslike.

Fleckenstein (2003) develops a concept of "slippery texts" that allow for an evolving literacy and blurriness around what the text actually is. This slipperiness often comes from a proliferation of adaptations over time and across various media. In a gameplay-based study of *American McGee's Alice*, a 2000 'dark fantasy' videogame adaptation of Lewis Carroll's novels, all players generally found the adaptation elements enjoyable (Mackey, 2007). While one participant did not necessarily enjoy the violence of the game, she nonetheless found the adaptation enjoyable. The nostalgia expressed in the YouTube comments regarding *Lies of P* similarly express enjoyment and excitement, rather than questioning the adaptation of *Pinocchio*. Slippery texts may themselves be more likely to prime reflective, critical processes in audiences, even when accompanied by nostalgia, because of their perceived flexibility (Mackey, 2011). Soulslike games, which can offer radical transformations in how a narrative is presented (primarily through item descriptions) hold the potential to further reinforce reflection, rather than restoration. Videogames in general may be less accessible than other media adaptations, given both hardware (Luo & Johnson, 2020) and physical requirements (Aguado-Delgado et al., 2020). The added difficulty of the Soulslike genre may both further limit the players who have access to the adaptation and thus drive that limited player base away from restorative nostalgia, as encountering the media object itself is difficult and "un-sanitized" in contrast to Disney adaptations (Fleming, 2016).

What is most compelling in these exchanges from the perspective of understanding nostalgia's place in videogame fandom is how productive these comments are in offering up new possibilities and thinking through alternatives. Users actively engage in considering how children's stories they find nostalgic can be translated into the Soulslike format, rather than treating such stories as somehow sacred and immutable. The transformation of stories they enjoyed as children into games in a genre they are currently fans of creates reflection regarding both narrative and gameplay possibilities. Like discussions that compared *Lies of P* to *Bloodborne*, placing *Lies of P* alongside *The Adventures of Pinocchio* and its multitude of adaptations moved users toward reflective nostalgia where their memories are rearranged and modified in light of new information and possibilities for understanding. This is in direct contrast to much of Disney nostalgia, which trends toward more conservative, restorative nostalgia (Robson, 2019; Zornado, 2017).

## Conclusions

Throughout both the videogame publication coverage and YouTube comments, nostalgia emerges as a key component of understanding how *Lies of P* opens up possibilities for critique of games and stories that might otherwise be considered above criticism. Fans invoke their nostalgia regarding *Bloodborne* specifically, and Soulsborne games more generally, in ways that convey both longing *and* critical analysis. *Bloodborne* is often considered Soulsborne at its best, a benchmark that other games can approach, but cannot quite reach. *Lies of P* is then frequently understood, both in press and in fan reactions, as indivisible from *Bloodborne* nostalgia. The YouTube comments in particular not only share in restorative nostalgia that continues to hail *Bloodborne* as an unreachable standard, but also take a clearly reflective turn. In sharing comments about *Lies of P*, whether they have already played the game or not, fans evaluate the virtues and shortcomings of *Bloodborne* in relation to the *Lies of P*. *Lies of P* invoking *Bloodborne* creates a space where fans can critically evaluate their nostalgic praise for *Bloodborne*, while still being allowed to experience longing. Their affection does not have to be denied. While there are moments of such reflection in press coverage, it is more strongly present in comments where fans reflect on their own personal experiences with both games.

Also present is nostalgic engagement with the story of *Pinocchio* as both children's literature and Disney product. Given that both the press coverage and fans commenting on review videos have most likely come to *Lies of P* as fans of Soulslike games, rather than Disney or children's literature fans, it is notable that moments emerge where fans are engaging in critique of media they engaged with in childhood. In these comments there is very little turn to restorative nostalgia, and engagement is almost entirely reflective.

Important here is how the open nature of YouTube comments prevents strict regulation of which fans can and cannot participate in sharing their perspectives and reactions. While some comments are far more restorative in nature, holding *Bloodborne* above and apart, these attempts at boundary maintenance are ineffective on YouTube. Reflective nostalgia appears right alongside these more conservative reactions. Future research should consider more bounded digital gaming fandom spaces where reflective critique is restricted and how nostalgia manifests in discussion among fans who might otherwise be vulnerable to radicalization. Do more private, tightly knit digital gaming spaces manifest restorative nostalgia over reflective? Furthermore, uncovering perceptions of in-group and out-group affiliation in fandom settings can shed light on whether spaces like YouTube comments and the imagined community they might precipitate, act as a viable source of alternative perspectives for members of these more regulated groups. What are the fandom spaces which allow for reflective nostalgia to flourish, including the introduction of new ideas and social rewards for critical thought?

Ultimately, reflective nostalgia can serve as a point of departure for understanding and critiquing existing systems being maintained through momentum and tradition. Being able to engage in a critical, but still loving analysis of videogames with others who one might consider part of their in-group has potentially important outcomes for those searching for a sense of belonging. By acknowledging that memories are flawed and incomplete, nostalgic impulses can be martialled to actually break apart or question the 'perfection' of a treasured artefact or perspective. Fans, even in a format as unstructured as a YouTube comment section have a desire to engage in reflective work and actively introduce new perspectives, even if those thoughts might not be fully developed. Importantly, the nostalgic trigger, in this case, *Lies of P*, does not need to be universally 'better' than the artefact it's disrupting, it only needs to be better in *some aspects* in order to serve as a site of critique. Developing a capacity for critique, while still acknowledging that the affective longing for a particular time and place has its value, has the potential to reach those individuals searching for a sense of community without leaving them vulnerable to those who might exploit them.

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## Conflicts of interest

There are no known conflicts of interest for this research.

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***Unpacking an Obfuscated  
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**The Use of Mise-en-Scène in Minimalist  
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Mienke Fouché

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# ***Unpacking* an Obfuscated Female Protagonist**

## **The Use of Mise-en-Scène in Minimalist Videogame Narrative Through Social Semiotics**

MIENKE FOUCHÉ

### **Abstract**

This paper explores the portrayal of an obfuscated female protagonist in the minimalist videogame *Unpacking*, which narrates its story entirely through its mise-en-scène. Adopting a social semiotics approach, the study delves into how the socially constructed elements of the game's mise-en-scène assist players in '*unpacking*' the protagonist's identity and narrative. *Unpacking* introduces a novel approach to ludonarratology by intentionally omitting the direct presence of the protagonist, instead focusing on the spaces and objects that players interact with. As players progress through the protagonist's life, these spaces and objects become laden with social significance, creating a shared history between the player and the protagonist. The game diverges from traditional storytelling methods, offering an environment where the story is pieced together through the objects unpacked in each new space the protagonist inhabits. These objects serve as signifiers of her memories, aspirations, and life stages, evolving beyond mere gameplay elements into artefacts that shape her life story. A significant aspect of this paper is its discussion of the novel portrayal of a female protagonist who is omitted from visual representation. Rather than focusing on her physical appearance, the game emphasises unearthing her identity through gameplay, allowing players to discover who she is. The game exemplifies how minimalist narrative techniques, rooted in social semiotics, can foster rich and engaging storytelling experiences. By omitting a visible protagonist, *Unpacking* allows players to explore and interpret the narrative through the spaces and objects they encounter and the connections they establish between them. This article's significance lies in its examination of *Unpacking* as a case study for understanding how minimalist narrative techniques can effectively convey a complex and emotionally resonant story through unconventional means.

### **Keywords**

Mise-en-scène; female protagonist; minimalism; social semiotics; ludonarratology

**The significance of objects in storytelling** extends beyond their physical presence; they act as vessels for meaning, shaped by our experiences and emotions. Gillespie (2014, p. 155) asserts that “objects don’t speak our language, we must translate their meanings”, highlighting the necessity of interpretation in understanding the deeper significance of everyday items. In videogames, objects can become powerful narrative tools, serving as extensions of a character's identity and history. While seemingly mundane, these inanimate objects are imbued with emotional weight, creating connections between the player and the protagonist through shared histories and experiences.

This paper examines the portrayal of an obfuscated female videogame protagonist uniquely narrated entirely through the games’ *mise-en-scène*. *Unpacking* (Witch Beam, 2021) presents a novel approach to ludonarratology by intentionally omitting the protagonist from the game and rather relying on the player’s interaction with the game environment. The various stages that the player plays through build a significant history between the player, the protagonist and the *mise-en-scène*.

The discussion begins with an overview of female and LGBTQI representation, considering how recent developments reflect broader cultural changes towards more authentic and nuanced portrayals. The discussion then shifts to the theoretical foundations of Tavinor (2009), Gillespie (2014), and Sofer (2013) to examine how *Unpacking* employs *mise-en-scène* and minimalist design to construct a narrative that unfolds through player interaction. Tavinor’s concept of narratives of disclosure underpins the analysis of how players infer meaning through environmental storytelling rather than direct exposition. Gillespie’s shared histories framework explores how recurring objects in *Unpacking* accumulate emotional significance over time, fostering a connection between the player and the protagonist. Sofer’s dark matter concept highlights the role of absence and omission in shaping the game’s narrative, demonstrating how missing or repurposed objects create a meaningful presence.

The framework for this analysis is grounded in social semiotics, which provide the tools to examine how videogames convey meaning through minimalist storytelling techniques. This reveals how minimalism and *mise-en-scène* are used effectively in videogames to create rich, immersive experiences that communicate complex ideas and emotions without relying on explicit dialogue or overt exposition.

While *Unpacking* is particularly relevant for exploring identity-driven narratives, the results of this paper extend beyond games with explicit identity themes. By highlighting the critical role of spatial and object-based storytelling, this paper contributes to a broader discussion on how minimalism in *mise-en-scène* enhances engagement, immersion, and narrative depth across a wide spectrum of videogames and is also of use to videogame academics as well as videogame developers.

## Female protagonist representation in videogames

This section provides a brief overview of the challenges and developments in female and LGBTQ+ character representation in videogames. It addresses the historical context, the industry's response to criticism, and the ongoing issues with stereotypical depictions.

Videogames have historically faced criticism for harmful stereotypical representations, particularly of female characters (Behm-Morawitz & Mastro, 2009; Jansz & Martis, 2007). Over time, the videogame industry has responded to these criticisms, leading to some improvements in character representation (MacCallum-Stewart, 2014; Lynch et al., 2016; Engelbrecht, 2020). The 'Lara phenomenon' marked by the rise of competent female characters in leading roles, represents a significant shift in this trend (Jansz & Martis, 2007). However, despite the increase in such characters, many remain subject to sexualised depictions, catering primarily to male audiences (Jansz & Martis, 2007). Female characters continue to be underrepresented and are often portrayed more provocatively compared to their male counterparts (Beasley & Standley, 2009). However, MacCallum-Stewart (2014) argues that narrowing academic scrutiny of female protagonists only to their visual depictions diminishes the impact that these characters have on the industry.

Parallel to these developments, Utsch et al. (2017) observed an increase in LGBTQ+ character representation in videogames, with a greater diversity in identities emerging particularly after 2005. Süngü (2020) compared LGBTQ+ representation in AAA and indie games, finding that indie games developed by LGBTQ+ creators often provide more meaningful portrayals of LGBTQ+ experiences. While representations of female and LGBTQ+ characters in games has improved, these advancements are not consistent and often fluctuate based on the preferences of target audiences.

As mediated experiences (Jansz & Martis, 2007), videogames play a significant role in shaping attitudes towards gender roles (Beasley & Standley, 2009). As social artefacts, they influence cultural perceptions (Utsch et al., 2017), guiding interpretations of masculinity and femininity beyond mere biological distinctions (Beasley & Standley, 2009; Behm-Morawitz & Mastro, 2009; Bristot et al., 2019). Media interpretations contribute to the foundation of societal understanding (Munters, 2017), and the interactive nature of videogames amplifies these effects, despite their fictional contexts. However, the continued reliance on harmful stereotypes in character archetypes can perpetuate damaging constructs (Lynch et al., 2016). Research indicates that exposure to sexualised female characters in games is correlated with lower self-efficacy among female players and the reinforcement of negative attitudes towards women among both genders (Behm-Morawitz & Mastro, 2009). Media should evolve to reflect societal changes and promote cultural assimilation (Bristot et al., 2019), and game developers have the potential to challenge stereotypes by offering more constructive representations (Munters, 2017). Notably, Beasley and Standley (2009) found that 31% of sexualised female characters appeared in games rated suitable

for all ages, exposing young audiences to these problematic depictions. Given that strong female protagonists can enhance girls' appreciation of games (Jansz & Martis, 2007), empowering portrayals have the potential to boost female players' self-worth and reshape male players' expectations.

The industry has shown improvement in female character representation. Characters like Lara Croft have evolved for a new generation of gamers (MacCallum-Stewart, 2014) and this is tied to broader trends in AAA game design towards more complex and nuanced female protagonists (Engelbrecht, 2020). However, this trend is sometimes superficially applied where female characters play important roles but, in some cases, are subjected to benevolent sexism (Perrault et al, 2016) or defined by male characters (Adhyaksana, 2019). Bristot et al. (2019) observe that some female characters lack physical diversity in terms of race and body shape. They argue that this lack of diversity is still a result of designing characters for the heterosexual male gaze rather than for the role of the character (Bristot et al., 2019; Sa et al., 2020). Sa et al. (2020) expands on this by stating that the character's physical depiction must serve a purpose in the narrative otherwise it undermines the character.

*Unpacking* exemplifies a novel approach to representing a female LGBTQI+ character by omitting her physical presence from the game entirely. Instead, the character is represented solely through the spaces she inhabits and the objects she takes with her, using *mise-en-scène* to convey the story of the protagonist's journey from childhood to parenthood.

## **Mise-en-scène in videogames and their use in narrative**

This section offers an exploration of *mise-en-scène* and its role in narrative construction within videogames. The integration of theoretical perspectives from film, theatre, and videogame studies provides a rich framework for understanding how these elements contribute to immersive storytelling and the narrative potential of *mise-en-scène* in interactive media.

Deldjoo et al. (2016) describes *mise-en-scène* as the aesthetic features that collectively create a style within a performance medium. Many of these features may go unnoticed by the viewer, yet they significantly impact the overall experience. *Mise-en-scène* involves the deliberate use of space and objects to construct a performative setting that expresses mood, situates the narrative in a specific time and place, and aids in conveying the story. It can be understood as a medium of communication where the careful selection of elements adds layers of meaning that the viewer interprets. Spatial principles such as depth, proximity, size, and proportion, along with design elements and principles like line, shape, colour, texture, contrast, framing, and movement, all contribute to conveying physical, social, psychological, emotional, financial, and cultural significations.

Traditionally associated with film and theatre, *mise-en-scène* has also been applied to videogames with the added element of interactivity (Arsenopoulou et al., 2023; Ulas, 2014; Girina, 2013). In videogames, the space presented to the player is not merely an environment to observe but one to explore by physically moving the player character within it. Additionally, objects or props within the environment can be interacted with, often allowing players to rotate and zoom in to observe details. This interactivity immerses players more deeply by giving them a physical presence within the space. Game designers can leverage this to construct a narrative. For example, in *Skyrim* (Bethesda Game Studios, 2011), an example of a mainstream game, a remote farmhouse scene presents animals in the yard, an empty, disordered house with blood on the floor, and a nearby bandit camp. It does not take much imagination to connect the dots between the bandit camp and the scene at the farmhouse, thereby constructing a narrative simply through exploration and observation.

Tavinor (2009) has criticised the quality of narratives in videogames, arguing that they often prioritise gameplay functionality and graphic polish over storytelling. In many cases, games treat narrative as secondary, which can lead to it being an afterthought. Tavinor (2009) also highlights the tension between gameplay and narrative, noting that while excessive narrative may interrupt gameplay, too much gameplay can detract from the narrative. Cutscenes, which are scripted narratives, often conflict with the interactive nature of games, as they remove control from the player, creating a disconnect between the player and the game (Tavinor, 2009). While cutscenes serve a narrative purpose, they can be detrimental to the overall experience by removing the player from the game world.

To reconcile narrative and gameplay, Tavinor (2009) proposes the creation of interactive narratives where the player is responsible for discovering the content of the narrative. He refers to this as "narratives of disclosure or discovery", where the player uncovers the story through their actions in the game. Toh (2019) also supports this reconciliation as crucial to the experience of the player. The narrative is scripted, but the player unearths it through exploration. Tavinor (2009, 125) argues that this method is effective because it is "artistically satisfying" and engages the player's fear, apprehension, curiosity, and wonder by allowing the player character an interactive role in the discovery process. Toh (2019) observes how the narrative and gameplay can semiotically be combined by establishing relationships and resonances between the two.

In this context, *mise-en-scène* effectively solves the tension between narrative and gameplay by using the in-game environment to provide narrative clues. This encourages the player to explore the world actively, without being placed in the passive state of watching a cutscene, thereby allowing the narrative to unfold through the player's effort. In this approach, the player may not alter the narrative's content but

unearth it through exploration. This method aligns with Tavinor's concept of interactive narratives that engage the player in the discovery process, enhancing immersion and narrative satisfaction.

Returning to performing arts discourse, Gillespie's (2014) concept of shared histories and Sofer's (2013) notion of dark matter add further depth to the narrative power of *mise-en-scène*. Gillespie observes that shared histories are created between objects, performers, and audiences throughout a production. Objects become socially charged through their use in performance, acting as agents within the narrative rather than merely being acted upon. Gillespie notes that these objects are "vessels of memory... uncannily blending memory with the theatrical present, reconstituting the past in the present moment" (Gillespie, 2014, p. 151). The reoccurrence of objects affirms their importance to the audience and the object's presence begins to carry weight throughout the progression of the narrative.

Similarly, Sofer's (2013) concept of dark matter describes the invisible elements that structure the audience's experience, creating a felt absence that invites speculation about unseen events. What is absent, implied, or unseen can be just as narratively and emotionally significant as what is visible. These invisible aspects pull the audience deeper into the theatricality and create an experience that transcends semiotic analysis (Worthen, 2014). This concept can be applied to *mise-en-scène* in videogames, where the absence of visible events or objects leaves a lingering presence, prompting players to piece together the unseen narrative. When coupled with the shared histories concept, the absence of object that carries significant historical weight, in terms of narrative progression, causes a significant and noteworthy presence due to the contrast.

Collectively, these concepts provide a robust understanding of how *mise-en-scène* can be employed in videogames to convey narrative. The player interacts with the environment to uncover the story (Tavinor), builds a shared history with objects throughout gameplay (Gillespie), and speculates on invisible events that shape the game world (Sofer). This interaction not only informs the narrative but also makes the experience more immersive and compelling, as the player's effort directly influences the extent of their engagement. This paper argues that *Unpacking* demonstrates a successful combination of these elements.

## **Social semiotics applied to videogames**

Social semiotics explores the social dimensions of meaning-making through multiple modes of communication, including visual, verbal, written, gestural, and musical. In videogames, these modes converge to create rich, multi-modal experiences for players. De Oliveira Matumoto and Gonçalves-Segundo (2022) applied a social semiotic approach to analyse a 1996 two-dimensional action game, revealing that games

are more than mere 'toys'; they convey meanings beyond entertainment. The multi-modality of videogames allows for layers of meaning-making through various sensory channels.

Pérez-Latorre et al. (2017) connected social semiotics to procedural rhetoric in game studies, emphasising the signification potential of videogames. They argue that social semiotics contribute to videogame design by integrating narratological and ludological elements into both representation and interaction. Van Leeuwen (2005) highlights that social semiotics require semiotic resources to enable meaning-making. In videogames, the multi-modality offers a diverse range of these resources, each contributing uniquely to the player's experience.

Caroux et al. (2015) proposed a player-videogame interaction model that breaks down games into specific aspects, each of which can be considered a semiotic resource (refer to Fig 1). These aspects are not just components of gameplay but are instrumental in conveying specific meanings. The videogame aspects identify the concrete aspects of the game that the player engages with while the player aspects result in this engagement.

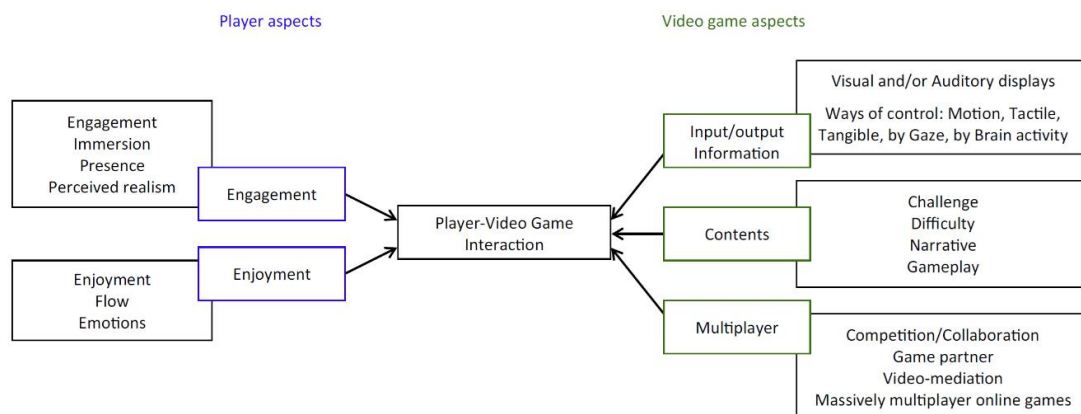


Figure 1. Caroux et al.'s (2015, 368) player-videogame interaction model.

While Caroux et al.'s model is not the only framework for analysing videogames, it focuses on player interaction as a vital component of games as social artefacts. In the context of social semiotics, the interaction between player and game is crucial for allowing players to construct their interpretations of the game's narrative.

Van Leeuwen (2005) also notes that social semiotics often work interdisciplinarily with other theories. This paper considers social semiotics in conjunction with minimalism, the style in which the game under discussion is created. Sofer's concept of dark matter is particularly relevant in minimalist game design, which 'structures and focuses' the game experience by eliminating excessive or unnecessary elements. Minimalism in videogames is often employed to explore specific themes through artistic and immersive means. These games are typically designed around a particular aspect—such as narrative, gameplay, visuals, or audio design—while reducing

the others (Naelen et al., 2011). Where Caroux et al.'s' model identifies semiotic resources that can be employed in conveying meaning to players, Naelen et al.'s' (2011) minimalist design principles provide the aesthetic and stylistic constraints used to present the resources to the player. The methodology section demonstrates how the semiotic resources are shaped by the minimalist aesthetic in *Unpacking*.

## Case study formulation

*Unpacking* (Witch Beam, 2021) is a minimalist story-rich indie game situated in the genre of cosy puzzle gaming released for multiple platforms. The game has won several awards, most notably: the 2021 Australian Game Developer Awards (game of the year, outstanding achievement for an independent game, excellence in accessibility), the 2022 25<sup>th</sup> Annual D.I.C.E. Awards (outstanding achievement for an independent game), the 2022 Game Developers Choice Awards (best audio, innovation award), the 2022 18<sup>th</sup> British Academy Game Awards (narrative, EE game of the year), and the 2022 IGDA Global Industry Game Awards (2D animation, 2D environmental art) (Steam, 2024).

This paper considers the novel approach towards ludonarratology by omitting the protagonist from the game and allowing the player the freedom to uncover the narrative through the gameplay. The game follows the life of the protagonist (referred to as P in this paper) through eight pivotal stages she relocates to. Players infer the narrative solely through the spaces P inhabits and the objects she unpacks. The following table summarises the game stages, the number of rooms and the number of objects that the player unpacks:

Stage	Number of rooms	Number of objects
Child bedroom May 1997	Bedroom	49
University dormitory January 2004	Bedroom, kitchen, bathroom	125
Commune March 2007	Bedroom, kitchen, bathroom, dining room, living room	166
Boyfriend's apartment September 2010	Bedroom, kitchen, bathroom, living room	147
Parents home June 2012	Bedroom, bathroom	67
P's house January 2013	Bedroom, kitchen, bathroom, dining room, living room, office	256
Girlfriend move-in November 2015	Bedroom, kitchen, bathroom, dining room, living room, office	120

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Family home July 2018	Entry hall, guest bathroom, kitchen, dining room, living room, office, bed- room, walk-in closet, baby room, bath- room	488
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Table 1. Summary of spaces and objects in *Unpacking*.

Content analysis of *Unpacking* was done by cataloguing the objects that players unpack in each stage of the game. The catalogue organised objects by stage and assigned a distinct colour to each object based on its corresponding stage. The objects were then classified into the following categories and listed alphabetically:

- Art – Objects related to P’s artistic pursuits, reflecting her childhood interests and later career as an illustrator.
- Clothing – Items including clothing, shoes, and accessories used by P.
- Entertainment – Objects related to leisure activities such as gaming, music, and viewing devices.
- Books – Literary materials, including books for entertainment and career reference.
- Toiletries – Personal hygiene and self-care products.
- Kitchen – Items used in the kitchen environment.
- Decorations – Plushies, souvenirs, photos, and artworks created by P.

The alphabetised list identified objects that appeared across multiple stages, highlighting recurring items. Objects of particular significance—those that contributed to inferences about P’s personal story—were then analysed in detail.

The discussion is structured on the semiotic resources employed by the game as based on Caroux et al.’s player videogame interactions and Naelen et al.’s minimalist game design principles with a particular focus on the narrative aspect of the objects and spaces. The following table is used to structure the analysis of the game:

<b>Caroux et al. (2015): Player-videogame interactions</b>		<b>Naelen et al. (2011): Minimalist game design principles</b>	<b>Semiotic resources employed in <i>Unpacking</i></b>
	Visual displays	Deliberate, minimal, abstracted, stylised	Pixel graphics, limited space, objects not labelled
<i>Input/output information</i>	Auditory displays	Deliberate, minimal, abstracted	Foley sound effects, background music
	Ways of control	Deliberate, confined	Mouse or console control input
<i>Contents</i>	Challenge	Procedural methods, combinatorial complexity, obfuscation, probability	No tutorial, no dialogue, limited text
	Difficulty		No time pressure, no scoring system
	Narrative	Thematic, imagination stimulation, deliberate, obfuscation	Inference based on establishing connections between spaces and objects through the various stages
	Gameplay	Simplified or few, small rulesets, narrow decision-making	Navigation between rooms, placement of objects, some spaces only P's items can be moved
<i>Player modes</i>	Multiplayer	Either mode is used in minimalist game design	Single-player experience creates intimacy with the protagonist

Table 2: Semiotic resources framework for analysis.

## Deliberate minimal input/output information

This section analyses how the game's minimalist input/output mechanisms enhance player engagement and contribute to narrative construction within the theoretical frameworks discussed.

The game provides no tutorial or explicit instructions on objectives or controls. Instead, players must interact with objects intuitively, clicking and experimenting at their own pace. The absence of a time limit reinforces a leisurely, exploratory approach, allowing players to organically discover mechanics and spatial relationships.

Realistic pixel graphics ensure that players recognise functional spaces (bedroom, kitchen, bathroom, etc.) and intuitively determine where objects belong. The isometric perspective provides a clear view of room structures and potential object placements. Audio design also plays a role in reinforcing interactions, as objects produce distinct sounds depending on the surfaces they are placed upon. The player can

move between different rooms, manipulate storage spaces (cupboards, drawers, etc.), and reposition objects. Some objects adjust automatically based on placement—clothing folds when near a wardrobe, books shift to a vertical position on shelves—subtly guiding interaction while maintaining a narrow sense of agency. These limited but intentional interactions reinforce the cosy, puzzle-like nature of the game.

The deliberate choice of minimal input/output information aligns with the theoretical framing. Gameplay and narrative emerge through player-driven discovery rather than direct exposition, relating to the concept of narratives of disclosure. Providing the player with only the *mise-en-scène* to interact with focuses the player's attention to the importance of the space and objects. The narrative progression over stages allows the player to realise that changes in the spaces and objects are deliberate and intended for the player to take note of to understand the narrative. But this can only occur if the player has learned to recognise objects over the various stages and what their changes and presence, or absence thereof, in a specific context implies. This is based on both the shared histories and dark matter concepts.

*Unpacking* features 1,418 objects, with only a select few reappearing to become focal points of interest to the player. The game relies on the player becoming invested in the objects (as much as P) to recognise the progression over stages and allow reflection on the history of what has taken place starting to anticipate what might occur in the future. Once investment is established between the player and the objects, the concept of dark matter comes into play as the player then starts to infer the amount and type of experiences that happened between the stages.

The objects manifest and exude a presence that communicates with the player, and the sudden absence of an object manifests a strong presence of omission that forces the player to question the reason for the omission and what significance this holds. The minimalist design is not merely an aesthetic choice but an integral mechanism for storytelling.

The joy of *Unpacking* comes from the act of discovery—the recognition of familiar items, the introduction of new ones, and the subsequent realisation of their narrative significance. The game's design ensures that investment contributes to a satisfying and intellectually stimulating experience, as players navigate the layers of meaning embedded in the game's deliberate design.

## **Obfuscated game contents to structure the narrative**

This section discusses how the game contents of challenge, difficulty, and gameplay are structured to enhance the narrative aspect of the game.

The game's challenge level is minimal, which reflects its cosy genre that allows players to choose the depth of their engagement. While the game allows players to

simply move through the motions of *unpacking* without interpreting the significance of the objects, those who become invested trace P's life stages from childhood to parenthood. This in turn affects the difficulty aspect of the game: since little information is provided, the game can be considered difficult in the sense that it requires a tremendous amount of investment on the part of the player to uncover the narrative. Without this investment, the depth of the narrative can be lost or only partially interpreted.

The narrative aspect of *Unpacking* is its focus and therefore all the videogame interactions are deliberately designed to provide cues to the player to uncover the narrative. The fabula, which is the life story of P, is conveyed through the syuzhet, which comprises the deliberate limitations on spaces and choice of objects available to unpack in each stage.

Unlike traditional narrative-driven games that rely on dialogue and cutscenes, *Unpacking* follows a design philosophy similar to other minimalist narrative games such as *Florence* (Mountains, 2018), *The Stillness of the Wind* (Lambic Studios, 2019), *Assemble with Care* (Ustwo, 2019), and *Venba* (Visai Games, 2023). While each of these games integrates narrative and gameplay through subtle environmental storytelling, *Unpacking* uniquely structures its narrative through mise-en-scène rather than visible character interaction or textual exposition.

For example, *Florence* (2018) conveys the protagonist's emotional journey through puzzle mechanics that shift in complexity to reflect the distinct stages of her relationship. *Unpacking* similarly externalises emotional experiences but does so through object placement and absence, requiring players to infer relational tensions and character development. *The Stillness of the Wind* (2019) tells its story through the protagonist's slow-paced farm work and cryptic letters from distant family members, juxtaposing the mundane with a growing sense of unease. *Unpacking* also uses environmental storytelling, relying solely on shifting domestic spaces and the presence or lack thereof in possessions.

In *Assemble with Care* (2019), the protagonist repairs sentimental possessions, learning about their owners' struggles through dialogue-driven interactions. While both games centre on objects, *Unpacking* shifts the focus from repairing to *unpacking*, emphasising personal history rather than interpersonal relationships. Likewise, *Venba* (2023) explicitly foregrounds cultural identity through cooking mechanics, where players reconstruct lost Tamil recipes as a metaphor for preserving heritage. In contrast, *Unpacking* presents cultural identity more subtly, weaving it into the recurring presence—or absence—of objects tied to the protagonist's background.

### ***Spatial restrictions for narrative depth***

The game's stages communicate various aspects of P's life, including her financial status, relationships, and personal growth. The following discussion describes the

restrictions imposed on the stages of the game to demonstrate how the player must engage with these deliberate gameplay choices to uncover the narrative and infer P's character development. The dark matter concept is exemplified here as the game takes place over twenty-one years of P's life but only eight stages during this period are presented to the player, requiring them to infer missing details through environmental storytelling.

#### *P's early life and emerging identity (1997–2004)*

In the first stage, P moves into her first private bedroom (the game implies she previously shared with her sister). The room is small but comfortable and hints at a garden outside. This demonstrates a middle-class financial situation, supported by the presence of gaming devices and a fair number of toys. With no spatial restrictions, this stage allows P full agency over her space, serving as an introduction to the player as they experiment and become familiar with the mechanics. At this point, the narrative is not yet clear in the first playthrough.

The second stage further supports P's family's financial status as comfortable but not wealthy. The university dormitory P moves into is modest and shows elements of structural damage to the bedroom walls and kitchen floor, while the mismatched crockery suggests they are hand-me-downs. She enters this space with a few childhood possessions, reinforcing her sentimental nature. With a seven-year time gap, this stage sets the tone for the rest of the game, where the player recognises objects that accompany her from the previous stage, notes which ones were left behind, and focuses on the new objects to determine what P came to study.

#### *Expanding social and professional life (2007–2010)*

In the third stage, P moves into a commune with friends, marking the first indication of interpersonal relationships outside her family. The commune introduces spatial restrictions by preventing the player from moving her friends' possessions or entering their bedrooms. Their shared interests—gaming, cosplay, plushies, and ornamental fantasy figures—further establish a communal bond. P starts a part-time job (evidenced by the work uniform) while attempting to build her illustrator career, as seen in the presence of art supplies, stationery, and digital devices.

In the fourth stage, she moves in with a boyfriend. The apartment has only one bedroom with a double bed, establishing intimacy between the two inhabitants. This stage highlights a difference in their financial status and personal tastes. His upmarket apartment, free of structural damage, is filled with high-quality possessions, including a large LCD television, large speakers, and a modern furniture set. These contrast with P's softer, more homey possessions. Unlike the previous stage, the player can freely move around the boyfriend's possessions, a lifted restriction that furthers the narrative. However, making space for P's belongings becomes quite a

challenge in the confined space. The aesthetic clash between their tastes communicates a difference in their personalities.

The narratives of disclosure (Tavinor) are particularly relevant here, as the limited space in the boyfriend's apartment forces players to navigate and interpret the constraints placed on P's identity. The act of hiding or storing personal objects symbolises the struggle of assimilation within the relationship, reinforcing narrative themes through interactive discovery rather than overt exposition. This stage subtly foreshadows the eventual breakup, as P is forced to store her items in less prominent places, symbolising the lack of space for her identity within the relationship.

#### *Transition, emotional reconnecting, and growth (2012–2013)*

Returning to her parents' home after the breakup, P must once again rearrange objects to fit her belongings. This stage plays a crucial narrative role, as the player rediscovers objects from the first stage—P's childhood. The interaction with these items fosters a shared history between the player and P, reinforcing nostalgia and emphasising the passage of time (Gillespie). Fifteen years have passed, and P's old bedroom has been repurposed into a sewing/storage space. The sewing motif reflects the mending of her broken heart, further emphasised by the worn state of her beloved pink pig. Notably, if the player pins a photo of P and her ex-boyfriend on the board, she places a pin through his face—a subtle but powerful expression of her feelings. This stage also requires the player to store the ex-boyfriend's photo out of sight before advancing, reinforcing P's emotional resolution.

In the sixth stage, P transitions to her first independent home, suggesting a rebirth following her breakup. She brings along select childhood possessions (frog plushie, duck plushie, alarm clock), symbolising a reconnection with her past self. Her growing career focus is reflected in the presence of a home office, new illustration materials, and the absence of the part-time work uniform. Her financial situation is subtly communicated through the apartment's structural damage and limited furnishings, such as bean bags instead of couches.

#### *Relationship with girlfriend and stability towards resolution (2015–2018)*

In the seventh stage, P's girlfriend moves in, marking the only instance where the player unpacks items that do not belong to P. Over two years, the living space has evolved to reflect P's growing success as an illustrator, evident in the improved furniture and decor. The player must move P's possessions around to make space for the girlfriend, but unlike the boyfriend stage, the girlfriend's possessions blend seamlessly with P's, reinforcing their compatibility. For instance, the girlfriend's tiger plushie complements P's pink pig, symbolising their shared interests and emotional harmony.

The final stage, the largest in the game, represents P's successful life. The house is pristine, with no scuff marks, peeling paint, or water damage. In P's home office, copies of the book she illustrated about the pink pig—now an award-winning project—showcase her professional achievements. Most possessions from three years ago remain, suggesting continuity and stability in her relationship with her girlfriend. Their impending parenthood is indicated by the presence of baby items, reinforcing their shared happiness and long-term commitment.

Throughout these eight stages, the player never directly witnesses P's life events but instead infers them from the condition, arrangement, or absence of objects. This aligns with Sofer's concept of dark matter, where narrative meaning emerges from omission and suggestion rather than explicit exposition. Additionally, Gillespie's notion of shared histories offers insight into the emotional weight of recurring objects in *Unpacking*. Having grown familiar with P's belongings, the observant player vicariously experiences her journey, developing an understanding of key events in her life.

### ***Inferring P's cultural and personal identity***

The concept of narratives of disclosure allows the player to gradually uncover P's cultural and personal identity.

P's Jewish heritage is subtly indicated in her childhood bedroom by a dreidel. As she matures, this aspect of her identity appears to fade, only to resurface later in life when she unpacks a Hamsa and Hanukkah candles—suggesting a renewed connection to her cultural roots. Unlike *Venba* (Visai Games, 2023), which explicitly foregrounds cultural identity through interactive cooking mechanics, *Unpacking* presents heritage as a subtle yet meaningful thread in P's life. This reinforces Sofer's dark matter, where elements of P's identity are not explicitly presented but instead inferred through their absence and later reappearance. The player experiences a quiet realisation of this reconnection.

Similarly, P's gender identity is revealed gradually through her possessions rather than through direct characterisation. Initially ambiguous, her biological female identity becomes evident through feminine-coded items such as underwear and tampons. However, *Unpacking* avoids the common gaming trope of sensationalising gender representation, opting instead for a naturalistic approach. This subtlety extends to her evolving gender expression. As a young adult, she favours androgynous clothing—t-shirts and baggy jeans—but later incorporates more traditionally feminine attire. Notably, this shift coincides with her relationship with her boyfriend, whereas her later relationship with a girlfriend does not produce a similar change. This contrast suggests that, earlier in life, P may have been more influenced by societal expectations or a desire to conform to her partner's preferences.

Beyond gender, P's personal growth is reflected in the evolution of her possessions. Her ex-boyfriend introduces her to lifestyle changes, such as transitioning from instant coffee to French press and learning the ukulele to complement his guitar playing. While their relationship ends, these interests persist, symbolising how personal development often stems from relationships, even after they have ended. This is reinforced in the game's end credits, where P plays the ukulele for her partner and newborn, demonstrating how objects in *Unpacking* function as carriers of personal narrative and emotional history, in line with Gillespie's shared histories concept. Similarly, her career as an illustrator flourishes after the breakup, implying that personal loss fuels her professional ambition. The placement of her degree—proudly displayed in all her previous living spaces but relegated to the closet or under the bed when she moves in with her boyfriend—suggests a period of diminished self-expression within that relationship.

The game also subtly acknowledges P's physical health. Exercise equipment follows her through various stages, but in later years, the presence of back pain medication and a cane signals a significant shift. This unexpected limitation evokes a sense of loss, as the active lifestyle she once enjoyed is now constrained by chronic pain. This gradual removal of once-important objects mirrors the earlier instances of objects that disappear and later re-emerge, reinforcing a cyclical pattern of loss and reconnection.

### ***Intimacy with the protagonist through the mode***

The combination of narratives of disclosure with the shared histories fosters a unique intimacy between the player and P through the single-player mode. The mode, coupled with the cosy nature of the game, allows the player to enter a meditative space of comfortable play.

As discussed before, the considerate intertwining of narrative and gameplay assures that the engaged player would have built an emotional history with P. The developments in her life as witnessed through her space and possession developments mirror the sentimental attachments that players would recognise in their own real lives.

Dark matter also aids in this process by not explicitly presenting P's physical form or voice. However, her presence is deeply felt by the player due to their intimacy with her which is based on them having interacted with her most precious possessions. This intimacy ensures that the player's experience of P's losses is also poignant, as they gain insight into the things P enjoys and is passionate about, only to witness the impact of unexpected events that alter her life. For example, her active lifestyle becomes a source of loss when chronic back pain becomes a debilitating factor. Yet, there is also a joy to be found in P's successes, such as the publication of her book, which is inspired by her beloved pink pig.

P's life is portrayed as a series of ordinary, relatable events rather than a sequence of dramatic or traumatic experiences. This choice aligns with the game's cosy genre, which eschews high-stakes conflict in favour of depicting everyday life. The game's narrative avoids delving into darker or more complex topics, presenting instead a straightforward journey marked by personal growth, relationships, and self-discovery. This approach offers a refreshing contrast to the often intense and conflict-driven narratives common in videogames, suggesting that life need not be filled with dramatic events to be meaningful or worthy of exploration. This further enhances the intimacy, as the player was privy to the key moments in P's life and observed how she made decisions and their outcomes.

The authenticity of *Unpacking* has been widely praised, particularly for its ability to depict an LGBTQIA+ relationship without making it the focal point of the narrative. Unlike many games that foreground a character's sexuality to appeal to contemporary trends or fan interests, *Unpacking* integrates this aspect of P's life naturally and unobtrusively. The relationship between P and her girlfriend is presented as just one part of her life, woven seamlessly into the broader narrative. This understated approach reflects the game's commitment to authenticity and its focus on the subtleties of everyday life.

## Conclusion

The analysis of *Unpacking* demonstrates that minimalist storytelling, when underpinned by a strong theoretical framework, can produce deeply immersive and emotionally resonant experiences. The game's reliance on *mise-en-scène*, environmental storytelling, and player interpretation aligns closely with Tavinor's narratives of discovery, Gillespie's shared histories, and Sofer's dark matter. These frameworks collectively highlight how *Unpacking* allows players to infer a rich, evolving narrative without ever directly presenting the protagonist or engaging in conventional storytelling techniques.

Tavinor's (2009) insights into player-driven narrative discovery are evident in *Unpacking*, where players actively reconstruct the protagonist's story by observing recurring objects, shifting spaces, and evolving spatial restrictions. The game's design encourages the player to unearth meaning through inference, reinforcing the power of narratives of disclosure in digital storytelling. The absence of explicit direction fosters a deeper connection between the player and the game world, demonstrating how minimalist design can enhance emotional and cognitive engagement.

Gillespie's (2014) shared histories concept is central to understanding how objects gain narrative weight over time, reinforcing continuity and attachment. The recurrence of meaningful items, such as the pink pig and P's art supplies, fosters a sense of familiarity and progression, allowing players to construct a narrative based on accumulated meaning.

Sofer's (2013) dark matter is integral to how the game conveys loss, change, and identity through absence, as seen in missing objects and repurposed spaces that signify unspoken transitions in the protagonist's life. The deliberate omission of explanatory text or dialogue compels players to speculate and fill in gaps, making the experience deeply personal and subjective. This approach highlights the effectiveness of omission as a narrative device, demonstrating how what is unseen or implied can shape player perception just as powerfully as what is visually present. The use of dark matter in conjunction with shared histories manifests a presence that carries more weight through its reaffirmation in spaces. The more established the history between the player and the object, the more presence is created in the absence of the object in the space.

Beyond *Unpacking*, this study has broader implications for game design and narrative theory. The techniques analysed in this paper—mise-en-scène, environmental storytelling, and minimalist design—can be applied to various genres beyond identity-focused games. Games in genres such as survival horror, open-world exploration, and interactive fiction also employ similar mechanics to convey narrative depth without relying on traditional exposition. By examining how mise-en-scène, object interaction, and spatial constraints shape narrative experiences, this study highlights the significance of minimalist design in interactive storytelling and its potential for broader application in game studies.

This study contributes to game studies by offering a framework for analysing how environmental storytelling conveys character identity. The findings emphasise the role of mise-en-scène as an active participant in narrative construction, demonstrating how videogames can engage players through inference, discovery, and emotional resonance rather than prescriptive storytelling methods. Moving forward, future research could extend this analysis to other games that rely on minimalist storytelling techniques, further solidifying the role of mise-en-scène in shaping videogame narratives.

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# **Emergent Ecological Dynamics in Videogames What Player Paratexts Reveal**

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# Emergent Ecological Dynamics in Videogames What Player Paratexts Reveal

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## Abstract

Videogames invite players to inhabit virtual worlds that often represent or simulate ecologies. Existing conceptual frameworks for understanding these dynamics and experiences as they arise from play emphasise the role of the videogame text in structuring such meaning. This article introduces the concept of *emergent ecological dynamics* to explain how, within the situated and ephemeral experience of playing a videogame, new ecocritical meaning can emerge, and can be captured in user-created paratexts. Undertheorised in ecocritical game studies are player experiences of ecologies and environments that emerge in ways unanticipated and unintended by gamemakers. By drawing on explanations of assemblage, emergence, and the materiality of digital media, this article suggests a latent potential for all videogame texts to convey ecocriticality. The methodological value of addressing player paratexts—as a means for scholars to access and analyse otherwise transitory emergent ecological dynamics—is also explored. The capacity of such user-created artefacts to manifest players' revelations of ecological entanglement, development of ecological awareness and encounters with potent sensations of affect drawn upon as examples.

## Keywords

Ecocriticism; videogame ecologies; player paratexts; emergence; assemblage

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**When we play videogames**, we often enter into relations with some form of a virtualised ecology. Whether the game we play is characterised by high-fidelity graphics and powerful simulation models that represent the cutting edge of computer processing power or, instead, utilises more modest modes of representation and interaction, our play occurs within virtual *worlds*. Videogames summon into being virtual worlds comprised of various types of natural environments, populated with humans, animals and other creatures, and bearing ecological dynamics that dictate how players, in-game entities and virtual natural systems interact with one another. This will be uncontroversial for most people who have booted up a videogame and

encountered landscapes, climates, creatures and more. Less obvious is the fact that while fictional (in the sense that videogame worlds are media objects designed, coded and scripted by game makers), these environments and ecological dynamics are often closely connected to conditions on Earth.

In the field of game studies, attention to ecological dynamics—through the intellectual practice of ecocriticism—is burgeoning. The present era is one in which humanity's asymmetric relationship with planet Earth has led to intertwined and compounding ecological crises, including climate change, global warming, biodiversity collapse and toxic pollution. Scholarly attention has turned increasingly to the role of popular culture in representing ecologies, environments and in their ability to highlight these conditions of crisis (as well as their causes and possible mitigants) to everyday audiences. As I outline shortly, ecocritical efforts within game studies are largely captured by game-centric approaches founded on static textual analyses. Consequently, the ecocritical substance of the variable, situated and lived experiences of play are largely overlooked. By turning attention to the ecomaterialist possibilities opened up by thinking of games and play as assemblages, and the emergent nature of the play experiences that arise from assemblages, I outline the potential for recognising *emergent ecological dynamics* that come together during play and which are stabilised and shared online by players in the form of paratexts. My aim is to establish that emergent ecological dynamics are both a conceptual and methodological intervention in ecocritical game studies. The structure of this article reflects this duality of purpose: I first build the theoretical basis of this concept, before turning to consider relevant extant case studies that illustrate what player paratexts might reveal to us about players' everyday encounters with emergent ecologies in videogames.

## The ecocriticality of videogames

Game studies scholars have sought to understand how virtual environments reflect their material earthly counterparts, as well as how the complex systems modelled by videogames might offer access to ecological pasts, presents and futures. Some scholars turn their attention to the possible outcomes of play, asking how both the representational and interactive elements of videogame texts might support players in developing their awareness of, and shifting their attitudes towards, ecological relations. These different modes of game studies ecocritical inquiry are often closely bound up with the conditions of what I will refer to in this article as the Anthropocene era.

*Anthropocene* is a term, originating in the work of atmospheric chemist Paul Crutzen and ecologist Eugene Stoermer (2000), to describe a geological epoch in which humankind has ascended to biospheric supremacy, and whose aggregate activity is responsible for shaping Earth's climate and environments. Intense debate sur-

rounds this epochal label, including whether the term draws our attention to scientific, cultural, political, or economic conditions. A key failing of the term is that in assigning planetary agency (and blame) to humankind, the idea of an 'Anthropocene' appears to universalise culpability. Unequal relations of geography, class, race, and gender are collapsed by the label's assumptions. Recognising that harm has been inflicted on our planet unevenly—by specific groups of humans, concentrated in particular parts of the world, and driven by the rapacious logics of capitalism and colonialism—is critical to understanding the origins and effects of today's ecological crises (Chakrabarty, 2017; Klein, 2014; Nixon, 2013). Jason Moore's (2016) term 'Capitalocene' has been one particularly influential intervention, seeking to situate our ecological crises within a critique of capitalism. Following the lead of Elaine Gan et al. (2017) I use the term as a kind of short-hand for our era, but one that does not accept the worst uses or assumptions of the label, instead aiming to enter a conversation around our present conditions "in dialogue with those who remind readers of unequal relations among humans, industrial ecologies, and human insignificance in the web of life" (2017, p. G3).

Against the backdrop of this era of planetary harm, the approaches adopted by many ecocritical game studies scholars have been compelling in asserting the position of digital games as important forms of ecomedia, whether such qualities are intentional or incidental. Alenda Chang (2019) draws on a variety of virtual environments to explore how their mesocosmic, multiscale, non-human, entropic and precarious characteristics reveal the intertwining of real and imagined worlds through videogames. In an Anthropocene era in which humankind has "crept inexorably into all aspects of the world around us", Chang's analysis offers an important corollary: that the "world has also inevitably permeated into our technical artifacts, including games" (2019, p. 11), albeit through interactive models that are often reflect naive and one-dimensional accounts of nature. Benjamin Abraham and Darshana Jayemanne (2017) also establish the connection between physical and virtual worlds, suggesting that assumptions and models relating to human-environment relationships have always found their way into games. They suggest four key models for the figuration of environments in videogames: as backdrop (a relatively inert space), as resource (offered up for exploitation), as antagonist (resisting the player and their progress), and as text (where environment suggests or conveys narrative). Proposing these four models as a heuristic to help with analysis of the overlap between our real and imagined worlds, Abraham and Jayemanne observe that games engage with different aspects and combinations of these human-environmental modes at different times, with the player's experience of virtual nature shaped by a game's shifting emphasis on various ecological dynamics.

Extending the case that videogames produce arguments about the relationship between humans and nature, Melissa Bianchi (2014) foregrounds the role of gamemakers and, importantly, the material conditions surrounding game development. Bianchi argues that while the cultural context and the intentions of game designers undoubtedly play a significant role in the ideological framing of nature within

their texts, virtual representations of ecology are “inherently bound to and governed by material limitations (i.e., processing speed, memory, graphical capabilities, keyboard and mouse controls, etc)” that shape game design (2014, p. 210). Entangled with the cultural and technological dimensions of our own world, videogames have the power to communicate both the opportunities and perils of human–environmental relations because of their capacity to connect player attitudes and actions to outcomes in rule-based simulatory systems (Backe, 2017), as well as through the imaginative appeal of aesthetics and visual representation (Abraham, 2018a) and their capacity to model futures (op de Beke, 2021). Scholars have sought to illustrate a diverse array of ecological dynamics in videogames through close analysis. Examples include the industrial capitalistic impulses underlying survival crafting games (Abraham, 2018b), the way that the environmental god game genre juxtaposes apparent ecological relationality with an inexorable impetus for expansionism and progress (op de Beke, 2020) or the oscillation between anthropocentric mastery and natural wonder in the *theHunter* series (Felczak, 2020). Other work emblematic of ecocritical game studies considers the way that plants and gardens in virtual postapocalyptic worlds can structure player engagements with ideas of the posthuman (Bianchi, 2024) and the particular temporal logics at work in oil-themed games (op de Beke, 2024).

What unites the analytical approaches I have outlined is an emphasis on the ecocritical potential of the videogame object itself. It is the game, or specific aspects of its design, that represents and simulates nature, and it is the game that invites and affords the player’s interaction with ecologies. As such, according to the ecocritical models dominating game studies, the ecological dynamics encountered in play are a product of games and often (but not always) the intentions of those who make those games. To be clear, these game-centric approaches to understanding virtual ecologies are valuable, and I have no desire to diminish their contribution to ecocritical game studies. However, through a common emphasis on the ecocriticality of the videogame text, and the text’s possible impact upon the player, the act of *play* and its contribution to meaning-making appears overlooked. In response to this gap, I seek to re-orient focus toward the *emergent* ecological dynamics, relations and meanings that develop amidst the unpredictability and contingency of moments of play.

## The ecocriticality of play

I join a handful of scholars who have recently de-emphasised *textual* content in order to centre ecocritical analysis upon the various elements of videogame production and play. Benjamin Nicoll (2023), for example, shifts focus to the player’s subconscious in a Lacanian reading of play that suggests videogames can reveal the way we derive *jouissance*—unconscious enjoyment—from our own complicity in Earth’s deteriorating ecological conditions. Paolo Ruffino (2020) asks us to consider what we might learn from the processes that arise when games are created and played

by non-human actors or processes. Alenda Chang (2024) considers the ecocritical potential of sustainability oriented online communities for game developers. Benjamin Abraham (2022) urges game scholars, makers and players alike to turn their attention to the material provenance and impact of games (in terms of dangerous resource extraction, voracious labour exploitation, toxic pollution and waste) and to decarbonise the industry as a matter of urgency. Developing Abraham's provocation further, Emil Hammar et al. (2023) call for games scholars to more accurately address the underlying conditions of imperialism, racism, militarism, fascism and patriarchy that drive a number of societal issues (including climate crisis).

In this article I outline an analytical approach that similarly destabilises the assumed centrality (to ecocritical enquiry) of the core videogame text and the determinations of its developers and development process. My approach is in many ways consonant with earlier theorizations of play and its potential in meaning-making. Consider, for example, Miguel Sicart's (2011) rejoinder to proceduralist approaches to game studies. Resisting (then-ascendant) tendencies to celebrate the apparent capacity of games to step players through ideological perspectives procedurally, and impress predetermined meanings upon their audiences, Sicart crucially insists that play is more than mere performance of a developer's intentions. Instead, the "player who wants to play" is situated centrally, because play "does not only include the logics of the game - it also includes the values of the player" (2011, p. np), their politics, their social being, and their body. Play is understood best not as procedural argumentation, but as an act of unpredictable player "expression, guided through rules, but still free, productive [and] creative" (Sicart, 2011, p. np). Meaning-making in play, in this now-influential account, is fundamentally configurative and open.

Melissa Bianchi (2019), meanwhile, develops a similar concept of play specifically oriented toward ecocritical analysis. *Eco*play, developed out of earlier rhetorical analytical perspectives, urges analysis how the experience of play shapes and formulates concepts of environment and ecologies for players. Bianchi emphasizes the multimodal qualities of games and the place of play within "broader rhetorical ecosystems" (Bianchi, 2019, p. 19), privileging the contributions to meaning-making made by players, players' values and experiences, and players' abilities to map connections between the game at hand and other mediated encounters with ecology or ecological messaging. As such, *eco*play offers insight into "the relations (or interplay) between gameplay and other rhetorical modes and media" and the ways these "elements inform and interact with one another" (Bianchi, 2019, p. 19). More recently Sicart (2022) similarly expands his explanations of emergent, player-driven meaning-making to incorporate the interrelationship between players and the countless other actors, entities and agencies that surround us. Sicart, like Bianchi, reminds us that the act of play should be understood as a "relational practice of being in the world, characterized by the creation, recreation, and appropriation of relations between agents and things and mediated by materialities" (2022, p. 143).

Together, Sicart and Bianchi's approaches help establish the value of analysing play experiences—rather than just games—ecocritically. They call attention, again, to the limitations of narrowly game-centric approaches to understanding the meaning-making associated with play. I follow this conceptual thread and turn instead to the contingent phenomena that emerge as part of everyday player experiences of gameplay and offer a play-centric and player-centric approach to the analysis of ecological dynamics. Such an approach, as I will go on to argue, offers a distinctive form of access to comprehend the materiality of videogames and their interconnection with other actors and entities, and can make legible players' own revelations of the assemblages of play. Guided, in part, by the limited scholarship available directly addressing player-created paratexts, I focus my attention on the potential for such artefacts to illustrate and manifest emergent ecocritical experiences characterised by revelations of *entanglement*, the development of *ecological awareness*, and the fostering of sensations of *affect*. This, of course, is not to say that there are not other interesting, rich and surprising types of emergent player experiences with ecocriticality. Rather, as I outline in the article's conclusion, ecocritical game studies researchers are presented with the exciting—and urgent—chance to further explicate players' situated encounters with ecologies and ecological meaning.

## Locating the lived experiences of play

My argument that some capacity for ecocritical meaning of videogames is found in emergent ecological dynamics, which develop out of the ephemeral and transitory experiences of play rather than solely from the textual content of games, is grounded in two important phenomenological attributes of these media. Firstly, that videogames, their players and the contexts surrounding their production and play are best understood as a form of assemblage. Assemblage thinking encourages us to look beyond game texts themselves for the material, political, social and cultural meaning that might circulate through play. Secondly, I employ the concepts of emergence and emergent meaning which outline how games draw on their broader assemblages, as well as the inherent novelty and unpredictability of complex computing systems, to generate play experiences not anticipated or intended by game makers. With its foundations in assemblage and emergence, the concept of emergent ecological dynamics offers a way to think about the lived experience of playing with ecologies, and ecological meaning, in videogames.

Assemblage thinking is an important starting point for an understanding of emergent ecological dynamics. It is not a new claim to suggest that videogames—and in particular the complex relationship between videogames, their players, and the technologies that sustain them—should be considered assemblages (Keogh, 2018; Taylor, 2009) or an assemblage-like 'mangle' (Steinkuehler, 2006). As T.L. Taylor observes, defining and approaching a videogame narrowly as that which is found 'inside the box', so to speak, reveals "something about the given structure of the artifact or its imagined player" but precludes an understanding of the lived object that

it becomes once a user actually engages with it (2009, p. 332). Rather, a range of actors and practices inform and actively contribute to play experiences, including technological systems and software, the material world, genre expectations, gaming communities, players' inner lives, their cultural contexts, and institutional structures, and these must be acknowledged (2009, p. 332). Brendan Keogh (2018), in describing the 'embodied textuality' of digital gameplay, argues for a reflexive view of the player and the game system as co-constitutive. Playing a videogame is thus a "coming-together", not of "preexisting, separate, distinct subjects or objects", but "as a cybernetic assemblage of human body and non-human body across actual and virtual worlds" (Keogh, 2018, p. 34). Distributed across the various cognitive, material, cultural, social and political domains alluded to by Taylor, the assemblage of play is "a multiplicity, a spatiotemporally contingent and situated coming-together" of actors, signs and practices (Andiloro, 2023, p. 563) that is at once "intimate, unknowable, ironic, and monstrous" (Ruffino, 2020, p. 15). Play, in this view, is characterised by a dynamic of constant negotiations between the various human and non-human actors assembled (Chang, 2019, p. 20).

Thinking about videogames and game experiences as forms of assemblage for ecocriticism implies that our attention *must* be drawn beyond the boundaries of the game text. Assemblage offers an opportunity to locate and analyse constituent elements of virtual ecologies in more fluid and situated ways. It is a mode of thinking that highlights "the agency of the materials themselves as processes within assemblages" (McFarlane, 2011, p. 221), as well as particular tendencies and dispositions—either manifest as a potential, or an actual expression—of the various actors arranged within an assemblage (DeLanda, 2016, p. 108). The ambit of this distributed motivation and capacity for action includes the shaping of ecological dynamics within the play experience. While videogames, and their creators, certainly take centre-stage in the assemblages we might consider from an ecocritical perspective, they do not determine alone the nature of players' encounters with environments and ecologies. From an individual player's history and memories of interactions with different gameworlds, to the stories and images they might have encountered while scrolling through an online forum related to the game, to the material experience of their handling of their game console's physical hardware, and even to the influence of the weather outside the window, an array of actors beyond the game text have the potential to define virtual ecologies.

Examining videogame assemblages from an ecocritical perspective also invites particular consideration of the material inheritance and impact of digital play. The material components of the assemblages that make up digital media mean that "media cultural objects and information technology have an intimate connection with the soil, the air and nature as a concrete, temporal reality" (Hertz & Parikka, 2012, p. 429). While an "illusion of immateriality" (encouraged by the industries that produce and capitalise upon computing hardware) has long shaped discourse about and perceptions of digital media as "otherworldly and mystical" (Watson, 2021, p. 3), com-

puting devices, clouds, networks, software production and communication infrastructures all carry with them a profound material inheritance from our Earth. By pursuing what Jussi Parikka describes as the ‘geology of media’, we can begin to untangle the complex ways in which “digital culture starts in the depths and deep times of the planet” (2015, p. 58) and the ways in which our media and planetary resources are caught in a co-constitutive double-bind (Parikka, 2015, pp. 12–13). It is, of course, an asymmetric boundedness, where the industrial processes that underpin the production, distribution and connectivity of media and computing demand resource extraction, fabrication processes, the burning of fossil fuels, toxic pollution, labour exploitation and the endless accumulation of electronic waste (Abraham, 2022; Parikka, 2016; Watson, 2021).

David Beer observes that an assemblage approach allows us to open up complex entanglements of bodies, technologies and culture, and to “unravel a materially situated context to the analysis” of the various elements of these arrangements (2013, p. 36). The urgency of adopting such materially grounded analysis in videogames research is summarised by Thomas Apperley and Darshana Jayemanne (2012) in their overview of game studies’ ‘material turn’. The authors foreground the “stubbornness” of material realities to digital phenomena and media (2012, p. 7) and call for a “crucial re-imagining” that sites games firmly within their “material contexts across different scales and registers: the machine, the body and the situations of play” (2012, p. 5). Melissa Bianchi (2017) and Marco Caracciolo (2021), in ecocritical analyses, have each explored how videogames’ narratives, aesthetics and mechanics can foster ecological awareness through nonhuman-oriented experiences that expose, in different ways, the layers of assemblage and entanglement surrounding players. By continuing to find ways to centre ecocritical analysis on the assemblages of play—including the material dimensions of these arrangements—we are not only able to trace the manifold ways in which videogame meaning and experience is shaped beyond the design of the core game text, but we can also trace how our planet’s own ecological and geological resources come to reside within and influence play.

Out of the manifold assemblages that make up play emerge lived experiences for players. These experiences carry with them meaning, which while *centred* around the player’s encounter with the representational and interactive content of a videogame text, does not always entirely or solely reflect what is contained within that central text. Thinking about the phenomenon of *emergence* helps to explain the dynamic and sometimes unpredictable meanings attached to players’ lived experiences with videogames. Emergence is rooted in scientific thought at the end of the nineteenth century, and George Henry Lewes’ (1891) writing on the topic establishes some of the phenomenon’s key tenets. Lewes, observing organic systems found in nature, describes a “qualitative novelty” produced in some systems, where the material output of these systems is “unlike its components insofar as these are incommensurable, and it cannot be reduced to their sum or their difference” (1891, p. 369). Rather than the products of the natural systems in question being *resultant* (i.e.,

quantitatively predictable), Lewes observed them as *emergent* (i.e., novel and unanticipated). Emergence came to be paired with the analysis of complex systems, within which macro-level phenomena are dependent upon their underlying, intertwined processes, but are also autonomous from these micro-level interactions to the extent that, ultimately, “the global behaviour has no simple explanation” (Bedau, 2008, p. 160). Emergence, therefore, is a concept that explains the generative engine residing at the heart of complex systems. Rules, processes and actors combine in a system and unpredictable, novel and complex outcomes emerge.

Game studies is no stranger to theories of emergence. Katie Salen and Eric Zimmerman describe videogames as complex and emergent systems, and note that simply combining a game’s rules together does not illustrate the experience of play (2003, pp. 163–164). Emergence is the “primordial structure” of the videogame according to Jesper Juul, who points out that the play of any text by an actual user yields countless potential experiential variations (2005, p. 73). In videogames, emergent narratives are encounters with story and meaning that “are not pre-structured or pre-programmed, taking shape through the game play” (Jenkins, 2004, p. 128), and which “come into being because of the systemic nature of videogames and their variable constituents” and the interactions between those constituent components (May, 2021, p. 21). Fuelled as they are by the complexity of the assemblages that make up play (which are, in effect, themselves systems), the experiences and meanings that arise out of videogames are emergent. Actors distributed across the material, social, political and cultural assemblages of games interact and exercise their agency in fluid and unpredictable ways. In concert with one another, theories of assemblage and of emergence provide, therefore, the ideal basis for thinking about how ecological meaning might develop during play.

## Tracing emergent meaning

I have sought to establish that, out of the assemblages that comprise games and play, unanticipated and transient textual encounters emerge. In these emergent experiences we might find, among other things, expressions of ecologies and ecological relations. However, other than through our own scholarly play, how do we gain access to these ephemeral, transitory phenomena? As a method for tracing emergent ecological methods, I turn to player-created paratexts—game-related digital ephemera including discussion posts, gameplay videos, screenshots, fan art, stories and the like—as artefacts that capture, preserve and make encounters with emergent meaning legible to others. The concept of the ‘paratext’ is well established in literary studies, having been introduced by Gérard Genette (1997) to account for the elements of a publication that surround and shape a reader’s approach to and interpretation of a core text (its cover, preface, illustrations, and so on). While Genette’s own focus was limited to the printed book, the concept has found productive application across a wide range of media forms, including videogames (Gray, 2010).

While some scholars identify an ongoing tension between the apparent rigidity of Genette's original formulations and the embrace of 'paratext' within the studies of different media and cultural phenomena, I join those who pursue the generative potential of the broader application of the idea of 'paratext'. Such perspectives recognise that while we might address media forms different to those prized by Genette, such analyses "continue to function in the spirit of his analysis" (McCracken, 2013, p. 106) and, in overlooking narrow classificatory matters, a productive "treasure trove of questions in Genette's spirit" is opened up (Birke & Christ, 2013, p. 65). Game studies is particularly indebted to Mia Consalvo (2007) for the popularisation of the 'paratext' concept within the field, as her landmark work drew attention to both the industrial, officially sanctioned paratexts (including advertisements, game manuals and strategy guides) and those unofficial works created by users (in the forms of walkthroughs, reviews, message-board posts, and so on). In the context of digital games, paratexts not only *surround* a main text, but extend the textual presence of a game across countless other artefacts, shared in printed, audiovisual and digital forms between players, developers and critics. The varied arrangements of paratexts consumed by players combine to "provide challenges to sedimented meanings" found—or designed—within a game (Consalvo, 2007, p. 182), and actively "transform and condition how the audience interprets the main text" (Fernández-Vara, 2014, p. 25). Esther Wright (2022), writing about developer-created paratexts (but nonetheless making a point that is equally applicable to user-created paratexts), observes that analysing paratextual material is essential to comprehending the meaning-making and ideological work undertaken through games.

Crucially, for the concept of emergent ecological dynamics, paratexts also offer a means to retrace what Souvik Mukherjee calls the "ephemeral text" (2015, p. 103) or "'disappearing' game narrative" (2015, p. 104) that arises from play. This is the emergent experience of a game text I have already described; it is fleeting, it only exists as long as the player is engaged in the play sessions, and it can change dramatically each time the game is played. Paratexts in which players record or reflect on their experience of play can reveal the ephemerality of play. Players themselves capture the meaning of their particular assemblages of play through diverse artefacts, which include 'Let's Play' videos, after-action reports, screenshot, written stories and fan art (Mukherjee, 2015, p. 104). In efforts to reconstruct emergent play experiences (by players and scholars alike), the paratext "artefact becomes the key piece of evidence – the end result of an experience, or series of experiences, within a game text" (May, 2021, p. 7). Understood as artefacts that render emergent experiences visible and legible to others, paratexts have a powerful role to play in focusing our attention on the lived experiences of play. As Dan Golding has argued, videogame scholarship has frequently exhibited a desire "to regard the videogame as a whole ... to stand above the videogame, outside of its grasp" and construct totalising and universalising accounts of games and the experiences of their play (2013, p. 30). This account recalls the text-centric emphasis I have noted as existing in extant ecocritical game studies research, and I therefore enthusiastically embrace Golding's call to move

away from the allure of finite, stable and isolatable notions of the textuality of videogames, and instead turn towards imperfect, incomplete and contingent expressions and impressions of play that reflect the direct and lived experiences of players.

Not only do paratexts capture the otherwise transient emergent experiences of story and meaning players have within games, but they also bear a particular affinity with assemblages. As Dorothee Birke and Birte Christ explain with respect to paratexts across a range of media, paratexts help to bring into view the historical, social, production and reception conditions that surround texts, raising questions about “how readings are circumscribed by factors that are usually seen as marginal (or even external) to the text” (2013, p. 66). Jan Švelch (2020) urges a shift away from the use of the term ‘paratext’ and the association of the concept with individual cultural artefacts that are perceived as ancillary to a ‘core’ text, and looking instead towards a quality of ‘paratextuality’ that texts might exhibit. This is in part because speaking of ‘paratextuality’ as a functional attribute emphasises the “link between a text and the surrounding socio-historical reality” (Švelch, 2020). Extending this analysis, Nick Webber (2023) emphasises the potential for refocusing our attention on the connections and links that paratexts and paratextuality draw upon. To Webber, who is “unconvinced that paratextuality is a quality of a cultural artefact in itself”, it is the *relational* quality of ‘paratextuality’ that should be prized, because “there is no paratextuality in isolation” (2023, p. 82). In this view, it is the relationships between cultures, cultural artefacts and texts that are paratextual. Through this relational quality, cultures, cultural artefacts and texts foster, influence and capture meaning and emergent experience in one another, and reveal to us the “network of things being connected with yet distinctly not the text” (Seiwald & Vollans, 2023, p. 3).

Another way of understanding recent scholarly efforts to refocus discussion on ‘paratextuality’ and connectivity is to see them as highlighting the intimate connection between the ‘paratext’ concept and videogame assemblages more broadly. Paratextuality is a way of thinking about the countless connections between textual, cultural, social, material and political actors in the assemblage of play and how these linkages and interactions generate meaning within play. I embrace this focus on paratextual relationships and, ultimately, agree with Švelch and Webber’s arguments that we must be careful not to suggest, through the use of the term ‘paratext’, a rigid textual hierarchy that places user-created texts as subordinate to a ‘core’ text. However—and this may seem paradoxical—I also continue to use the term ‘paratext’ to describe user-created textual artefacts that capture or reflect on experiences of play. By grounding my discussion in the notions of assemblage and emergence I hope to be clear that I construct no hierarchy: texts, paratexts, cultures and other conditions surrounding play jostle equally for attention and influence in the production of play experiences and textuality. As Jane Bennett observes, assemblages are not governed or hierarchised; no individual element or material within one “has sufficient competence to determine consistently the trajectory or impact of the group” (2010, p. 24). In methodological terms, my suggestion is that ‘paratextuality’ allows

a keen focus on the connections between emergent player experiences and elements of the assemblage of play, and 'paratext' affords a term to identify the textual artefacts created by those players as a consequence of that assemblage.

## What player paratexts reveal

Amitav Ghosh, writing about the relationship between literary fiction and the Anthropocene, argues that in an era characterised by the violence of climate change, our everyday life is permeated by "inconceivably vast forces that have now become impossible to exclude, even from texts" (2016, p. 63). Taking an approach that draws upon ecocritical game studies, media materialism and assemblage thinking, I propose a similar case. Videogames are entangled and intertwined with the material conditions of their production, distribution and play, as well as other surrounding social, political and cultural influences, such that they are permeated by the conditions of the Anthropocene. Games carry with them their planetary inheritance, irrespective of whether their developers intend for them to speak of, or demonstrate, ecological and environmental relations. The capacity of videogames to foster emergent experiences for players mirrors the lived experience of an era where "forces of unthinkable magnitude" combine to create "unbearably intimate connections over vast gaps in time and space" (Ghosh, 2016, p. 63). As games and their assemblages are set into motion through play, spatial and temporal distances collapse in unpredictable ways. Players are imbricated with ecologies and ecological dynamics that reside in, and emerge from, different actors across these assemblages. Paratexts become crucially important to understanding these dynamic and ephemeral experiences largely overlooked by existing ecocritical frameworks. Paratexts capture and reveal traces of the play experience, acting as a kind of roadmap for scholars and players alike to retrace unexpected ecological encounters with games. To elaborate on the ecocritical function of player-created paratexts, I will explore three characteristics of emergent ecological dynamics that such artefacts are able to capture and manifest particularly acutely: qualities of *entanglement*, *awareness* and *affect*.

### Entanglement

Player-created paratexts have the capacity to reveal the entanglement of play with surrounding cultural, political and ideological conditions. An example can be found in Tom Apperley's (2018) investigation of the player communities surrounding the historical strategy games *Europa Universalis II* and *Victoria: Empire Under the Sun*. Apperley finds that paratexts created and shared within these communities demonstrate players' emergent encounters with histories that exceed and modify the representations of the past encoded within the game texts. Players' experiences of history are not tethered to the 'official' accounts presented by the games; rather, they are highly contextual, blending the games' historical narratives with individual and community understandings of past and present, as well as local and global cultures. By actively negotiating these variables, players develop 'counterfactual' accounts of

history that arise from their play. These counterfactual imaginaries are then “made tangible through the production and sharing of paratexts that remix the official history of the games to include other perspectives” external to those found within the games (Apperley, 2018, p. 1).

In considering ecological dynamics within games directly, Ben Hall and I (May & Hall, 2023) build on Apperley’s perspective through analysis of paratexts created by players of the city-building simulation *Cities: Skylines*. We consider popular trends within the game’s player communities to pursue the development of ecocentric cities, developed in sympathy with their natural surrounds and which exhibit qualities of sustainability and eco-consciousness across different aspects of their urban infrastructures (including energy generation, waste disposal, housing design, and so on). Our analysis of a range of user-created paratexts demonstrates that the ecocritical meaning associated with such efforts at ecocentric play is inevitably (and often unwittingly) intertwined with currents of Anthropocentric power and discourse. Drawing on architectural and aesthetic histories, Hall and I observe that seemingly eco-conscious urban design decisions made by users come to “unwittingly reflect and sustain anthropogenic relationships with the land” (May & Hall, 2023, p. 12), that industrial capitalism inflects players’ relations with natural resources (2023, p. 15), and that a contemporary logic of cybernetics drives players to optimise and maximise the ecological violence of human settlement (2023, p. 17). Players’ attempts to build virtual cities summon up entanglements that lie far beyond the game itself, within the conditions of the Anthropocene and its underlying ideology and economic order.

Both these examples reinforce the fact that games are able to cultivate experiences for players that diverge from the accounts and paradigms contained, and intended, by game texts themselves, whether historical or ecological. These emergent and divergent experiences and imaginaries draw in elements of material and cultural ideological assemblage that surround the player. It is paratexts that allow such situated entanglements to be recorded, preserved and consumed by others. For Ben Hall and I, player paratexts are thus uniquely positioned to illustrate the “porosity of both our lived material conditions and the digital game objects we play” by capturing examples of the ecological dynamics of the Anthropocene actively shaping in-game ecological relations pursued by players (May & Hall, 2023, p. 18). Apperley suggests, similarly, that while historical strategy games are limited in their capacity, as texts, to simultaneously present, destabilise and re-negotiate histories, they afford the conditions for players to palpably explore these possibilities alongside their own “highly localized” knowledge of the world, cultures and dominant paradigms (2018, p. 16). Paratexts then allow users to remediate these play experiences, laden with new, unanticipated and entangled meaning, for others to consume (2018, p. 3). This demonstration of the entanglement of play with its surrounding assemblages is the first key contribution made by paratexts to the methodological project of uncovering emergent ecological dynamics at work.

## Awareness

A second important aspect of the relationship between paratexts and emergent ecological dynamics is the capacity of user-created artefacts to illustrate modes of ecological awareness among players and play communities. This is a characteristic that builds upon the tendency previously described for paratexts to record and represent entanglements with realities beyond the game, but re-orient focus from the general play experience to the attitudes and inclinations of players themselves. Nicolle Lamerichs (2024) offers an example in a study of various sustainable fandom practices that surround games. Addressing 'ecomodding' (which they define as user-created technical modifications to games that enhance their focus on, or sympathy toward, ecologies and environments), 'ecocosplay' (sustainable production practices in the material aspects of cosplay) and green board gaming ('eco-friendly' practices within analogue game design and consumption), Lamerichs outlines increasingly popular modes of "responsible consumption" that allow players to infuse games and play with personal values related to sustainability (2024, p. 543). While material practices figure centrally in these forms of sustainable fandom, discursive acts are equally significant. Sustainable practices are captured and disseminated in paratextual form, allowing players to engage in "critical discourse around companies, knowledge sharing around production and consumption" and to grow a culture of "greening of one's own fan activities" (Lamerichs, 2024, p. 544).

The emergent inflection of videogame experiences with players' recognition of the catastrophic ecological conditions of our era is apparent in further paratext-focused studies. Gabrielle Trepanier-Jobin et al. (2024) trace the diversity of player responses to the ecocritical messages contained within the underwater adventure game *ABZÛ*. The authors gathered over 2000 relevant user posts from a range of discussion fora, games journalism websites and social media platforms. These paratextual artefacts reveal that posts, paratexts, and discussions related to users' ecocritical experiences of play enable online play communities to act as "spaces where collective ecological awareness can develop", as players share their different experiences and interpretations of the environmental messages apparent within *ABZÛ* (Trepanier-Jobin et al., 2024, p. 311). Trepanier-Jobin et al. make the important observation that while those players of *ABZÛ* studied in their chosen communities clearly engage in the production of paratexts in order to record their engagements with ecological dynamics, these communities "rarely create a coherent or reliable response" (2024, p. 328). Instead, a striking diversity of player responses are witnessed, as each user—I would suggest—draws on their particular assemblage of play to inform their encounter with in-game ecologies. This is a finding echoed in one more example: Ben Hall's and my (May & Hall, 2024) paratext-focused examination of *Battlefield 2042*'s ecocritical potential. Through paratexts related to this multiplayer first-person shooter, shared in three different player communities, we identify a multiplicity of player encounters with ecological thought (a form of ecological awareness that relates to the revelation of interconnectedness and entanglement), ranging from resonance and agreement to abjection and outright rejection.

Lamerichs also draws attention to the “ripple effect” of user-created paratexts: that ideas of sustainability and sustainable play can spread across play communities “through different texts, through streams and memes, reaching new audiences”, who might not otherwise be prompted to consider such approaches to play (2024, p. 547). As an example, Lamerichs considers how the ‘Eco Lifestyle’ expansion for the game *The Sims 4* stimulates the production of paratexts by players who offer advice on minimising game characters’ virtual carbon footprints, which in turn motivates users to discuss their own lifestyles and choices outside the game. In the idea of ecological ‘awareness’ that I associate with paratexts, I therefore suggest a double-meaning. On the one hand, paratexts can capture the play-bound emergence of experiences that are characterised by recognition of, and reflection upon, ecologies and ecological dynamics. On the other hand, paratexts are a portable artefact designed to be uploaded, posted, shared, recommended and ultimately consumed by other players. This means that paratexts, and the players who create them, are able to *share* emergent ecological dynamics with one another. ‘Awareness’ speaks not only to the moments of ecological revelation that play might encourage, but also to the possibilities for awareness of other players’ situated experiences—which, without paratexts, would be individual, ephemeral and invisible encounters with the eco-material assemblages of play.

## **Affect**

A third notable strength of paratexts is their potential for communicating experiences of *affect* that might arise in players’ encounters with emergent ecological dynamics. Players’ affective responses to what unfolds during their interactions with a videogame parallel in many ways the contingent nature of the play experience itself. Affective states, after all, emerge in unpredictable and dynamic ways; they are transitory (coming into view only briefly to inform emotional responses, thought, decision-making and action) and draw on the dimensions of personality, experience, memory, culture and emotion that make up the assemblage of a particular user’s subjectivity. As a transitory state, affect is itself ephemeral. When layered on top of one form of the ephemerality of the game experience itself, we might understand players’ affective responses as being recursively ephemeral (and doubly difficult to capture and analyse). The paratext, whether in the form of a written account of play, an evocative screenshot, or a richly layered piece of fan art (to name only a few examples), is positioned to capture affective structures in a ‘snapshot’ of the situated moment of play it provides. In an earlier example, Marcus Carter (2015) considers the creative work of the various user-propagandists affiliated with different player alliances and factions in the massively multiplayer online role-playing game *EVE Online*. Amidst the heady context of long and impassioned player-versus-player wars that are waged across *EVE Online*’s virtual galaxies, a number of players are shown in Carter’s study dedicated to the craft of virtual, paratextual propaganda. Images are produced, and shared in online fora, with users “leveraging broader Internet

memes; 'nerd' tropes; in-jokes; game history; and racial, cultural, and sexist stereotypes" in order to "bolster support and demoralize opponents" (Carter, 2015, p. 311). Either by appealing to their comrades' morale or assaulting the confidence of opponents, these paratexts and their creators are seen as hoping to elicit affective responses from other players. Carter details strategies of aesthetic remediation, historical parallelism and popular cultural mimicry that are consciously deployed in efforts to capitalise upon, and manipulate, players' places within a "complex assemblage of social, historical, and cultural contexts" to provoke particular modes of feeling (2015, p. 335).

This capacity of paratexts to evoke affective states is evident in Rainforest Scully-Blaker's (2024) consideration of the */r/patientgamers* community on Reddit (a community dedicated to those who return to play videogame texts long after their original dates of release). Investigating whether the community's distinctive approach to play might be read as an act of resistance to the neoliberal instrumentalisation of leisure time, Scully-Blaker finds that these users' paratexts demonstrate their entanglement in particular affective structures. Namely, players capture their desires for forms of comfort (often sought and seemingly never quite found through contemporary play experiences) and bittersweet nostalgia (for lost childhoods and times of 'innocence', where play featured more centrally in their lives). In an auto-ethnographic reading of the western-themed action-adventure game *Red Dead Redemption II*, Paolo Ruffino (2022) charts his engagement with user-created paratexts as he comes to terms with a significant narrative development during the game (the revelation of terminal illness suffered by the player's own character) that for players frustrates their sense of agency over story, self and environment. As the author becomes immersed in the game's online communities, and other users' attempts to respond to and (futilely) overcome this critical and agentially disruptive turning point in the game, they note that affect is the defining function of the paratexts analysed. Ruffino highlights a "performative potential" underlying paratexts created by players, which upon consumption by others can "bring about affective states that open the possibilities of the text and on the political potential of these openings" (2022, p. 348). The paratext, in this reading, is an illocutionary artefact. It might summon up states of feeling (anguish, helplessness, anger, mastery, resolution), which can then spur on refigurations of a player's own sense of the meaning of the game text, its world and its narrative.

## Conclusion

In this article I have put forward both a conceptual and a methodological intervention. Emergent ecological dynamics are a way of thinking about instances of ecological representation, relations and interaction that occur in videogames and which are not currently theorised by text-centric ecocritical models within game studies. Of course, it is not a new claim to suggest that players negotiate and perform their play in concert with the cybernetic systems of videogames, or the assemblages that

surround them, rather than the nature of play experiences being solely defined by texts. The specific contribution I hope to make here is highlighting the unanticipated, variable and situated ecocritical meaning that can emerge because of such assemblage, and how the immanent materiality of digital games means our present planetary conditions find their way into everyday play. In light of the compounding crises that defines the Anthropocene (or any other label one might apply to these fractious times), there is an urgent need to examine the manifold (and unconventional, with respect to the focuses taken within ecocriticism and the environmental humanities to date) ways in which ecological concepts and experiences are encountered today.

The idea of unpredictable and dynamic ecological dynamics that emerge in ever-changing individual play experiences also raises the question of how we—as scholars, and also as players—might access such ephemeral and transitory encounters. I have argued that paratexts act as vehicles for capturing and propagating these emergent experiences. Just as Bianchi (2017) and Caracciolo (2021) suggest that particular structures or aesthetics of play might offer revelations about our lived conditions of non-human kinship and ecological entanglement, emergent ecological dynamics in videogames similarly draw upon and illustrate the interconnection between players and their games, and the different actors, entities and agencies that make up our worlds. User-created paratexts not only bear the potential to capture the emergent ecocritical meanings that emerge from these interconnections, but can also render legible players' own revelations of the material and cultural assemblages of play and of ecologies themselves.

In detailing the potential for paratexts to grant insight into the fleeting ecologies summoned through play, I have highlighted the capacity of paratexts to illustrate entanglement, communicate awareness and conjure affect. This is not to suggest that these are the *only* qualities of such artefacts that we might pay attention to as we consider the ecological dynamics that emerge from the shifting assemblages of play. Rather, these are paratextual properties that are particularly helpful to an ecocritical analysis of games: entanglement, because our intertwining with the surrounding material conditions of our planet is the fundament of human–nature relations; awareness, because its development is central to the projects of hope, optimism and change amid ecological crises; and affect, because in an age where we are overwhelmed everyday by the symptoms of Anthropocentric devastation, visceral states of feeling offer powerful means to cut through catastrophe, confusion and powerlessness.

I have also drawn attention to the three qualities of entanglement, awareness and affect because of their evidence in limited existing paratextual research. Continuing the theorisation of the emergent ecological dynamics of videogames could well illustrate various other strengths of paratextual artefacts in the preservation and sharing of these ephemeral moments of ecocriticality produced by the assemblages of play. The methodological provocation I hope to have presented in this article is that because of the nature of the assemblage of play, our 'real world' ecologies and

material conditions are latent within videogame texts and play cultures. These conditions re-emerge through play in unanticipated and novel ways and, crucially, often in ways that were not designed or envisioned by game makers. By taking up the task of examining (in more detail and across more game texts, genres and player communities) the creative artefacts produced by players as a consequence of play, game studies scholars might deepen understanding of how our ecological reality, and the conditions of a fractious Anthropocene era, permeates play. The concept of emergent ecological dynamics thus invites a new kind of ecomaterialist project within game studies, tracing the influence of the material on digital textualities by focusing not on videogames as texts, but on the emergent phenomena that characterise the situatedness of videogame experiences, phenomena which player paratexts grant unique access to.

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# **Curled Up With a Good Game**

## **A Study on Personality Traits and Game Motives of Cozy Game Players**

Rowan Daneels and Kato Maes

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# Curled Up With a Good Game

## A Survey Study on Personality Traits and Game Motives of Cozy Game Players

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### Abstract

Cozy games, risen in popularity since the COVID-19 pandemic, are generally characterized by their easy mechanics, prosocial narratives, lack of violence, and overall feelings of comfort, safety, abundance, and softness. While academic research primarily focuses on defining cozy games and exploring their impact during the pandemic, little is known about who plays them and why. Therefore, we conducted an online survey of 277 cozy game players, examining players' game motives and their Light and Dark Triad personality traits. Results show key reasons to play cozy games, including *moral self-reflection* (i.e., seeing cozy gameplay as a morally sensible activity), *agency* (i.e., having the freedom and control to make decisions and pursue actions according to players' own desires or goals), *escapism* (i.e., escaping from daily reality into a safe virtual environment), experiencing *eudaimonic emotions* (i.e., feeling moved, awe, and having elevating or heartwarming or feelings), and an interest in the game's *narrative*. Additionally, players scored significantly higher on Light Triad personality traits, with those scoring high on Humanism being more motivated by eudaimonic and social reasons. This study provides novel insights into the study of cozy games, the (eudaimonic) motives to play them, and cozy game players' personality traits.

### Keywords

Cozy games; eudaimonia; game motives; Light and Dark Triad; survey

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**The lights are dimmed** and you are curled up in your favorite chair. You start playing a game where you design your home, clean up your inherited farm, pack your belongings, climb mountains, or surf the oceans. Doing this, chances are high that you are playing a *cozy game*. Cozy games are characterized by feelings of comfort, empathy, meaningfulness, relaxation, safety, abundance, softness, and the absence of violence (Boudreau et al., 2025; Short et al., 2018; Wäppling et al., 2022; Waszkiewicz & Bakun, 2020). While this type of game has existed for some time (e.g., *The Sims*; Maxis, 2000), the term *cozy games* emerged only recently. Such games gained

popularity especially during the COVID-19 pandemic, as they allowed players to move to a peaceful parallel world where social interactions with others were still possible, temporarily escaping the harsh and lonely reality of the pandemic (Pearce et al., 2022). Even after the pandemic, the popularity of cozy games continues.

Although scholarship is limited, researchers have started examining cozy games alongside their growing player base. The main focus of this research is occupied with conceptualizing cozy games (Boudreau et al., 2025; Wäppling et al., 2022; Waszkiewicz & Bakun, 2020)—analyzing, for example, the *coziness* in this type of game (Andiloro, 2024; Simond & Klös, 2024)—and investigating what impact they had on players during the COVID-19 pandemic (Lewis et al., 2021; Pearce et al., 2022; Zhu, 2021). However, little is known about why players choose to play cozy games and whether their personality traits relate to their play motives for this particular game type.

Prior research has already distinguished plenty of reasons to play games, such as fun, competition, or as a pastime (De Grove et al., 2016; Scharkow et al., 2015; Sherry et al., 2006). Recently, Possler et al. (2024) determined that players are also motivated to experience meaningfulness, intense emotions, and self-reflection (i.e., eudaimonic experiences); all experiences that cozy games can elicit based on their characteristics (Wäppling et al., 2022; Waszkiewicz & Bakun, 2020). However, eudaimonia has mainly been studied as experiences during gameplay, not as motives before gameplay (Daneels et al., 2021, 2023). Therefore, by examining (eudaimonic) game motives for cozy games, the current study intends to contribute to this innovative line of research on eudaimonic gaming. Furthermore, players' personality traits have previously been studied in relation to game motives. For example, de Hesselde et al. (2021) found that personality traits from the Big Five model (i.e., openness, conscientiousness, extraversion, agreeableness, and neuroticism; McCrae & John, 1992) were related to specific gaming motives. However, personality traits of individuals playing cozy games and how these relate to players' game motives remain understudied. Therefore, this study aims to examine the motives behind players' selection of cozy games and determine whether players' personality traits relate to these motives. An online survey among 277 cozy game players was conducted to investigate this topic.

## Cozy games

Cozy games is a subjective term to describe all games that provoke a feeling of warmth, safety, and comfort among players (Boudreau et al., 2025; Wäppling et al., 2022; Waszkiewicz & Tyimińska, 2024). Short et al. (2018) referred to the *coziness* of these games as feelings of safety, abundance, and softness. Safety relates here to the absence of violent content present in many other (types of) digital games as well as the ability for players to play at their own pace. Abundance refers to Maslow's (1943) hierarchy of needs, where cozy games frequently offer players an abundance

of in-game food and energy (i.e., fulfilling basic needs). By relinquishing the need for survival, cozy games allow players to focus on higher-level needs such as self-realization and the initiation of deeper relationships (Wäppling et al., 2022; Waszkiewicz & Bakun, 2020). Finally, softness can be understood as the slow pace and achievable tasks in cozy games that induce calmness in players (Short et al., 2018). Boudreau (2024) recently framed this softness as a lack of challenge or 'demands', showing that cozy games typically present little to no challenges in terms of, for instance, complex input controls (physical demands) or difficult puzzle mechanics (cognitive demands).

Given that these defining elements involve subjective feelings that differ between individuals, meaning that any game can potentially be seen as a cozy game (de Pan & Bosman, 2024; Boudreau et al., 2025), cozy games are not considered a distinct game genre but rather a type or style of digital game (cf. recent research questioning the merit of genre labels in modern digital games due to their complexity and hybrid forms: Bowman et al., 2024). This relates to recent scholarship on the growing incorporation of *coziness* elements into traditionally more violent or non-cozy game types, such as horror games (Waszkiewicz, 2024), first-person shooters (Smith, 2024), open-world survival games (Gnat, 2024), and historical games (Vandewalle, 2025).

In addition to subjective feelings, cozy games often have several in-game features that, on their own, are not unique to cozy games but, when combined, set cozy games apart from other types of games (Boudreau et al., 2025; Campbell, 2022; Short et al., 2018; Wäppling et al., 2022; Waszkiewicz & Bakun, 2020; Waszkiewicz & Tymińska, 2024). These characteristics include stylized and less realistic graphics, soothing soundtracks, easy control and pause mechanics, narrative themes focusing on helping others and generosity, educational elements, social interactions with other players and non-playable characters (or NPCs), meaningful play (i.e., players practicing real-life skills in a safe environment as well as satisfying needs such as mastery, self-reflection and connectedness), and the absence of stereotypical task divisions (i.e., each player can perform any activity regardless of gender or other demographic characteristics, including cooking, fishing, harvesting, and falling in love). *Stardew Valley* (ConcernedApe, 2016) exemplifies this last feature, where a character's gender is virtually irrelevant to clothing options, physical characteristics, or romantic relationships.

Besides conceptualizing cozy games, scholarship has examined the growing popularity of cozy games through societal changes such as the COVID-19 pandemic. Negative events such as the pandemic evoke individuals' need for safety and social, positive, and heartwarming experiences; all of which can be provided by cozy games (Waszkiewicz & Bakun, 2020). For example, Pearce et al. (2022) showed through interviews that parents played *Animal Crossing: New Horizons* (Nintendo EPD, 2020) to cope with their pandemic-related stress. The game allowed players to psychologically detach from their stressful reality. It also provided relaxation, offered players feelings of accomplishment by achieving in-game goals, and gave players a sense of

control when playing. Cozy games also offered a virtual world during the pandemic, where players could find both spiritual comfort and the ability to maintain social contact with friends and family despite physical separation (Lewis et al., 2021; Pearce et al., 2022; Zhu, 2021). While research has investigated the role of cozy games during the pandemic, little is known about why players are motivated to play these games beyond the pandemic context.

## Digital gaming motives

Individuals' motives to play digital games have been studied extensively, mainly through three fundamental frameworks. Via the self-determination theory or SDT, prior research has shown that players' needs for competence, autonomy, and relatedness motivated their game use (Reinecke et al., 2012; Ryan et al., 2006). The social cognitive theory or SCT poses that players' motives are fueled by their expected outcomes of playing (e.g., performing well or playing to pass the time), which are based on players' own previous experiences, observations of other players' behavior, and their sense of self-efficacy (De Grove et al., 2016; van Rooij et al., 2017). Finally, the uses and gratifications theory or UGT assumes that players actively select games to satisfy their needs (similar to SDT), identifying a variety of motives such as escapism, fantasy, role-playing, social interaction, diversion, competition, and challenge (Scharnow et al., 2015; Sherry et al., 2006).

These theories have different explanatory mechanisms for game motivation but often identify similar reasons why people play games. This is shown in syntheses of existing game motivation research (Holl et al., 2024; Scharnow et al., 2015), coming up with a range of game motives such as wanting to play games to explore, for escapism, to make new friends or to experience a game's narrative. However, these overarching game motivation scales fail to include normative motives to play games, nor do they account for unconscious selection processes (cf. an often-made critique of the UGT active selection approach: Ruggiero, 2000); both aspects the Digital Games Motivation Scale or DGMS (De Grove et al., 2016) accounts for. The DGMS is a validated measurement instrument based on the SCT that consists of eight different dimensions to explain players' gaming motives:

1. Agency: playing games to do what you want to do.
2. Narrative: playing games to experience a convincing story and characters.
3. Escapism: playing games to temporarily escape reality.
4. Pastime: playing games to alleviate boredom and kill time.
5. Performance: playing games to make progress in the game.
6. Social: playing games to interact with others.

7. Moral self-reflection: playing games because you feel gaming as an activity is morally correct.
8. Habit: playing games as a routine.

Connecting these motives to cozy games' characteristics, escapism might be a key motive, as cozy games rarely include violence and provide players with a relaxing and safe virtual environment (Waszkiewicz & Bakun, 2020). This has previously been found in studies linking cozy game play to times of crises, such as the COVID-19 pandemic (e.g., Pearce et al., 2022). Moreover, similar to casual games, cozy games have a softness to them that translates into achievable tasks, easy mechanics, and overall less demanding player experiences (Boudreau, 2024; Short et al., 2018), making it easier to progress or perform in a game. Finally, cozy games often include deeper, meaningful storylines as well as the ability to socially interact with other players and/or NPCs (Boudreau et al., 2025; Wäppling et al., 2022; Waszkiewicz & Bakun, 2020), which was especially useful during Covid-19 (e.g., Pearce et al., 2022). This implies that individuals might be motivated to play these games for their narrative and for social reasons. This leads to the following hypotheses:

H1: Escapism will be an important motive (i.e., the average score of this motive will lie above the scale's midpoint) for cozy game players.

H2: Performance will be an important motive (i.e., the average score of this motive will lie above the scale's midpoint) for cozy game players.

H3: Experiencing the narrative will be an important motive (i.e., the average score of this motive will lie above the scale's midpoint) for cozy game players.

H4: Having social interactions will be an important motive (i.e., the average score of this motive will lie above the scale's midpoint) for cozy game players.

Interestingly, most of the DGMS motives have been connected both theoretically (Klimmt & Possler, 2021) and empirically (Possler et al., 2020) to hedonic game experiences of fun and enjoyment, implying these motives can be categorized as more hedonic-oriented motives. Considering that cozy games often include emotional narratives and meaningful play (Boudreau et al., 2025; Wäppling et al., 2022; Waszkiewicz & Bakun, 2020), it is also important to consider eudaimonic game motives, such as seeking meaningful experiences, intense emotions, and self-reflection (Possler et al., 2024).

### ***Hedonic and eudaimonic gaming motives***

Scholarship has traditionally explained media selection in terms of people seeking pleasure, fun, and enjoyment. Zillmann's mood management theory (1988), for example, suggested that individuals tend to choose fun media content to regulate negative emotions and stress. This focus on hedonic experiences of pleasure, comfort,

enjoyment, and positive emotions (Vorderer et al., 2004) is also prevalent in games research. Digital games, especially in their earliest forms, were mainly designed to elicit enjoyment and distraction among players (Ivory, 2016). More recently, scholars found that media entertainment can elicit more profound, deeper experiences that are personally meaningful, emotionally moving, or thought-provoking (Oliver & Bartsch, 2010). These experiences were categorized under the term *eudaimonia*, stemming from Aristotelian philosophy to describe experiences “reflecting virtue, excellence, the best within us, and the full development of our potential” (Huta & Waterman, 2014, p. 1427). Translating this to games, Daneels et al. (2021) showed that players can have eudaimonic experiences while playing games that can be described as personally meaningful, emotionally moving, self-reflecting, socially connecting, and nostalgic.

Beyond experiences, research has investigated eudaimonic reasons such as seeking meaning and personal growth when selecting different media entertainment, next to the prevalent hedonic motives (Oliver & Raney, 2011). However, recent literature reviews have shown that studies on eudaimonic reasons to play digital games specifically are virtually absent (Daneels et al., 2021; Holl et al., 2024), instead mainly examining eudaimonic game experiences (Daneels et al., 2021, 2023). To remedy this research gap, Possler et al. (2024) explored players’ eudaimonic gaming motives by extending a gaming motivation scale (Scharkow et al., 2015) with a set of eudaimonic motives based on eudaimonic game research (Daneels et al., 2021) and positive psychology (Huta & Waterman, 2014). Eudaimonic reasons included, for example, wanting to play a game to grow as a person, reflect on themselves, or experience something meaningful to players’ own lives (Possler et al., 2024).

These eudaimonic game motives have yet to be studied in a cozy game context. Through their characteristics, cozy games have the potential to elicit eudaimonic experiences, implying players might be likely to select this game type for eudaimonic reasons. For instance, having an abundance of in-game resources in cozy games allows players to focus not on survival but on higher-order needs such as self-realization, personal development, and the initiation of deeper relationships (Wäppling et al., 2022; Waszkiewicz & Bakun, 2020)—needs that have been linked to eudaimonia (Huta & Waterman, 2014). Similarly, the softness or slow pacing of cozy games can allow players to free up more time for self-reflection and engagement in more emotional elements of a cozy game’s story (Short et al., 2018). Additionally, poignant narrative themes focused on altruism and generosity as well as deeper social connections with other players and NPCs, which are key elements of cozy games (Short et al., 2018; Waszkiewicz & Bakun, 2020), have also been identified as key elicitors of eudaimonic game experiences (Daneels et al., 2020; Oliver et al., 2016). Based on these insights, we formulated the following hypothesis:

H5: Eudaimonia will be an important motive (i.e., the average score of this motive will lie above the scale’s midpoint) for cozy game players.

Beyond a focus on gaming motives, this study intends to investigate cozy gamers' personality traits and how they relate to their reasons for playing cozy games, similar to prior research on digital games in general (de Hesselle et al., 2021).

However, personality traits of individuals playing cozy games and how these relate to players' game motives remain understudied.

## Personality traits

Individuals' consistent ways of thinking, feeling, acting, and experiencing have been subsumed under the term personality (Neumann et al., 2020). Several approaches to personality traits exist. The most widely used perspective is the five-factor model of personality or Big Five model (McCrae & John, 1992). This model includes five personality traits of *openness to experience*, *conscientiousness*, *extraversion*, *agreeableness*, and *neuroticism*. Despite its frequent use, the Big Five model has faced considerable criticism regarding its many variations, problematically high correlations between traits, lack of theoretical support, and exclusion of other important traits (Eysenck, 1992; Grucza & Goldberg, 2007).

Therefore, we looked at more recently studied approaches of personality traits such as the Dark and Light Triad personality factors. These perspectives focus on how individuals are either self-centered or prosocial (Johnson, 2018). The Dark Triad is a set of three personality traits—Machiavellianism, narcissism, and psychopathy—that can be considered socially aversive, yet remain within the range of normal functioning (Paulhus & Williams, 2002). While Machiavellianism refers to a manipulative personality that lacks empathy and has no regard for morality, narcissism relates to having an excessive admiration for oneself that leads to feelings of uniqueness and superiority. A psychopathic personality, finally, connects to decreased levels of empathy, violent tendencies, and impulsiveness. In contrast, the Light Triad also consists of three personality characteristics—Kantianism, Humanism, and faith or belief in humanity—related to having a loving attitude toward others (Kaufman et al., 2019; Neumann et al., 2020). Kantianism includes the notion that other people are not a means to an end, contrary to Machiavellianism, and people should be treated with honesty and respect. Humanism is about appreciating and admiring others, while belief in humanity concerns the belief in the goodness of other people.

In a gaming context, prior research has shown that players' personality has an impact on their motives and experiences (de Hesselle et al., 2021; Tang et al., 2020). The Dark Triad has mainly been examined related to negative aspects of games, such as addiction and aggression. For example, Tang et al. (2020) showed that players with higher levels of Machiavellianism and psychopathy characteristics scored higher on indicators of gaming disorder or addiction. Additionally, all three Dark personality traits were related to gaming disorder when players were motivated to play

games for escapism or social reasons. Next to this, Jones (2019) found that a psychopathy personality predicted aggressive gaming behavior, while Machiavellianism predicted addictive gaming behavior. The Light Triad has been studied less in a gaming context. Mejía-Suazo et al. (2025), for instance, recently showed that there was no significant relation between individuals with Light Triad traits and internet gaming disorder. While the Big Five model has seen considerable attention in game research (de Hesselle et al., 2021), the current study will approach personality using the more recently formulated and less studied Dark and Light Triad personality traits, thereby expanding scholarship on personality within a gaming context.

The ability of cozy games to let players experience a slower or less-demanding style of play, a setting where players need to help others and show generosity without the need for violence, and the possibility to socially interact with other players and NPCs on a deeper level (Boudreau, 2024; Short et al., 2018; Wäppling et al., 2022; Waszkiewicz & Bakun, 2020) leads to believe that players who score higher on prosocial Light Triad personality traits are more appealed to this type of game. Therefore, we posed the following hypothesis:

H6: Cozy game players will score significantly higher on the Light Triad personality traits compared to the Dark Triad traits.

Furthermore, Kaufman et al. (2019) showed that individuals' motives to conduct a certain activity can be related to their Dark and Light Triad personality characteristics. In terms of Light Triad personality, prosocial individuals who seek to help other people strengthen their own self-confidence and self-awareness (Schwartz & Sendor, 1999), making them grow on a personal level and enabling them to experience eudaimonia (Huta & Waterman, 2014). Additionally, having an altruistic personality might lead to players wanting to experience social connectedness with other players or in-game characters, which is a eudaimonic experience (Daneels et al., 2021). Therefore, we expect that players with a Light Triad personality are inclined to play cozy games for eudaimonic motives such as self-realization and personal growth as well as for social motives (Possler et al., 2024). Finally, Tang et al. (2020) indicated that players' Dark Triad personality traits were connected to playing games for reasons of escapism and social interactions. This led us to the following hypotheses:

H7: Cozy game players' Light Triad personality traits will be positively related to their eudaimonic game motives (H7a) and social game motives (H7b).

H8: Cozy game players' Dark Triad personality traits will be positively related to their social game motives (H8a) and escapism game motives (H8b).

**Figure 1** provides a visual overview of the study's hypotheses, representing the hypothesized relationships between digital gaming motives, personality traits, and playing cozy games.

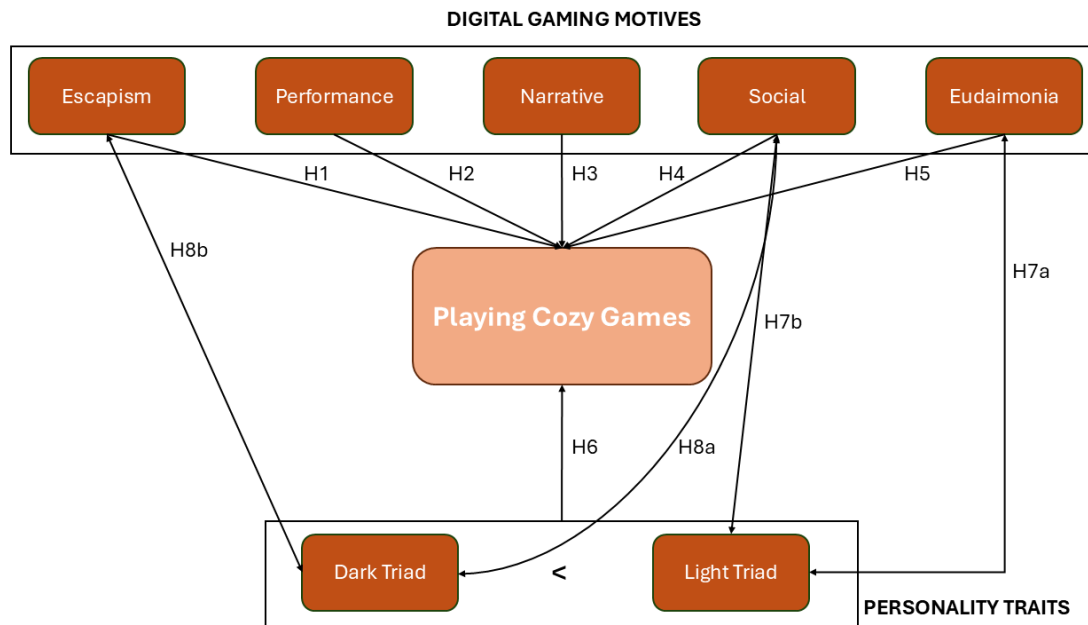


Figure 1. Visual representation of the study's hypotheses.

## Methods

### Procedure

We conducted an online survey using Qualtrics to study cozy game players' personality traits and gaming motives, allowing us to examine the relationship between both of them. Before data collection started, respondents were informed about the purpose of the study, ensured that their data was processed anonymously, and asked for their written consent. The survey started with several socio-demographic (i.e., age, gender, nationality) and game-related background questions (i.e., game frequency, favorite cozy game). Respondents were then asked about their gaming motives to play a cozy game in the near future. The survey ended with several questions on respondents' Light and Dark Triad personality traits.

The full questionnaire and all analysis files can be found on OSF (<https://osf.io/n6urd>). Surveys took on average 11 minutes 30 seconds to complete (SD = 9 minutes 42 seconds).

### Sample

Cozy gamers were contacted through multiple online communities on Reddit (i.e., r/CozyGamers with 79000 members), Discord (e.g., *The Cozy Gaming Club*, *Stardew Valley*, and *Unpacking*), and Facebook (e.g., *Cozy Gamers* and *Animal Crossing New Horizons Community*). See Appendix 1 (or Supplementary Table A on OSF) for the full list of included gaming communities. All respondents had to be at least eighteen

years old to participate in the study. A total of 389 participants filled in the survey. Through data cleaning, we removed  $N = 106$  respondents who did not fully complete the questionnaire,  $N = 2$  minors,  $N = 2$  respondents who filled in the survey in more than two hours, and  $N = 2$  'straight liners' who indicated the same answer for all items of the motives and/or the personality scales.

The final sample consisted of 277 respondents. Respondents' ages ranged from 18 to 67 years old, with a mean age of 31.04 ( $SD = 8.40$ ). The majority of respondents identified as female (78%), while 10.1% identified as male, 11.9% as non-binary or gender-fluid, and one respondent preferred not to mention their gender. In terms of nationality, 48.7% of respondents originated from the USA, 12.3% from the UK, 8.3% from both Canada and Belgium, and 22.4% from 24 other nationalities. They played on average 2 hours 39 minutes during a weekday ( $SD = 2$  hours 25 minutes) and 4 hours 41 minutes during a day on the weekend ( $SD = 2$  hours 31 minutes). Finally, respondents mentioned a range of favorite cozy games. By far the game most often mentioned was *Stardew Valley* (45.8%), followed by *Animal Crossing: New Horizons* and other games in the *Animal Crossing* franchise (12.8%), *Palia* (3.2%), *Minecraft* (3.2%), *The Sims* franchise (2.8%), *Disney Dreamlight Valley* (2.8%), and *Wylde Flow-ers* (2.5%). See Appendix 2 (or Supplementary Table B on [OSF](#)) for the full list.

## Measurements

To measure gaming motives, we used the Digital Games Motivation Scale (or DGMS) by De Grove et al. (2016), as this scale also includes morally normative motives and habitual reasons to play games that other scales tend to overlook. The scale was adapted to cozy games, meaning that questions started with "If I were to play a cozy game in the near future, I would select a game where I...". The scale consists of 43 items across eight motivational dimensions: agency (5 items; e.g., "... can do my own thing during the game.";  $\alpha = .75$ ), narrative (9 items; e.g., "... feel involved in the story.";  $\alpha = .83$ ), escapism (5 items; e.g., "... can put daily reality aside.";  $\alpha = .74$ ), pas-time (4 items; e.g., "... play because I am bored.";  $\alpha = .86$ ), performance (4 items; e.g., "... get far in the game.";  $\alpha = .80$ ), social motive (9 items; e.g., "... keep in touch with friends.";  $\alpha = .92$ ), habit (3 items; e.g., "Gaming is part of my normal routine.";  $\alpha = .82$ ), and moral self-reflection (4 items; e.g., "I feel good about playing games.";  $\alpha = .78$ ).

To measure eudaimonic game motives, we used the recently developed and validated Motivations of Eudaimonic Gaming (or MEG) scale (AUTHORS [Anonymized for peer review]). This scale includes 10 items divided into two motivational dimensions: self-realization (7 items; e.g. "... can grow as a person";  $\alpha = .86$ ) and meaningful affect (3 items; e.g. "... feel moved";  $\alpha = .74$ ).

For personality, we used the Short Dark Triad (SD3) scale by Jones and Paulhus (2014) and The Light Triad Scale by Kaufman et al. (2019). The SD3 scale was chosen because of its earlier validations and limited number of items to avoid survey fatigue

(Maples et al., 2014). The scale consists of 27 items spread across three personality traits: Machiavellianism (9 items; e.g., “I like to use clever manipulation to get my way.”;  $\alpha = .77$ ), narcissism (9 items; e.g., “I know that I am special because everyone keeps telling me so.”;  $\alpha = .75$ ), and psychopathy (9 items; e.g., “People who mess with me always regret it.”;  $\alpha = .75$ ). Kaufman et al.’s (2019) Light Triad scale, chosen because of its brevity as well as being the only validated scale to measure Light Triad personality traits (to our knowledge), consists of 12 items for three personality traits: Humanism (4 items; e.g., “I tend to applaud the successes of other people.”;  $\alpha = .70$ ), belief in humanity (4 items; e.g., “I think people are mostly good.”;  $\alpha = .68$ ), and Kantianism (4 items; e.g., “I prefer honesty over charm.”;  $\alpha = .45$ ). As Kantianism showed poor internal consistency (i.e.,  $< .70$ ), and removing items did not improve the reliability of this dimension, this set of personality traits was excluded from the analyses. This may have been caused by the alternation of positively and negatively worded items in the Kantianism scale, in contrast to the exclusively positive wording in the other two Light Triad dimensions. Such alternation has previously been shown to lead to misinterpretations and mistakes by respondents, which, in turn, lowers the internal reliability of scales (Sauro & Lewis, 2011; Zeng et al., 2024).

All main variables were measured with a Likert scale ranging from 1 (“Strongly disagree”) to 7 (“Strongly agree”).

## Results

### *Motives to play cozy games (H1–H5)*

Means and standard deviations were calculated for all dimensions of gaming motives (see **Table 1**), testing hypotheses 1 through 5. Overall, respondents were mostly motivated to play cozy games for reasons of moral self-reflection ( $M = 6.06$ ;  $SD = .87$ ) and agency ( $M = 5.80$ ;  $SD = .68$ ). This means that respondents choose to play cozy games mainly because they believe that playing these games is morally correct and because these games allow them to do what they want to do.

	Mean	Standard Deviation
<b>Motivation</b>		
Moral Self-Reflection <sup>a</sup>	6.05	.87
Agency <sup>a</sup>	5.80	.68
Escapism <sup>a</sup>	5.72	.87
Meaningful Affect (Eudaimonia) <sup>a</sup>	5.59	.98

	Narrative <sup>a</sup>	5.42	.80
	Performance <sup>a</sup>	5.09	.98
	Habit <sup>a</sup>	4.99	1.39
	Pastime <sup>a</sup>	4.58	1.35
	Self-Realization (Eudaimonia) <sup>a</sup>	4.53	1.12
	Social <sup>a</sup>	3.49	1.33
<b>Personality</b>			
Light Triad	Humanism <sup>b</sup>	5.87	.82
	Faith in humanity <sup>b</sup>	4.81	1.08
Dark Triad	Machiavellianism <sup>b</sup>	3.60	.94
	Narcissism <sup>c</sup>	3.19	.92
	Psychopathy <sup>b</sup>	2.42	.85

Note: N<sup>a</sup> = 277; N<sup>b</sup> = 275; N<sup>c</sup> = 274; On a scale from 1–7.

Table 1. Descriptive statistics for gaming motives and personality traits.

Testing our hypotheses of whether certain motives are important in the selection of cozy games (i.e., by scoring on average above the midpoint of the scale, so above 4 out of 7), we found that the motives of escapism (M = 5.72; SD = .87; confirming H1), performance (M = 5.09; SD = .68; confirming H2), the narrative (M = 5.42; SD = .80; confirming H3), eudaimonic meaningful affect (M = 5.59; SD = .98; confirming H5), and eudaimonic self-realization (M = 4.53; SD = 1.12; confirming H5 as well) were important to play cozy games. Only the social motive scored below the scale's midpoint (M = 3.49; SD = 1.33), as it was the least important reason for playing cozy games, rejecting H4.

Beyond hypothesis testing, we conducted a repeated measures ANOVA to see whether respondents' motives to play cozy games differed significantly from one another.<sup>1</sup> Mauchly's test indicated that the assumption of sphericity had been violated ( $\chi^2(44) = 494.388, p < .001$ ) and the Greenhouse-Geisser estimate of sphericity

<sup>1</sup> While typically used to analyze differences in mean scores of one variable measured over more than two time points, a repeated measures ANOVA is also useful to determine significant differences between means of more than two conditions or dependent variables of the same type (Sullivan, 2008)—in our case, the different gaming motives.

was below .75 ( $\epsilon = .72$ ). Therefore, we used the Greenhouse-Geisser corrections for the within-subjects test (Field, 2009).

The overall model was significant:  $F(6.436, 1776.469) = 181.935$ ,  $p < .001$ , partial  $\eta^2 = .397$ , indicating that there are significant differences between the different gaming motives. To examine which motives are significantly different, we conducted post-hoc pairwise comparisons based on Bonferroni corrections (see Supplementary Table C on [OSF](#) for all mean differences and p-values). These comparisons showed the following sequence from most to least important motives to play cozy games:

1. Moral self-reflection: scored significantly higher than all other motives.
  - a.  $p = .007$  with agency.
  - b.  $p < .001$  for comparisons with all other motives.
2. Agency, escapism, and eudaimonic meaningful affect: scored on the same level of importance ( $p \geq .059$ ).
  - a. They scored significantly higher than the other motives ( $p < .001$ ), except for moral self-reflection (see above). There was also no significant difference between eudaimonic meaningful affect and narrative ( $p = .052$ ).
3. Narrative: scored significantly higher than the other lower-scored motives ( $p < .001$ ).
4. Performance and habit: scored on the same level of importance ( $p = 1.00$ )
  - a. They scored significantly higher than the other lower-scored motives ( $p < .001$ ).
5. Pastime and eudaimonic self-realization: scored on the same level of importance ( $p = 1.00$ )
  - a. They scored significantly higher than the social gaming motive ( $p < .001$ ).
6. Social motive: scored significantly lower than all other gaming motives

### ***Cozy game players' personality traits (H6)***

Descriptives (means and standard deviations) were also calculated for all dimensions of the Light and Dark Triad personality traits (see **Table 1**, above), testing hypothesis 6. We found that respondents on average scored higher on the Light Triad personality traits (Humanism:  $M = 5.87$ ;  $SD = .82$  and faith in humanity:  $M = 4.81$ ;  $SD = 1.08$ ), while they scored lower on the Dark Triad characteristics.

To investigate whether these differences were statistically significant (and test H6), we conducted another repeated measures ANOVA with the Dark and Light Triad personality traits as within-subjects variables. Mauchly's test indicated that the assumption of sphericity had been violated ( $\chi^2(9) = 291.605$ ,  $p < .001$ ) and the Greenhouse-Geisser estimate of sphericity was below .75 ( $\epsilon = .61$ ). Therefore, we used the Greenhouse-Geisser corrections for the within-subjects test (Field, 2009).

The overall model was significant:  $F(2.423, 661.610) = 610.843$ ,  $p < .001$ , partial  $\eta^2 = .691$ , indicating that there are significant differences between the different personality traits. Post-hoc pairwise comparisons based on Bonferroni corrections (see Supplementary Table D on [OSF](#) for all mean differences and p-values) showed that respondents scored significantly higher ( $p < .001$ ) on the two Light Triad personality traits (i.e., faith in humanity and Humanism) compared to the Dark Triad personality traits of Machiavellianism, narcissism, and psychopathy. This confirms H6, showing that cozy players assess themselves as having more positive and compassionate personality traits.

### ***Relationship between cozy game motives and personality traits (H7–H8)***

Finally, we wanted to examine how cozy players' personality traits are related to their specific game motives, focusing specifically on the eudaimonic, escapism, and social motives (i.e., those with concrete hypotheses: H7 and H8). An initial correlation analysis showed that respondents' Light Triad personality trait of Humanism was positively and significantly correlated to the eudaimonic meaningful affect motive ( $r = .326$ ;  $p < .001$ ), the eudaimonic self-realization motive ( $r = .156$ ;  $p = .010$ ), and the social motive ( $r = .154$ ;  $p = .011$ ); while none of the motives were significantly correlated with the Light Triad trait of faith in humanity. In terms of Dark Triad traits, we found that Machiavellianism was significantly and positively correlated to escapism as a motive ( $r = .125$ ;  $p = .038$ ), while both narcissism ( $r = .182$ ;  $p = .002$ ) and psychopathy ( $r = .218$ ;  $p < .001$ ) are positively and significantly correlated with the social motive. **Table 2** shows the full correlation matrix of all motivational and personality traits dimensions.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
Moral Self-Reflection (1)	1														
Agency (2)	-.012	1													
Escapism (3)	.118	.349***	1												
Meaningful Affect (4)	.216***	.199***	.332***	1											
Narrative (5)	.179**	.218***	.286***	.541***	1										
Performance (6)	.063	.265***	.228***	.248***	.327***	1									
Habit (7)	.362***	.110	.215***	.121*	.189**	.147*	1								
Pastime (8)	-.183**	.229***	.219***	.027	.104	.263***	.119*	1							
Self-Realization (9)	.144*	.225***	.375***	.583***	.551***	.352***	.270***	.142*	1						
Social (10)	.059	.123*	.066	.264***	.285***	.312***	.193**	.102	.446***	1					
Humanism (LT) (11)	.171**	.103	.070	.326***	.182**	-.109	-.032	.009	.156*	.154*	1				
Faith in Humans (LT) (12)	.066	.059	.005	.113	.039	-.092	-.074	.062	-.036	.064	.500***	1			
Machiavellianism (DT) (13)	-.053	.085	.125*	-.058	.137*	.256***	.228***	.211***	.182**	.116	-.388***	-.323***	1		
Narcissism (DT) (14)	.000	.093	-.040	.070	.068	.171**	.014	-.016	.168**	.182**	-.021	.017	.281***	1	
Psychopathy (DT) (15)	-.050	.135*	.089	.010	.046	.149*	.195**	.143*	.257***	.218***	-.327***	-.345***	.580***	.341***	1

Note: \*p < .05; \*\*p < .01; \*\*\*p < .001; DT = Dark Triad, LT = Light Triad

Table 2. Correlation matrix between gaming motives and personality traits.

We conducted four separate stepwise regression analyses, one for each gaming motive we had a hypothesis on (i.e., both eudaimonic motives, escapism, and social motive), to further test the hypothesized relationships. For each analysis, the gaming motives were used as dependent variables, while the control variables (age, gender, nationality, education, and game frequency) and the different personality trait dimensions were the independent variables (see **Table 3**). No multicollinearity problems were found across the four regression models, as the highest VIF value was 1.76.

Motives		Eudaimonic	Eudaimonic	Escapism	Social
		Self-realization	Meaningful Affect		
		$\beta$	$\beta$	$\beta$	$\beta$
Control Variables	Nationality	.104	<b>.140*</b>	-.051	.043
	Age	-.076	-.017	-.048	<b>-.121*</b>
	Gender	<b>.163**</b>	.077	.070	.034
	Education	-.062	-.066	-.039	-.088
	Game Frequency (Weekend)	<b>.155*</b>	.055	.034	<b>.266***</b>
	Game Frequency (Weekday)	.064	.086	.119	.043
Light Triad	Humanism	<b>.258***</b>	<b>.396***</b>	.085	<b>.167*</b>
	Faith in Humanity	-.059	-.043	.021	.075
Dark Triad	Machiavellianism	<b>.167*</b>	.037	<b>.163*</b>	.054
	Narcissism	.085	.056	-.095	<b>.126*</b>
	Psychopathy	.143	.053	.007	<b>.168*</b>
<b>R<sup>2</sup></b>		.219	.167	.069	.233

Note: N = 257; \*p<0.05; \*\*p<0.01; \*\*\*p<0.001; Statistically significant relationships in bold.

Table 3. Linear regression analysis with personality traits and gaming motives.

For both the eudaimonic self-realization ( $\beta = .258$ ;  $p < .001$ ) and meaningful affect motives ( $\beta = .396$ ;  $p < .001$ ), results showed that the Light Triad personality trait of Humanism was a strong positive and significant predictor of playing cozy games for eudaimonic reasons. However, the second Light Triad trait faith in humanity was no significant predictor for either of the eudaimonic motives. This partly confirms H7a. The same regression analysis also showed that the Dark Triad personality trait of Machiavellianism was a moderately strong positive and significant predictor of the eudaimonic self-realization motive ( $\beta = .167$ ;  $p = .025$ ). Regarding social reasons to play cozy games, the regression model shows that the Light Triad personality trait of Humanism ( $\beta = .167$ ;  $p = .023$ ) and the Dark Triad personality traits of psychopathy ( $\beta = .168$ ;  $p = .024$ ) and narcissism ( $\beta = .126$ ;  $p = .043$ ) were moderately strong positive and significant predictors, while faith in humanity and Machiavellianism were no significant predictors. These results partly confirm H7b (Light Triad) and H8a (Dark Triad). Finally, we found for the escapism motive that only the Dark Triad personality trait of Machiavellianism was a moderately strong positive and significant predictor ( $\beta = .163$ ;  $p = .044$ ), partly confirming H8b.

## Discussion

Cozy games, increasingly popular since the COVID-19 pandemic, have seen limited academic interest, in particular regarding who plays them and why. Therefore, the present study investigated why players choose these games, what personality traits cozy game players have, and how players' personality traits relate to their game motives.

### ***Playing cozy games for various reasons, except social interactions***

For gaming motives, the results confirmed most of our hypotheses: escapism (H1), performance (H2), narrative (H3), and both eudaimonic motives of meaningful affect and self-realization (H5) were important motives for cozy game players, with average scores above the scale's midpoint.

As expected, players tend to choose cozy games to *escape* from their daily lives, which is especially relevant during crises such as the COVID-19 pandemic (Lewis et al., 2021; Pearce et al., 2022; Zhu, 2021). While escapism often has a negative connotation—escaping into games can lead to, for example, excessive gaming—escapism can also be healthy, for instance, as a way of coping with daily life and stress (Kosa & Uysal, 2020). Due to their lack of violence, slow pacing, and overall safe and inviting environments (Boudreau et al., 2025; Wäppling et al., 2022; Waszkiewicz and Bakun, 2020; Waszkiewicz & Tymińska, 2024), cozy game players seem well-suited to allow players to temporarily escape. Furthermore, playing cozy games to swiftly progress and *perform* well (i.e., performance motive) can be explained by their characteristic softness, which implies cozy games have achievable tasks, easy mechanics, and are typically less demanding for players (Boudreau, 2024; Short et al., 2018;

Waszkiewicz & Bakun, 2020). Since most cozy games are easy to play, players will more likely expect to perform well. Additionally, wanting to play cozy games for their *narrative* aligns with the idea that cozy games often include deeper storylines with themes like empathy, altruism, and generosity (Boudreau et al., 2025; Waszkiewicz & Bakun, 2020). This is not surprising, as the narrative has been found as a key motivator for game use in general (De Grove et al., 2016; Scharrow et al., 2015).

Moreover, we confirmed that *eudaimonia* was a strong deciding factor in the selection of cozy games. Their abundance of in-game resources allows players to engage in meaningful play, or becoming a better person through self-realization and personal growth (Wäppling et al., 2022). In addition, cozy games' slow pacing lets players focus on self-reflection and get caught up in emotional storylines (Short et al., 2018). Both of these aspects explain why *eudaimonic self-realization* was identified as an important motive. Furthermore, the second dimension of eudaimonic motives, *eudaimonic meaningful affect*, was even more important in selecting cozy games. As cozy games are frequently described as wholesome through the inclusion of poignant and empathic storylines and characters as well as cute aesthetics (Boudreau et al., 2025; Campbell, 2022; Wäppling et al., 2022; Waszkiewicz & Tymińska, 2024), which have been previously identified as key elicitors of eudaimonic game experiences (Oliver et al., 2016), players seemingly choose to play these games to feel moved or experience heartwarming moments while playing (i.e., eudaimonic meaningful affect). These findings also support the existence of eudaimonic gaming motives (Possler et al., 2024). Interestingly, we found that meaningful affect was a significantly more important motive than self-realization. Whether this difference only exists in cozy games or whether this persists in other game types should be explored in future research.

Unexpectedly, players were not as motivated to play cozy games for *social reasons* (H4) as we anticipated. Respondents scored this motive significantly lower than all other motives. On average, it was the only motive in this study rated below the scale's midpoint, despite cozy games providing plenty of social interactions with both human players and NPCs (Wäppling et al., 2022; Waszkiewicz & Bakun, 2020) and despite social motives being prevalent throughout game motivation research (Sherry et al., 2006; Scharrow et al., 2015). This could be the result of using the Digital Games Motivation Scale (DGMS) by De Grove et al. (2016), which focuses only on socializing with other human players within its scale questions, leaving out interactions with NPCs. Player-avatar relationships are a key element of gaming in general (Banks & Bowman, 2016) and of cozy games in particular (Wäppling et al., 2022; Waszkiewicz & Bakun, 2020). Excluding such (para)social interactions from the current study's operationalization of social motives may lead to misinterpreting the current findings, as social reasons could also be an important motivational driver for cozy games when player-avatar relationships are considered. Future research should therefore consider players' social motives for interacting with NPCs, by looking into other measurements such as Bowman et al.'s (2016) character attachment scale or Banks et al.'s (2019) common player-avatar interaction (cPAX) scale. Another

explanation for this surprising finding could be the nature of our respondents. Half of our sample were fans of the cozy game *Stardew Valley* (ConcernedApe, 2016), a farming simulator that mostly focuses on interactions with NPCs and less with other human players (although there is the possibility to play with friends in a cooperative setting). While respondents were asked to rate their motives for playing cozy games in general rather than for their favorite cozy game, the combination of this very specific player population (see *Limitations*) and the absence of questions about players' social motives to interact with NPCs may have biased our results.

### ***The Light Triad personality traits of cozy gamers***

As expected, cozy game players scored significantly higher on Light Triad traits than Dark Triad traits, supporting H6. This can be explained by cozy games' slower pacing, frequent collaborative settings, and altruistic and empathic narratives (Boudreau et al., 2025; Wäppling et al., 2022; Waszkiewicz & Bakun, 2020). Our findings indicate that cozy gamers overall have a prosocial personality (Johnson, 2018), appreciate others, and believe in the good of humanity (Kaufman et al., 2019)—contributing to the scarce scholarship that examines players' Light Triad personality traits (Mejía-Suazo et al., 2025). However, given that Kantianism was not included in the analysis due to poor internal reliability, we can only conclude that cozy gamers scored significantly higher on two out of the three Light Triad personality traits.

Furthermore, the lower scores for all three Dark Triad personality traits show that these traits contradict key characteristics of cozy games: for instance, psychopathy, which indicates a low level of empathy, contrasts strongly with cozy games' empathic narrative themes (Waszkiewicz & Bakun, 2020). However, caution is needed when interpreting these results due to their self-report nature. Respondents could have presented themselves more favorably than their true personality (i.e., socially desirable responding bias in personality research; Paulhus, 2002).

### ***Motives and personality traits matched***

Finally, building on prior research (de Hesselle et al., 2021; Tang et al., 2020), we investigated whether players' personality traits related to their play motives. Humanism (i.e., Light Triad personality) was positively related to both eudaimonic self-realization and meaningful affect (partially confirming H7a), and to the social motive (partially confirming H7b). Schwartz and Sendor (1999) found that helping others (cf. Humanism) can contribute to someone's self-confidence and self-awareness, which ties in with the eudaimonic game motives for self-realization and personal growth (Possler et al., 2024). Similarly, eudaimonic meaningful affect, or being motivated to experience awe of others and feel uplifted when others do good deeds, is closely related to the Humanism aspects of appreciating and admiring others (Kaufman et al., 2019). More so, being humane and open toward others might lead players to

become motivated to play games for social reasons. However, future research could further investigate this speculative explanation.

Regarding Dark Triad traits, both narcissism and psychopathy were positively related to social motives (partially confirming H8a), while Machiavellianism was positively related to escapism (partially confirming H8b); confirming previous research by Tang et al. (2020). Surprisingly, Machiavellianism was positively connected to the eudaimonic self-realization gaming motive. One possible explanation for this finding is that it reflects a spurious association, or false correlation. In regression analyses using cross-sectional (non-causal) data, it is possible to detect statistically significant relationships that do not represent actual causal links in reality (Ghouse et al., 2024). Typically, such spurious relationships occur when a third, confounding variable is at play. In our case, this is illustrated by the relatively low average scores on the Dark Triad Machiavellianism trait in our sample, particularly compared with the Light Triad traits and the eudaimonic self-realization gaming motive. This suggests that most respondents did not in fact report Machiavellian personality characteristics, making it likely that the observed association is a statistical artifact rather than a genuine relationship. Alternatively, since individuals with stronger Machiavellian personality traits tend to pursue personal goals at the expense of others (Rauthman, 2012), they may be strongly motivated to seek self-realization and personal development, both core elements of inward-driven eudaimonia (Oliver et al., 2018). In this case however, cozy game players with Machiavellian traits may define personal growth in more self-serving terms. Important to note here is that this Machiavellian interpretation of personal growth does not align with the more virtuous, eudaimonic understanding of the same concept (Huta & Waterman, 2014), as some of the psychological processes that typically support eudaimonic responses (e.g., prosocial orientations) may be incompatible with self-centered personality traits. This second, speculative explanation, as well as the potential relationship between eudaimonia (and eudaimonic play motives) on one hand and antisocial personality traits or outcomes on the other hand, needs further investigation (Daneels et al., 2023).

## **Limitations**

The decisions made in this study have also introduced certain limitations that should be considered when interpreting the findings. First, participant recruitment resulted in an overrepresentation of female players, which could have impacted our results. For instance, Neumann et al. (2020) found that Dark Triad personality traits are more common in men and Light Triad in women (i.e., women having a more caring and nurturing personality, perhaps largely because societal norms enforce this expectation: Bem, 1993). This could be an underlying bias to our findings that cozy gamers score significantly higher on Light Triad personality traits. Future research should therefore collect a more gender-balanced sample when studying cozy games.

Second, nearly half of the respondents mentioned *Stardew Valley* (ConcernedApe, 2016) as their favorite cozy game. Although they were asked about their motives as

'playing any cozy game in the near future', having their favorite cozy game such as *Stardwey Valley* in mind may have biased their responses toward that particular game. Similarly, some respondents mentioned games like *The Last of Us* (Naughty Dog, 2013) or *Fortnite* (Epic Games, 2017) as their favorite cozy game, even though these games do not align with current definitions of cozy games (Short et al., 2018; Wäppling et al., 2022; Waszkiewicz & Bakun, 2020). This suggests that cozy games as a game type are still subjective, requiring further examination in future research. A more diverse sample with varying preferences for and experiences with cozy games could also lead to more representative findings in future studies.

Third, the cross-sectional design of our study limits the ability to make causal claims about the relationship between players' personality traits and their motives for choosing cozy games. To address this, future research should employ an experimental design, not only to study this particular relationship but also to investigate how players' motives for playing cozy games could predict (1) their actual cozy game use, (2) their hedonic and eudaimonic experiences while playing these games, and (3) positive outcomes of cozy game play, like players' well-being.

## Conclusion

Cozy games, known for their relaxing and easy gameplay, have gained popularity during the COVID-19 pandemic and beyond. While academic research has mostly focused on defining cozy games and their impact during the pandemic, little is known about who plays cozy games or why. An online survey among 277 cozy game players first revealed several key play motives, including moral self-reflection or believing that playing cozy games is a morally sensible activity, agency, escapism, eudaimonic meaningful affect, and interest in the game's narrative. Interestingly, playing cozy games to have social interactions with other players was the least important motive. Furthermore, cozy game players self-reported higher levels of Light Triad personality traits, specifically Humanism and faith in humanity, compared to Dark Triad traits. Additionally, players who scored higher on Humanism were more likely to play cozy games for eudaimonic and social reasons. However, players with higher Dark Triad traits were also motivated by eudaimonic self-realization, social interactions, and escapism.

These findings provide new insights into why people play cozy games, highlighting eudaimonic game motives and further validating a recently developed scale measuring these specific game motives. It also connects Light Triad personality traits to gaming motives, for the first time to our knowledge, advancing research on personality and digital games in general, and cozy games in particular.

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## Conflicts of interest

The authors declare to have no potential conflicts of interest concerning the research, authorship, funding, and/or publication of this article.

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## Appendix 1

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### Facebook

Official Peeps of Cozy Gaming  
 Cozy gaming  
 Cozy Gamers  
 Cozy Millennial Gamers  
 Animal Crossing New Horizons Community  
 Animal Crossing New Horizons NL/BE  
 Stardew Valley Community  
 Cozy Grove Switch Players  
 Story of Seasons & Harvest Moon  
 Palia  
 Faefarm Community

### Reddit

r/CozyGamers

### Discord

The Cozy Gaming Club  
 Cat is Loaf  
 Stardew Valley  
 Payton's Corner \*  
 Unpacking  
 Fleurs \*  
 Jerrrs \*  
 Queendom of Lady Brittany \*  
 Animal Crossing New Horizons

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Note: Discord communities marked with '\*', are online communities of cozy game streamers and YouTubers.

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Table 4. List of gaming communities where the survey was spread.

## Appendix 2

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	Percentage
<i>Stardew Valley</i>	45%
<i>Animal Crossing (New Horizons + Pocket Camp + New Leaf)</i>	12,8%
<i>Minecraft</i>	3,2%
<i>Palia</i>	3,2%
<i>The Sims</i>	2,8%
<i>Disney Dreamlight Valley</i>	2,8%
<i>Wylde Flowers</i>	2,5%
<i>Unpacking</i>	2,2%
<i>Spiritfarer</i>	1,8%
<i>Cozy Grove</i>	1,4%
<i>Fae Farm</i>	1,1%
<i>Harvest Moon</i>	1,1%
<i>My Time at Sandrock</i>	1,1%
<i>A Little to the Left</i>	0,7%
<i>Coral Island</i>	0,7%
<i>Dragon Quest Builders 2</i>	0,7%
<i>Genshin Impact</i>	0,7%
<i>Wilderness</i>	0,7%
<i>A Short Hike</i>	0,4%
<i>Bluey The Videogame</i>	0,4%
<i>Cats and Soup</i>	0,4%
<i>Chess</i>	0,4%
<i>Coffee Talk</i>	0,4%
<i>Deemo</i>	0,4%
<i>Dinkum</i>	0,4%
<i>Firewatch</i>	0,4%
<i>Fortnite</i>	0,4%
<i>Garden Paws</i>	0,4%
<i>Gris</i>	0,4%
<i>Happy Color</i>	0,4%
<i>Horizon Zero Dawn: Forbidden West</i>	0,4%

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<i>House Flipper</i>	0,4%
<i>I Was a Teenage Exocolonist</i>	0,4%
<i>Journey</i>	0,4%
<i>Lake</i>	0,4%
<i>Later Alligator</i>	0,4%
<i>Life is Strange: True Colors</i>	0,4%
<i>Little Witch in the Woods</i>	0,4%
<i>Mineko's Night Market</i>	0,4%
<i>Mutazione</i>	0,4%
<i>My Time at Portia</i>	0,4%
<i>Ooblets</i>	0,4%
<i>Ori and the Blind Forest / Will of the Wisps</i>	0,4%
<i>Pikmin</i>	0,4%
<i>Pokémon GO</i>	0,4%
<i>Pokémon Soul Silver</i>	0,4%
<i>Potion Craft</i>	0,4%
<i>Potion Permit</i>	0,4%
<i>Raft</i>	0,4%
<i>Romance Club</i>	0,4%
<i>Rune Factory</i>	0,4%
<i>Skyrim</i>	0,4%
<i>The Last of Us</i>	0,4%
<i>The Legend of Zelda: Breath of the Wild</i>	0,4%
<i>TOEM</i>	0,4%
<i>Trio of Towers</i>	0,4%
<i>Unpacking</i>	0,4%
<i>Usagi Shima</i>	0,4%

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Note: N = 277

Table 5. List of favorite cozy games mentioned by respondents (in %).

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# Of Reviews and Women

## A Study of Women Discourses on Gender in Videogame Magazines

SAMUEL HEINE AND MARIE-CHRISTINE BEAUVAIS

### Abstract

Video games and their history are mostly seen from a masculine standpoint. Most traces, commentary, workers, communities, significant events or people, etc., are linked to a masculine lens that tends to ignore or marginalize women in video games and their culture. Even if they were clearly minorized in a masculine and sometimes hostile environment, there is a need to observe a part of history that gives us more information on the thought, the production, the influence, and the discourses of women without limiting them to the status of passive victims or to the margins of history. This article uses methods inspired by cultural history and textual analysis to investigate women's discourses about women protagonists present in the game reviews of the specialized press covering video game culture and the video game industry. By doing so, we will observe a complex situation where different, and sometimes contradicting, intentions can be linked to how women characters are described, criticized, or mentioned in the reviews. As such, this analysis will show a cultural context where women's writings are sometime influenced by the masculine hegemonic discourses made by or for a mostly gender restricted definition of the 'gamers', while other women's text openly resist this hegemony by criticizing the way the many protagonists and women are represented. Women, their writing, and traces of their intention, can be seen in multiple magazines from 1981 to 2021. As such these public discourses are a small but important part of a more general and diverse history of video games and their communities.

### Keywords

Women; magazines; videogames; representation; reviews; sexism

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**Video game history tends to be seen as mostly masculine** while other gender identities are marginalized. In fact, numerous researchers have written about the sexism, genderism and misogyny present in video games and their communities (Cote, 2015; Cote, 2021; Fisher, 2015). Whether in player communities, the industries, or its media coverage, video games are shown as having a history and a tendency to be patriarchal, othering and sometimes hostile to anybody who doesn't or

isn't identified as a white cisgender heterosexual man. This fact is hard to forget in a context following #Gamergate,<sup>1</sup> Sweet Baby Inc.<sup>2</sup> and the numerous articles about the sexism in the industry (De'Angelo 2020; Mercante 2024; Gash and Parrish 2020). This masculine hegemony over the medium is also true of the magazines that are published about games. For example, Consalvo describes how magazines:

create an average or perhaps ideal gamer that is young, male and heterosexual ... the person who is hailed successfully by this discourse has been taught 'how to be a gamer' just as well as women are taught 'how to be feminine' by women's magazines. (2008, p. 22)

As such, the discourses inside video game magazines are primarily written for a public of gamers identified as heterosexual men. These discourses tended to exclude women while including numerous forms of sexism and inequalities in their content. For example, the analysis of *Nintendo Power* by Amanda C. Cote demonstrates that women characters are significantly more sexualized in their representation while the contribution of women is mostly limited to fan sections (2015, p. 16–17).

However, this marginalization of women is a small part of a larger story. While observing how a gamer hegemonic masculinity<sup>3</sup> has been created and enforced in a patriarchal context, it renders the place of women even more invisible in magazines. Many researchers have shown the importance, resistances and voices of women throughout video game's history, may it be in its early years (McDivitt, 2020) or in its industries, its products, and its communities (Gray and Leonard eds., 2018; Chess 2020). However, there is a lack of papers precisely studying these aspects in videoludic magazines, including the places, roles and situations of the women that wrote inside these publications. After all, more general research can only do so much when it comes to observing parts of history that aren't hegemonic in nature. In fact, focusing mostly on how some identities are subject to violence can represent them as mostly passive victims or outsiders. It is necessary to emphasize the participation of these identities and their agency. On the patriarchal characteristic of the history of video games, Laine Nooney has said that it:

is a patrilineal chronicle, a forward-marching timeline punctuated by sacred litanies of "founding fathers," "hacker heroes," and "game gods." And

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<sup>1</sup> "#Gamergate gained media attention through misogynist and racist attacks on women gamers, critics, and developers. Followers of #Gamergate attempted to justify their campaign as a move to restore ethics in video game journalism, resulting in hostile and violent environments for women, queer folk, and people of color" (Gray et al., 2018, p. 3).

<sup>2</sup> Sweet Baby Inc. is a narrative consultation studio that is at the center of conspiracy theories and harassment campaigns falsely accusing them of pushing a "woke agenda" in games.

<sup>3</sup> "the configuration of gender practice which embodies the currently accepted answer to the problem of the legitimacy of patriarchy, which guarantees (or is taken to guarantee) the dominant position of men and the subordination of women" (Connel in McDivitt, 2020, p. 11).

in the most naïve historical sense, this may, perhaps, be an accurate representation—given that the overwhelming majority of game designers, game software producers, and game hardware innovators have been biologically male. Yet this historical impression is not necessarily transparent to itself. In other words, our sense that videogame history is “all about the boys” is the consequence of a certain mode of historical writing, preservation, memory, and temporally specific affective attachments. (Nooney, 2013)

Our article studies the writing of critics presenting as women inside video game magazines as a way of making their production the main research object. As such, this article has two goals: identifying women video game reviewers and analyzing what they wrote about gender.

## Who wrote what?

In this research, we explored 15 video game magazines, in French and English, coming from “Western” countries (Canada, France, the United Kingdom, and the United States). This selection includes *N64*, *Mean Machines*, *Commodore User*, *Official Xbox Magazine*, *Electronic Gaming Monthly*, *Québec Playstation*, *Joypad*, *Computer and Video Games*, *Canard PC*, *Edge*, *Computer Gaming World*, *Joystick*, *Crash*, *Nintendo Power* and *Tilt*. Together, they form a corpus covering two languages in multiple geopolitical and cultural contexts. As those publications include too much content to analyze them in their entirety, we randomly selected 33% of the issues from which we manually extracted all their game reviews for a total of 14,836 articles going from 1981 (the earliest publication of our sample) to 2021 (the latest), giving us access to many contexts over a long period of time while still being enough to have redundancy in the content. This corpus was selected in the context of a larger research project on the theme of videoludic critics made by the Video Games Observation and Documentation University Lab (LUDOV). The choice of corpus has been made based on their archives and to study diverse facets of these reviews, including their forms, scoring systems, and reviewer voices. We thus examine only reviews, a type of critical text that evaluates the subjective qualities of games and presents them to readers.

After selecting the corpus, we categorized each author as men, women, ambiguous, anonymous or others<sup>4</sup>. This coding was made on a review basis, making it easier to link each person to their production even in the case where there are multiple authors. The identification of each person’s gender was mainly linked to how they were

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<sup>4</sup> This category was diverse relating to intersexual, nonbinary, genderfluid, and other gender or sexual identities. As methods didn’t reveal any person linked to these identities, they were fused into one to show their absence. It doesn’t mean that there were none, but that our methodology and corpus are ill suited for their identification.

identified, by themselves or others, inside video game magazines. We use this terminology as some reviewers use pseudonyms or aren't identified<sup>5</sup>. This could lead to missing some persons or adding false positives, especially in magazines using freelance work where the writers change from one issue to another and may be anonymous even to the editorial team. Some pseudonyms are even used by multiple writers<sup>6</sup>. Even if this analysis is based on the text as it is presented to the readers, we build our knowledge on previous research that investigated a sample of 15 issues per magazine<sup>7</sup>. This observation was made by using keywords (she, her, herself, gender, woman, women, girl, elle, femme, fille, joueuse) and biographical texts (any information that describe the authors). Every first occurrence of a type of information (pronouns, biographical descriptions, photos, or artistic renditions<sup>8</sup>, etc.) was noted in a database to favorize compiling the variety more than the number of times each category of information is relevant. These results are then added to our current research that prioritizes the close reading the each review and masthead<sup>9</sup> looking for any of the aspects prioritized in the previous work, while looking for clues that could have been overlooked. We must also mention the use of search engines and LinkedIn if there was a lack of information on someone in the magazines. In these corpora, we prioritize self-identification as seen in the text; however, some critics could only be identified by how others described them, their pronouns and, in some extreme cases that aren't directly analyzed in this article but are part of our general statistical study, the gender commonly associated with their names as seen in databases like names.org. Even if the gender associated with a name or a pronoun may not reflect the real gender of the person depending on cultural associations or for nonbinary identities, this choice was made to avoid a disproportionate number of people in our "ambiguous" category, since most reviewers don't identify their gender in their writing and leave us only with indirect means of identifying them. This is especially the case for men who rarely feel the need to identify themselves in a mostly masculine environment<sup>10</sup>. This would risk rendering invisible numerous

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<sup>5</sup> We didn't take into consideration that women may use a masculine identity for protection. Also, our definition of women includes transgender identities that identify as such.

<sup>6</sup> Even if there are probably more inside our corpus, we were able to identify only one case (Paul Sumner). It was decided to not gender this reviewer even if we included them for our stats on the use of pseudonyms.

<sup>7</sup> This selection took the first and last five issues added to five taken in the middle to see the transformations of the review teams over a long period of time while still being able to analyze longer continuous samples. For details, see Heine 2022.

<sup>8</sup> In our case, the persons associated with pictures and artistic rendition could always be linked to other sources of identification (pronouns, presentation, etc.). However, it is important to remember that using only these sources could lead to forms of essentialism based on someone appearance.

<sup>9</sup> The section presenting the numerous people who worked on the magazine.

<sup>10</sup> This is based on our observation. However, the corpus includes reviewers that tend to "defend their masculinity" or "heterosexuality" violently, with the usage of homophobic and misogynistic discourses, in the case of video games including women protagonists. These

women who wrote in those magazines or falsely reduce the overwhelming majority of men writing in those publications. The goal is less of having a perfect statistical representation, as there will be misgendered people, and more giving us a representative portrait of the situation that gives clues on the production of each person, their gender identities, and the critics that necessitate deeper analysis. Evidently, it significantly increases the error margin of the statistical data. However, it let us cover a larger quantity of data that shows the general trends over a long period, while the information on how many different identifying elements are present for each reviewer guided our choice of who to analyze without misgendering them. total, we identified 10,443 articles written with the participation<sup>11</sup> of men (70%), 3532 anonymous (24%), 319 ambiguous, and 0 others. Only 637 reviews (4.29%) were written with the participation of at least one woman (see figure 1).

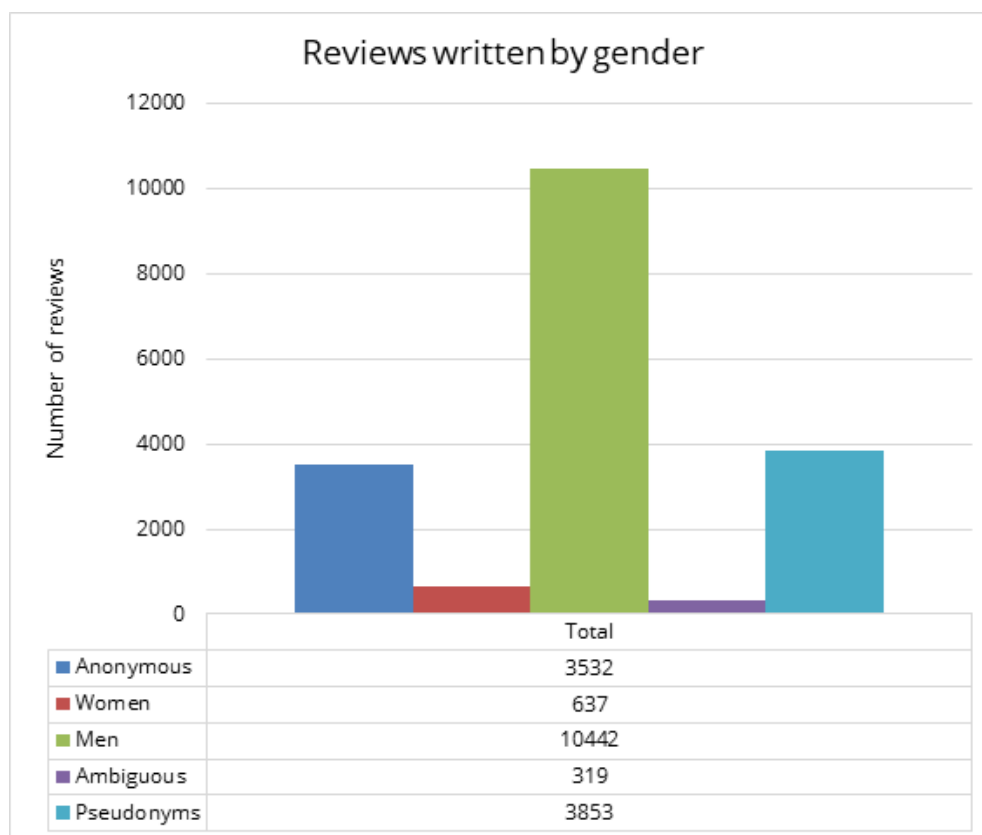


Figure 1. Number of reviews written with the participation of each gender category.

This is a small number that is distributed among 10 of the 15 magazines. Women writers weren't numerous, but the fact that they were present and wrote reviews creates a privileged access point to the history of those women and their discourses

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are mostly present in some magazines (Joypad and Joystick). For example, see: Kaa (1990) and Anonymous (1990).

<sup>11</sup> These statistics can include the same reviews multiple times if they are associated with co-authors linked to different identities.

in a precise context. A context in which their reviews have been seen by many readers over a long period.

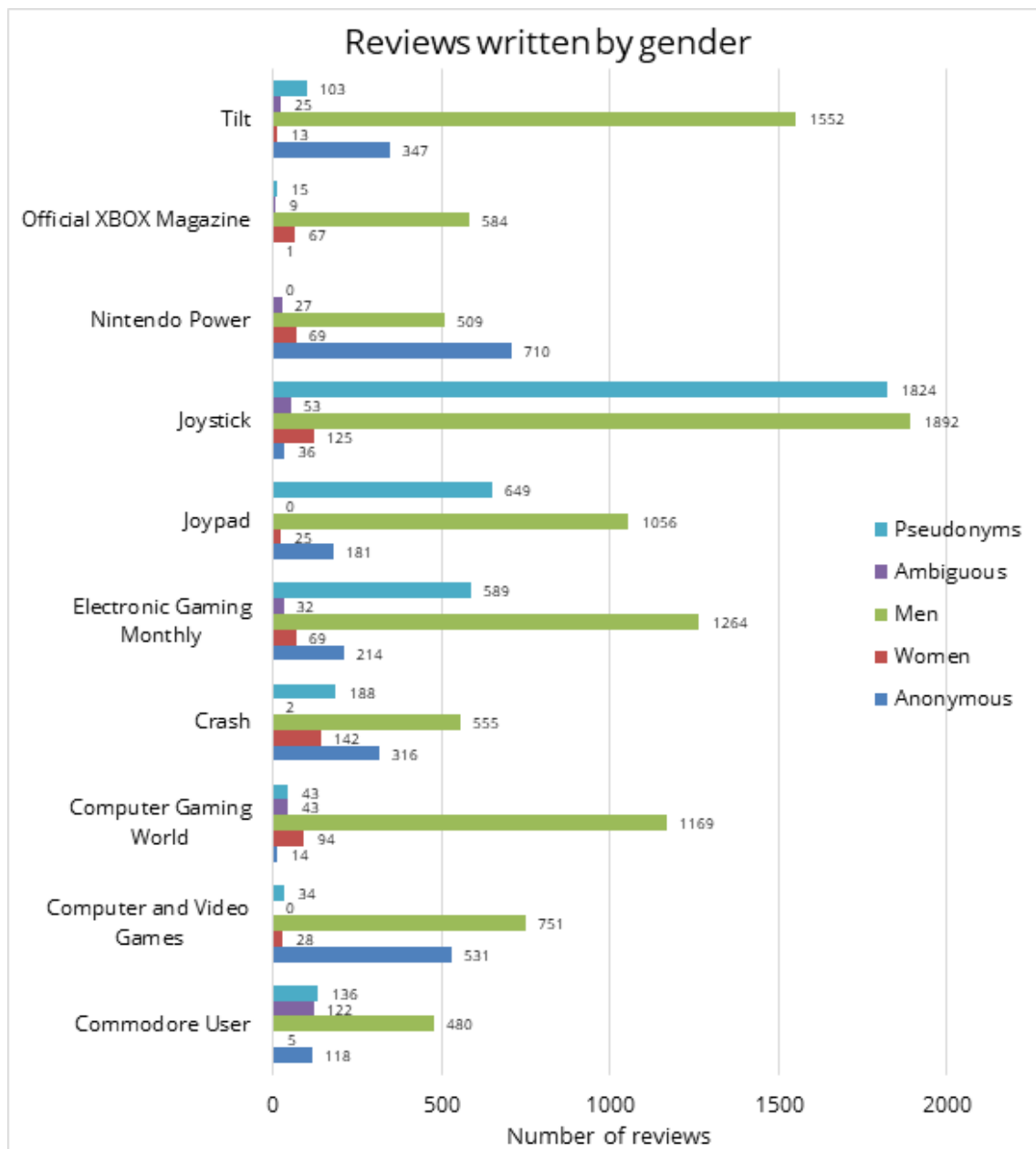


Figure 2. Number of reviews written by magazines containing at least one reviewer identified as women (exclude Canard PC, Edge, Mean Machine, N64, Québec PlayStation).

## What do they write?

After the identification of women reviewers, we examined the entirety of what they wrote in game reviews including women protagonists and how some used this opportunity to analyze and position themselves on the broader issues of gender and sexism. This choice reduced the number of reviews from 637 to 51, favoring a type

of article that was observed as containing more discussion about gender. This isn't surprising since women protagonists tend to be more heavily sexualized or linked to passivity while being at the center of many conflicting readings, may it be in the academic or gaming communities (Gray et al., 2018, p. 2-6).

Video game magazines are a useful tool to study some of the discourses that were and are sometimes still present around video games. Examining them helps us analyze the history of some of the perceptions, intentions and receptions linked to games and their cultural circles. To do so, we observe our corpus using a qualitative analysis, inspired by those used in cultural history and textual analysis, and supported by the quantitative analysis presented earlier. Our goal is to study these articles, a cultural artifact of their time, as they were presented to readers to "try and obtain a sense of the ways in which, in particular cultures at particular times, people make sense of the world around them" (McKee, 2003, p. 1). By analyzing their words with the help of concepts or perspectives developed by other studies, we will form a story of their writings to research and interpret what they said, what they convey and what could have influenced them. Each review was read in their entirety as the languages, regions, type of games, formal aspects of the reviews, etc. limited our ability to use tool-assisted analysis. This has the risk of making the researchers' bias more prominent as more of the conclusions depend on their perceptions. However, most software that could help to visualize the language used have difficulties with recognizing some fonts or artistic text of our corpus. Even more, they would be rendered mostly useless by the formal inconsistency of each magazine. Our sample is too chronologically and geographically dispersed for the use of each word being relevant data. This is especially the case for most women critics, which tend to have their own lexicon.<sup>12</sup> For genders, the same words are often used with different meanings depending mostly on who wrote and in what magazine.

As with any historical research, there will always be unknown parts of a past that exist only in memories and in the sources left behind. Memories can change and written accounts may be false or biased while mostly excluding the perspective of minorities or people from underprivileged classes, forcing historians in a heavily interpretative position (Wainwright, 2019, p. 10). For example, there are many difficulties when it comes to studying the life of women in the Middle Ages as there are a lack of sources about them other than those made by men in a patriarchal society or by women from a higher social class (Goldy and Livingstone, 2012, p. 1-3). There are some links with our subject, as women clearly wrote a minority of the reviews leaving us with fewer traces. We interpret those sources with missing or incomplete pieces. Discarding them would necessarily mean participating in a version of history

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<sup>12</sup> For an excellent example of how the use of tools and the choice of corpora can help to understand gendered languages and discourses around and inside a specific type of video games, see Heritage 2021. As their methods and the corpus chosen (fantasy video games) aren't easily adaptable to our research object while giving a look more on the developer side, we chose to prioritize other studies.

dominated by a hegemonic vision, that sees game history dominated by white heterosexual men, and an acceptance of gendered roles and the male gaze: a heterosexual and masculine gaze which sexualizes and objectifies feminine bodies (Mulvey, 1975, p. 12–13).

Using this corpus and these methods, we observed that even in the context of game reviews there are resistances, acceptations and nuances in women's writings. This shows a disparate portrait while adding to the history of women's presence and impact on video games by exposing their discourses even in the overly masculinized world of videoludic reviews. Evidently, the true intention behind their words is lost to time as even an oral history wouldn't necessarily be able to access exactly what was thought as those lines were written, especially when we include the possible changes made by the editorial teams. However, we can interpret what their writing conveys of their meaning in the context of the magazine. This has the advantage of retrieving stories, discourses, nuances and positions from the margins that should already be a part of mainstream video game's history.

To demonstrate the multiple discourses women critics wrote, we first observe examples that include a tendency to accept gendered norms. This is followed by those including a more "neutral" or ambiguous stance on the subject. We conclude our observation with examples that are more critical about how women are represented in video games. All those elements help us to understand what and how the women of our corpus wrote about gender in the specific context of their reviews.

## **Reproduction of stereotypes and hegemonic masculinity**

The field of gaming has long been rife with stereotypes about women, may it be in how games and accessories are gendered (Chess, 2017, pp. 1–30) or the way of playing is falsely essentialized as linked to binary genders (Chess, 2020, pp. 22–39). In the context of their work and through gendered expectation, some of the reviewers seem to reproduce part of the patriarchal and hegemonic discourse noted by other studies on video game magazines. In fact, two aspects of hegemonic masculinity are particularly interesting for our investigation of this subject. The first one posits the most accepted way of being a man within a precise cultural, social or historical context, which can be used to identify the form of the masculine gamer that may not be hegemonic outside of gaming culture but is still in a position of power inside it (Cote, 2021). The second is provided by Fisher:

since men have always been the majority in videogame spaces and are assumed to remain the majority in videogame spaces, their leadership or dominance is simply the way things exist, and little questioning of that state of existence needs to happen. (Fisher, 2012, p. 21)

This phenomenon, which we will call masculine hegemony for clarity, also refers to the idea that video games are led by men and are mainly oriented toward a masculine demographic, creating beliefs that are so embedded in society that some games are labeled, explicitly or not, as “games for girls,” separating them from “games for boys,” creating a gendered and patriarchal system and culture. According to Cote, “Games designed for women relied heavily on traditionally feminine material, such as cooking, dolls, and taking care of families, houses, or pets” (2021, p. 89). In contrast, video games directed toward men prioritize themes centered around adventure, combat and violence (2021, p. 89). These gendered definitions and games are evidently based on stereotypes of what is feminine or masculine. Still, they have an important impact on the writings of many reviewers as:

games that are deliberately designed for women often repurpose genres, themes, stereotypes, and expectations of feminine styles of play. Additionally, similar to previous forms of media, games designed for women are often overlooked and dismissed as having no importance or value. (Chess 2017, p. 5)

Some game critics manifest a tendency to endorse in part these gender-based stereotypes. Jennifer, a reviewer from *Electronic Gaming Monthly*, writes about *Final Fantasy Crystal Chronicles* (Square Enix, 2003): “Lots of stereotypes work (this game’s for kiddies, for girls, for *Final Fantasy*-loving fanboys), but none even hint at how deep this action RPG goes ... everyone should try it” (Jennifer et al., 2004, p. 125). The author claims that the targeted audiences are kiddies, girls and fanboys. However, let’s concentrate on the specificities of the term “girl” in this context. The author seems to accept that some aesthetic or design choices are linked to girls in a way where this identity seems to be external to that of mostly men gamers. Nonetheless, nuances are to be considered, as Jennifer stated that “none [of the stereotypes] even hint at how deep this action RPG goes” (Jennifer et al., 2004, p. 125). So, even though she claims that the game is of more interest to some identities, she still acknowledges the intricacies of the gameplay. An acknowledgement that doesn’t necessarily contradict the “stereotype” but shows a game that can be of interest for “gamers” by being sufficiently “deep” or complex. This mention insinuates that games for “girls” aren’t normally deep enough for real gamers. There is a pressure on women gamers to dissociate themselves from the “girl” qualifier as it is different from a more legitimate “gamer” identity that judges those themes as lesser than openly masculine games.

Another way in which there could be an acceptance of the stereotypes directed at women is in the description of the characters themselves. In fact, the official descriptions present in the paratext or sent by the developers and the publishers could have influenced reviewers’ perspective on women protagonists. When Kika, a reviewer for *Joystick*, mentions *Meat Puppet* (Kronos Digital Entertainment, 1997), she describes the protagonist as “the sexy heroine [who] runs to save her life” (Kika,

1997, p. 109).<sup>13</sup> The adjective “sexy” directly sexualizes the heroine. Nevertheless, upon an examination of the official description present on the game box, the protagonist is characterized as “A beautiful woman with a big gun.” (MobyGames, 2001). This sentence holds a reductive view of the protagonist as an object of desire, to be looked at, where a male protagonist would mostly be linked to its strength or capacity. Such instances are not limited to this singular case as:

women in games were more likely to be portrayed as partially nude or dressed in a sexually revealing way, with unrealistic body proportions, wearing clothing inappropriate to the in-game activities they were performing (Downs and Smith paraphrased by Heeter, 2014, pp. 373–374).

Heeter also writes about game designers’ intentions when portraying characters:

Game designers at an Austrian game design company ... aimed to represent ‘the average guy’ based on photographs, anatomically correct in proportion, but for a women character they did not use photos as they do in designing men characters, because photos were not ‘sexy’ enough. (2014, p. 374)

The desire to portray women in an attractive or “sexually revealing” way for the male gaze is therefore prevalent. With this vision of women ending in the paratextual description, it can heavily influence the way reviewers describe those characters especially in shorter reviews, like the one made by Kika, where the presentation of the game is minimal to leave some place for the critique of the gameplay. This situation reinforces a masculine hegemony where the male gaze is at the center of how the characters are described.

Even if those articles tend to repeat a masculine vision of the “gamers”, these choices aren’t necessarily conscious. Where, later in our article, we will briefly see extreme, but relatively frequent, examples of patriarchal influence in how women are described, we are far from the overt gendered violence and women exclusion of some discourses made by men reviewers. However, there is still a tendency to link gendered descriptions to the protagonist or the players.

## **The hardcore gamer**

Categorization by gender is not the only way to classify gamers. Another Kika article, about *ZanZarah: The Hidden Portal* (Funatics Development, 2002), explains that “Far from any physical or psychological violence, *ZanZarah* is aimed at a public who, before looking for strong sensations, wants to have fun without stress and with the family. But for hardcore gamers, it’s a different story” (Kika, 2002, p. 145). The use of

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<sup>13</sup> All citations in French were translated by us.

the term “hardcore gamers” indicates that there are casual gamers, who, according to Kika, want a relaxed experience. Even though readers cannot assert with certainty if the author had a gendered view of hardcore gamers, the term is often connected to masculinity. In fact, some types of hardcore games “possess many masculinized characteristics, such as a desire to dominate game environments and other players through one’s skill, and an extreme focus on competitiveness” (Cote, 2021, p. 29).

The separation between “games for boys” and “games for girls” seems to be ingrained at a conscious and subconscious level in many discourses through the history of games and can even be affected by gendered expectation over their content and type (Drisscoll, 2017, pp. 182–184). This situation seems strange when we compare it to the competitive scene around games like Pokémon, which was advertised for kids while presenting visuals that could be considered “girly”. More than a real sense of playing harder, longer or competently, “hardcore” is often linked to men, whereas “casual” is associated with women. In fact, “authorized forms of feminine play are often marginalizing, and at the same time often decoded as ‘frivolity’” (Chess 2009, p. 2). By being “frivolities”, “games for girls” are implied as lacking the serious component that “games for boys” possess. When Kika writes that *ZanZarah* is “a different story” for hardcore gamers, her assumption on the question may come from cultural perceptions where the game theme (fairies) and easier gameplay are associated with women more than mostly masculine “hardcore gamers”. We could adapt the concept of straightwashing, “a symbolic wiping away and subsequent painting over of a work’s LGBTQ aspects” (Ruberg 2018), to affirm that there is also a man-washing of the hardcore gamer where all genders, other than cis men, are rendered invisible and/or disconnected from it. For our subject, women, and any characteristic associated to their gender, are erased from the idea of the “hardcore”. Concepts judged as feminine are thus considered to be more casual without necessarily implicating things commonly linked to the “hardcore gamer” concept. This tends to confirm the five design categories (thematic, game-play, visual, character and excluded) identified by Chess while interviewing game designers (2017, pp. 42–52). Each of these categories is linked to a set of characteristics that are seen as the preference of an all-inclusive women identity designed and influenced by industry convention, textual constructs and audience placements present in the largely corporate and masculine video game industry (2017, pp. 31–52). These perceptions aren’t limited to the creative and marketing side, but tend to influence how games are interpreted and gendered depending on their content. They influence the people partaking in the medium and its culture, including the reviewers who judge games in a mostly masculine work environment.

## ‘Neutrality’

While reading through the reviews written by women, we came to realize that most of them (30) have a ‘neutral’ stance.<sup>14</sup> This mainly includes articles that don’t discuss gender matters and focus on game features. That is how Maura Sutton handles *Final Fantasy VIII* (Square, 1999) in *Computer and Video Games*. When describing the protagonists of the game, she uses neutral qualifiers that do not tend toward the oversexualization of characters. They are described by their personality, role and competences without directly discussing their gender. For example, Rinoa Heartilly, is described as “the leader of the Forest Owls. She’s headstrong, rebellious and idealistic. She gets herself in trouble when trying to prove her worth as a rebel fighter. Be prepared for a few surprises” (Sutton, 1999, p. 102). The characters are defined by their personalities and their social status, not their gendered traits. Even if this can seem like an amelioration compared to our previous section, this isn’t necessarily the case as the question of gender is merely not touched in a meaningful way. This represents most of our corpus as video game reviews tend to briefly describe the story and the gameplay without doing an in-depth analysis of each theme. This absence can sometimes erase important questions about how the protagonists are represented or linked to femininity. As David J. Leonard said in the context of colorblindness in games: “The cost and consequence is not just the reification of stereotypes but legitimizing, normalizing, and sanctioning state violence, inequality, and despair” (Leonard, 2006, p. 87). Evidently, this doesn’t mean that women should always write about their gender, but touch on a more encompassing situation where these questions are rarely in the reviews that are written by people of any gender identities, limiting the importance of the criticism on the representation of women in games.

Even if this isn’t the intention, not criticizing can mean participating in the normalization and crystallization of hegemonic visions present in the culture, thus reflected in the media while going far beyond one game or even one medium. Our point isn’t to judge these articles in themselves, marginalized people don’t have to always discuss the representative problems linked to their identities. However, the larger absence of importance associated with the subject can be linked to manwashing and straightwashing. Bo Ruberg explains that:

the vast majority of reviews of *Undertale* do not talk about queerness ... A survey of these materials reveals a key set of recurring themes that, though they may not appear at first to relate to gender or sexuality, in fact work to establish *Undertale* as a heteronormative game. (2018)

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<sup>14</sup> We use the word ‘neutral’ to indicate that they don’t fall easily in other categories. It doesn’t mean that they have no position, especially with the masculine hegemony in magazines.

Adapting this analysis to our subject, we see that most reviews of games including women protagonists chose to prioritize other elements of the criticism while ignoring discussions on the role and representation of women in story or gameplay. In a more general context that includes the reviews made by other identities, it creates a void in the discourses, leaving more space and visibility for othering, womens' erasure, or misogynist comments and the male gaze. Even queer women characters are mostly invisible. For example, there is no mention of LGBTQ+ characters in the Official Xbox Magazine review of *Dragon Age II* (BioWare 2011) (Reys 2011, pp. 70–73). In a context of masculine hegemony, part of this silence could be explained by the heavy social cost and the taboos associated with those types of absences (von Münchow 2018, pp. 225–226). There is a big difference between acceptance of something as “normal” because of the influence of your context and protecting yourself from the consequence (harassment, lost jobs, etc.) of openly discussing a subject. Our methodology can't differentiate between them.

In other reviews, the ‘neutrality’ is more ambivalence caused by double discourses and our inability to link some elements to the author. For example, Francesca Reyes, who worked for *Official Xbox Magazine*, reviews *Tomb Raider: Legend* (Eidos Interactive, 2006) by mostly describing visuals and gameplay (Reyes, 2006, p. 84–85). Outside the text, many images tend to sexualize the protagonist, Lara Croft, with a mention of: “Long pants? Is this really Tomb Raider?” (2006, pp. 84–85). There is a clear difference in how the subject is seen between the review and the accompanying pictures and comments. As with many magazines, there is a possibility that the editorial team added or changed some aspects, especially when it comes to the aesthetic representation and the comments outside the main text. In most cases, readers may never have the luxury of knowing the author's real intentions versus those of the editorial team.

However, we can still see that *Tomb Raider: Legend* is reviewed quite differently when some men reviewers tackle it in specific magazine, showing their hegemonic culture. Jeremy from *Electronic Gaming Monthly* writes in the second sentence of his review: “Since then she's gotten herself a new wardrobe, some new moves, a little, ah, reductive surgery...” (Jeremy, et al., 2006, p. 96). His colleague Crispin begins his review by describing her as “relic-hunting hottie Lara Croft is still just a sports bra away from suffering severe head trauma” (2006, p. 96). These reviewers rapidly objectify Lara by insisting on her sexual attributes even before talking about the game itself. However, in the same review, Dana, a woman, doesn't mention Lara's chest. She does explain that she “expected to have a girl fight with Lara to get her to do what I wanted” (2006, p. 96), but we are far from the overt sexualization of the other two reviewers. As such, our corpus tends to show a more neutral and less objectifying view of women protagonists in reviews made by women, especially when compared with their men cowriters in magazines where there are tendencies to sexualize and objectify women in video games. Even the review of *Dead or Alive Xtreme Beach Volleyball* (Team Ninja 2003), a game with many hypersexualized characters, shows an article from Francesca Reyes that mainly focuses on the gameplay with one of the

most objectifying (and heteronormative) sentences being: “think of it as an opportunity for male gamers (and female ones with a sense of humor) to do resource management shopping, and Barbie-style dress up for only slightly naughty, but very silly rewards” (Reyes *et al.* 2003, pp. 72–75). For comparison, the editors have a small section where they describe their favorite characters and swimsuits, even adding some comments like “not enough ... hot girl-on-girl smooching”, “my camera skills have improved dramatically” or “I was never allowed to play with dolls” (Reyes *et al.* 2003, p. 74). These mentions are more sexually explicit, the character is clearly seen by them as an object of desire for heterosexual men, even if they take a similarly humorous tone in the face of the game themes.

## **This gameplay is sexist!**

The sexism present in many games seem normalized and not even considered as a part of a game review, despite its inclusion in the narrative and visual aspect of many games. However, even with the influence of a gamer hegemonic masculinity, some reviewers still use the medium to convey comments on how women are represented in games, whether in relatively subtle ways or in a more direct acknowledgement of the problems. Samara, a reviewer for *Crash*, mentions the text adventure game *The Jade Stone* (1987) made by Linda Wright. She explains that:

Success depends on a strange mixture of feminism and femininity. Unlike Amanton, Amora [the protagonist] isn't afraid of a little sword-play (she can more than hold her own when it comes to fighting a battle) but she lives in a world where (quite realistically) brain is as important as brawn: she often has to fall back on qualities of intelligence and compassion — what some people might call feminine intuition! Suffice it to say that it's a good idea to take a needle as well as a sword on your travels... (Samara, 1988, p. 48)

As adventure games link story and gameplay, a relation between narrative and puzzle isn't surprising. After all: “Adventure games are story-driven videogames, which encourage exploration and puzzle solving ... Their challenges usually appear in the form of concatenated puzzles, which are integrated in the fictional world” (Fernandez-Vara, 2009, p. 13). The narrative elements can help to consolidate the form and solution of the puzzles, notably by giving hints or justifying their form. The story and its representation of the protagonist has become an important part of the gameplay as it justifies the series of actions that must be taken to progress.

We can also see an opposition between feminism, in this case a protagonist that performs aggressive actions traditionally linked to men, and femininity, performing activities traditionally linked to women like sewing or showing compassion. While analyzing this aspect, we must remember that the meanings of words are affected by a person's experience and cultural or social circles. It would be easy to consider

that the author saw feminism as incompatible with being feminine. Even if it's a possibility, the general meaning and context are more important than each isolated word. Samara seems to use those concepts to differentiate between performing gendered roles or going outside them. The "... " at the end of the quote could convey her disapprobation of the way in which a mostly feminist protagonist is sometimes reduced to her gender in the action necessary for progressing.

Some examples are more direct in their critique of gender roles in adventure games. This is sometimes made by referring directly to the sexism that is perceived in the actions required of the player character. While writing on *King's Quest IV* (Sierra On-Line, 1988), Scorpia, an adventure and roleplaying game reviewer for *Computer Gaming World*, explained: "You will also have to sit through some tedious animation in the dwarf's house. This is a puzzle in the game, the solution to which is rather sexist, although obvious" (1988, p. 20). While not giving more detail about what is sexist about the puzzle, she insists on how long and boring this sequence is. These sentences are linked to a puzzle where Rosella, the heroine, needs to clean a house and prepare food for "seven dwarfs" like in the story of Snow White. This is a small comment inside her longer review. Still, she explicitly describes the puzzle as sexist forcing the Rosella to replay traditional gender roles to progress, sharing with the readers her opposition to this type of representation. After all, even if there are stories and contexts that could justify it in other games, it is ironic to require that the heroine of an "adventure" game perform housework for a group of men to progress the story. However, *King Quest IV* is seen by Angel R. Cox as having a more "feminist turn" as it:

frequently puts Rosella into stereotypically feminine situations, it often subverts them—while she kisses a frog to transform him into a prince, he rejects her and she him; Edgar, whom she has rescued, proposes marriage to her at the end of the game, and she freely declines his proposal without penalty even while acknowledging that he is conventionally suitable for her. For a fantasy text published in 1988, having a princess rescue her family and reject (multiple) princes is a conventional feminist move, a response to stereotypical fairy tale princess roles ... However, it sets up a dichotomy ... for men, marriage is a reward for success that carries no impediment; but for women, marriage is an imposing, threatening impediment to success. In a way, though, this seems to reflect the reality of living in a patriarchal world, in which institutions such as marriage are likely to benefit men more than women, and as such critiques those institutions (Cox, 2018, p. 29).

While this analysis demonstrates the complexity of the game's feminist discourse, it also highlights the importance of the criticism made by Scorpia that point at some of the stereotypes still present even in a context where they permeate the general culture, and where the game tries to counter some of the more overt ones. It reveals a desire for more equality or a more systematic erasure of essentialized gender roles

even in the face of a story that tries more than most fantasy mediatic production of its time, showing a resistance that could appear anachronistic if we only observe the majority discourse present in gaming communities.

## Statistical determinism of gender

Roleplaying games were another source of critical positioning on the question of sexism and, more specifically, its essentialization of physical and mental statistics. In the same publication, Tracie Forman Hines, “an experienced adventure gamer” (1988, p. 60), describes how *Pool of Radiance* (Strategic Simulations, 1988) character creation has “apparent sexism in one area and ... complete disregard for gender in another.” (Hines, 1988, p. 62). This use of the term “sexism” is linked to how women characters have less strength with no other bonus, making them the worse option. Hines explains that: “It may be realistic, but ... there is no corresponding increase in charisma (as in *Basic Dungeons & Dragons*)” (1988, p. 62).

In one paragraph, we have multiple takes on the inequalities of the character creation system that sometimes appear as contradictory. On one hand, she clearly states that the game includes some form of sexism. However, the mention of “realism” and of the lack of charisma (a statistic mostly linked to beauty, leadership, or persuasion) need to be considered before making any assessment. Other than the fact that talking about “realism” in terms of statistics in a fantasy game where warriors can accomplish inhuman feats doesn’t make sense, the context of the review makes it so it could be normal for Hines to accentuate the impact of those choices on the gameplay more than the social aspect.

Six years later, Petra Schlunk, while reviewing *Disciples of Steel* (Megasoft Entertainment, 1993) explains that “Female Characters have a lower strength potential than males, although they make up for this deficit with correspondingly higher values for intuition and charm. (It’s okay, myths are important)” (Schlunk, 1994, p. 64). Without using the word sexism, she explicitly points, sarcastically, that the gendered statistical difference is based on myths. In fact, the bonus in “charm” shows a heterosexual and masculine perspective (male gaze) that essentializes women and presents them as “naturally” more attractive or charming. There are similarities in the comments made by Hines and Schlunk as they both point at the sexism of those games while not making it the central argument. Hines wrote it in two small paragraphs while Schlunk used only one sentence. This is the main disadvantage and advantage of our corpus. The reviews of most games will be more general than editorial or thematic articles. Discussions about genders are restricted to a small percentage of our sources, limiting the length of comments on the subject. However, it also renders even more important to note what made those critics write about gender and how they do it. In this case, we can easily link it to the tendency of many roleplaying games, especially those of the period, to give statistical description for everything, either to make the character creation choices important or as an attempt to simulate

actions and worlds. What statistics are associated with what choice can help us understand the potential bias of the game makers, and make them a highly visible target to criticism when it comes to their representation of genders or even races and cultures. Some researchers have highlighted the misogyny present in popular tabletop RPG, *Dungeons & Dragons*, and the use of “female monsters that simply embody misogynistic patriarchal tropes” (Stang, 2021). The gendered difference was noted by the above reviewers, who criticized the statistical sexism of the game. They even found it important to mention it in a context where the space was limited, forcing her to choose what part of the games are more important to write about.

The absence of statistical discrepancy could even be stated in some reviews. While writing on *Might and Magic* (New World Computing, 1986), Scorpio explains: “The sex of your character has no effect on attribute scores or abilities, but there is a point in the game where it will be extremely important whether the character is male or female. So, have both in the party” (1987, p. 24). The first part of the sentence gives some importance to the absence of difference between the two choices available as it is mentioned even when the game doesn’t include any statistical discrepancy between genders. The second part refers to a location in the game (Portsmouth, which is inhabited by a succubus queen) where men in the party get negatively affected while women have no consequences, favoring a party of women or temporarily changing the gender of characters at a magical fountain. Even if the context is ambiguous and raises some legitimate questions on the lack of LGBTQ+ characters representation (even with the addition of the possibility of transgender characters with the fountain), it is still one of the rare cases where women characters of the time are clearly advantaged without relying on a “capacity to seduce” or a similar concept.

Even if gendered difference still exists in some roleplaying games, the erasure of their importance in statistics is visible in some popular tabletop games, like *Dungeons & Dragons*, influencing the video games that are based on their rules and those that are inspired by them. In a context where gendered statistics were more prevalent, the above reviewers show that there were early discussions about statistical differences, based on conceptions of genders, that were and are still present in many cultural representations or discourses, and their deterministic nature that favor or disfavor some roles for women. By extension, it shows forms of resistance to the bioessentialism that is often still linked to gender in fiction. In games that are based on playing a role, these statistically act as deterministic limitations to what type of character should be played. As we have seen, these limitations were the target of explicit rejection. Without being the only influence, the fact that these rules have long been eliminated from *Dungeons & Dragons* demonstrates that these types of discourses and resistance can help change the perceptions of sexist rules and their transformation in gaming practices. There is power in those public discourses that can at the very least be one of the cogs that bolster movements and actions for cultural changes. That’s without adding the influence of independent

takes on these systems in the form of house rules, homebrews, or competing games.

## Sexualization and criticisms

How the protagonists are visually represented can sometimes lead to straightforward rejection of how women are characterized in games. In a *Joystick* review of *Hand of Fate: Kyrandia 2* (Westwood Studios, 1993), Maria Dao (using the pseudonym Calor) has a positive outlook about the game protagonist even going as far as complimenting her beauty and her tendency to have a variety of clothes for special occasion or vanity (1994, pp. 90–93). All the while, she also explains that “The main character is a woman that doesn’t content herself with wiggling her butt. This is something to celebrate, right?” (1994, p. 91). When we compare this aspect to some of the other articles of our corpus, it may seem like an antithesis as there is a positive view of her beauty and her clothes collection, which can reflect gendered stereotypes, while celebrating a character that isn’t here just to be objectified. It is important to keep in mind the period in which this article was published. Women protagonists in video games were rare and, when they were present, were frequently oversexualized, ridiculed, and objectified. Recent quantitative analyses of the subject have shown that popular games still tend to exclude women as protagonists or even as characters in general, while sexualizing them more frequently (Geena Davis Institute, 2021; Harrisson et al., 2020; Wilberg, 2011, pp. 42–43).

The lack of representation, plus the tendency to show passive and sexualized women, explain in part why a more active protagonist is seen as a positive even if she performs in a way that other reviewers would find stereotypical. The problem is more the lack of media going outside those representations, reinforcing them as gendered stereotypes, and the relative absence of masculine characters having those traits, than the representation in itself. We also need to compare her discourse with those of others, especially when it comes to sexualization. There are examples of this sexualization being used as an excuse for negative and sexist comments in numerous reviews made by men. For example, in *Joystick*, we can see some critics using terms as “honor to the weaker sex” and comparing, in a demeaning way, changing the equipment of the heroine of *Soldier 2000* (Artronic Products Limited, 1989) to playing with Barbie dolls (Kaaa, 1990, p. 129). This tendency continues even later as an anonymous reviewer criticized the sexualization of Lotus, one of the protagonists of *Deathtrap Dungeon* (Asylum Studios, 1998), while openly objectifying her as a “synthetic girlfriend” with numerous insinuations, sexualizing images and even a homophobic defense of the writer heterosexuality (1998, pp. 150–151).

In a context of hostility toward feminine protagonists, having a reviewer reacting positively to a character, whose main gimmick is her magical wardrobe, is an interesting perspective, where the masculine hegemony present in other articles could

have led to a categorization of the game as Barbie-like or people pointing at a sexualized heroine to be ridiculed. We mustn't forget what the researchers in our introduction said about the exclusion and the violence against women that are present in many magazines. We are analyzing magazines that are thought of as mostly for men, encouraging a patriarchal perspective that tends to judge women as an "other" that can be made into an object of desire to be controlled. Valorizing a feminine heroine is understandable as opposed to showing hostility at anything that doesn't enter the realm of "manliness".

## Stereotypes, simplifications and 'girly'

Some critics wanted a detachment from gendered roles and personalities that were considered 'girly'. This is the case of Arinn Dembo from *Computer Gaming World*. In her review of *New Horizon* (Koei, 1993), she explains:

The game has six characters you can play, including a token female. I played her, naturally, since I recognized her name: Catalina de Erantzo (Erauso in some texts), la Monja Allarez— "The Nun Ensign". She's one of the great folk heroes of Latin America. ... they did geld her character, assigning some kind of insipid, girly-type motive for her piracy, which is too bad. But still, seeing her in the game was a high point. (Dembo, 1995, p. 178)

When reading the story of Catalina in the game, we could question the hostility against a character that becomes a pirate to avenge the death of her husband and her father. However, a more thorough reading on the history of her inspiration shows an erasure of many aspects linked to genders and LGBTQ+ history. Catalina de Erauso is the birth name of Antonio de Erauso. They were linked to many mantles by studies—going from being a violent criminal, a colonizer and an example of resistance to gendered roles to a lesbian or a transgender man—while being used as an interesting example for discussion around identities, genders, and their frontiers throughout history (Velasco, 2009, p. 1–11; Aresti, 2007, p. 401–418; Goldmark, 2015, p. 214–235). Their story is very different from a revenge plot that is centered around the men in their life, removing their independence and complexity. In this case, the character is recognized by Dembo as a heroic woman. Still, the limited reference to the real history of de Erauso is perceived as lackluster. Moreover, the in-game character is seen as less independent from the patriarchal society of their time. Therefore, Dembo points at the "girly-type motive" of this "token female".

Another article from Dembo uses the term "girly". Her review of *Phantasmagoria* (Sierra On-Line, 1995) includes a section titled "Gender difficulties" (Dembo, 1995, p. 64). She points to the fact that the game's designer Roberta Williams continued "work with female protagonists is unusual in a business where even the most brilliant female designers devote their best work to male characters" (Dembo, 1995,

p. 64). However, Dembo also explains that some of the women protagonist in games linked to Williams (Laura Bow, from the series of the same name, and Adrienne Delaney, the heroine of *Phantasmagoria*) “are traditional girlie-type girls, despite their good qualities” (1995, p. 64). For her, those protagonists tend to act in a manner that’s considered “girly”, which she sees as a negative trait. She explains that she was forced to watch Adrienne looking at herself in mirrors going as far as writing: “When I tried out the ‘hot cursor’ spots in the bathroom, only to see Adrienne brush her hair, rub her hands with lotion, and put on make-up, all without advancing the plot at all, I actually let out a squawk of outrage—mortally offended, both as a woman and as a player, at this interjection of pointless ‘chick stuff’” (Dembo, 1995, p. 64). Moreover, she adds that:

I would certainly agree with anyone who said that there need to be more female characters in computer gaming, and that male players should have less trouble identifying with female protagonists. But I don’t think that end will be accomplished by exaggerating the feminine in a character, and hammering up the differences between men and women. Even female players are turned off by that kind of thing, and rightly so. (Dembo 1995, p. 64)

In our corpus, this is the most engaged and voluminous critique of how women protagonists are represented. Where other reviewers, like Lucy Hickman, did use the term “girly wimps” to describe how most heroines are represented (1992, p. 55), Dembo explains her position in great length. She shows an industry that needs to add more women in games. However, this addition mustn’t come at the cost of limiting those characters to performing a stereotypical femininity that essentializes gender.

Stereotypes are an important control tool that has power as a producer of meaning and in social reproduction (Dyer 2002, pp. 11–12). After all, “How we are seen determines in part how we are treated” (2002, p. 1) and there is a tendency for stereotypes to mark the difference between the “us” and the “other” (Shaw, 2015, pp. 19–20; Dyer, 2000, p. 250; Hall, 2003, pp. 258–259). By discussing this subject in her article, Dembo points at those constructions, explains how and why they are a problem for her, and helps to deconstruct a type of representation that is normalized in many narrative media. However, *Phantasmagoria* can also be seen as a game where “Williams was allowed an unprecedented budget and artistic control, and which plays out as a feminist allegory concerned with the nature of domestic abuse and its impact on women” (Cox, 2018, p. 31). The criticism of Dembo isn’t unwarranted as the media tends to limit women to roles or stories that are linked to gender stereotypes. In the context of her review, she doesn’t reject the overall story or the horror of the domestic abuses that are represented. She is mostly critical of the choice linked to the optional actions of the character that are interpreted as reinforcing a

form of femininity (self-conscious of their appearance, taking time to be presentable, etc.) in the context of a horror game where masculine characters wouldn't do these actions.

The criticism of the representation of women as linked to traditionally feminine personality traits is important, especially inside a review published in 1992. Even if they are relatively few, criticisms of gender stereotypes are an important part of video game history as a sign of resistance to influence including patriarchy or the men's hegemony over games and gamer identities.

Still, there is a visible lack of those types of articles after the year 2000. The progressive closure of some magazines and the change in teams, format, editorial rules and advertisers are some aspects that could explain this, without including broader social influences and the popularization of gaming websites. However, we mustn't forget that our research is focused on reviews and that many comments are also available in the other sections of those magazines like the reader's letters or the articles and reports about the gamers' communities. That's without including the fact that we only evaluated one third of the magazines and may have missed other examples. Moreover, some more general takes on gender outside the context of women protagonists are also present. For example, Noëlle Béronie writes: "Who said that girls didn't like wargames? I loved Cannon Fodder" (Béronie and Feroyd, 1993, p. 123), thereby going against stereotypes in gendered gaming interest. There are many ways to talk of or criticize the representation of women in games, the industry or in gamers' communities and the limitation of one study can't represent a complex phenomenon by itself.

## Conclusion

Video game magazines are a space dominated by men and their discourses. This patriarchal influence and the masculine hegemony tend to limit the presence of women and can affect in part the discourses produced and the work culture by influencing the importance or cost associated to some subjects. As we saw in our study, this influence can be seen even in the production of women. On the other hand, most of our corpus is 'neutral' when it comes to gender. As we have seen, they either don't write significant comments on the subject or can't be clearly categorized without more information. These restrictions on gender critiques aren't limited to women and some magazines did have more of those texts than others.

The most interesting aspect remains the presence and the form of resistance to sexism in video games. Whether the essentialization of statistical differences that insinuate a male gaze, the gendered nature of the actions or the stereotypical way in which women are represented, there are discussions and critical stances on the subject as early as the late 1980s. This joins the historical and cultural research on other parts of the gaming community, reception and production to show that even in a

mostly masculine environment and in a context limiting the opportunity for this type of discourse, there is a clear presence of women who discussed, criticized or supported a more inclusive and less stereotyped presence of women in video games. This adds to studies on magazines (which tend to limit their analysis of these signs of resistance and their impacts), while adding more fuel to the numerous stories that describe a history of gaming where women, feminist thought and counter-hegemonic discourse were present despite limiting factors. It shows the importance of exploring more forms of discourses and the fact that these discussions were considered sufficiently important to be mentioned by some.

As scholars, we need to add nuance to a general history that mostly limits women to the role of outsiders or passive victims, even with many studies proving their active role (Gray et al. (eds), 2018; Nooney, 2013). Despite their relatively few numbers in reviews, we can bring back from the margins a history of video games that is more diversified and complex than what hegemonic discourses tend to describe in a patriarchal context. After all, the number of women is less important than the fact that they were present at different times and that their opinions and writings were published and read by many. A story that still needs to be completed by exploring even more sources and mediums with a diversity of methods and perspectives until each smaller research combined give us a new and more inclusive historical vision, as with other parts of gaming history.

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**The Arena of Teamwork**  
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Geunyoung Kim

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# The Arena of Teamwork

## The Impact of Stellate Polygonal Seating on Multiplayer Game Performance

GEUNYOUNG KIM

### Abstract

Multiplayer gaming highly depends on teamwork, making the spatial arrangement of players an important design factor. This study examines how two seating configurations—linear seating and stellate polygonal seating—affect multiplayer performance, communication, and overall collaborative experience. Twenty-four participants played in teams under both arrangements, followed by surveys from sixteen participants evaluating eight aspects of teamwork and interaction. While linear seating resulted in higher kill counts and thus stronger quantitative performance, players consistently rated stellate polygonal seating more positively, emphasizing its advantages for communication and team-centric engagement. These findings note the complex relationship between spatial layout and team effectiveness in gaming environments and suggest that optimal multiplayer setups require balancing functional performance with social and spatial dynamics. Future work should explore additional spatial variables that may further enhance collaborative gameplay.

### Keywords

Multiplayer games; seating configurations; interactive communication; spatial dynamics; gaming performance; computer games; mobile games

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### Background

**Multiplayer gaming has evolved into an integral component of gaming culture.** From mobile games to esports tournaments, the realm of multiplayer gaming spans a diverse range of genres, including multiplayer computer games (MCGs) and massively multiplayer online games (MMOGs). It has seamlessly woven itself into every corner of the gaming landscape, becoming an omnipresent phenomenon that captivates players worldwide.

The world of multiplayer games is flourishing, fuelled by the inherent competitiveness of contemporary gaming, and players are instinctively drawn to seek out strategies that enhance their in-game performance. Technical strategies involve optimizing the gaming experience through equipment and environmental enhancements. One such approach entails reducing network latency, a pivotal factor that influences gameplay smoothness and responsiveness (Dick et al., 2005). Additionally, purchasing high-end graphics cards with an outstanding graphics processing unit (GPU), allows for indulgence in gaming with elevated frame rates and reduced image lag (Cuervo et al., 2015). Communication architecture, or how computer units are networked in gameplay, can also induce different levels of game performance in multiplayer games (Smed et al., 2002). Smed, Kaukoranta, and Hakonen present four types of communication architecture based on their respective degrees of deployment—(i) single unit (split screen), (ii) peer-to-peer (nonhierarchical units connected to each other), (iii) client/server (one server and multiple clients), and (iv) server-network (server pool of more than one interconnected servers) (3).

While attending to technical aspects is important, the essence of multiplayer gameplay extends far beyond the realm of utilizing high-end devices. It encapsulates the spirit of collaboration within gaming—teammates synergistically uniting their efforts. This team unification comprises numerous components, but at its core, it relies on answering this fundamental question: how will a team of players bring multiple minds together to think as one cohesive unit?

### ***Context and scope of effectiveness and teamwork***

In multiplayer gaming environments, how players are spatially arranged can influence the dynamics of teamwork and overall performance. This paper explores the broader concepts of 'effectiveness' and 'effective teamwork' within these settings, recognizing that interpretations of effectiveness may vary depending on player intentions and gaming contexts (Dick et al., 2005). For instance, a casual player may value enjoyment or communication, while a competitive player may equate effectiveness with winning. Understanding these distinctions provides a foundation for examining how different seating configurations may shape team-based play.

Here, 'effectiveness' refers to the seating configuration's ability to facilitate team success and victory, with 'team performance' measured by higher kill counts, as detailed in the Method I overview. To capture a more nuanced understanding of teamwork, observer notes were also taken to examine match dynamics from a third-person perspective.

Effective teamwork, though challenging to define, is inherently tied to collaboration in multiplayer gameplay. Defined as working together toward shared goals (Debowski et al., 2016), effective teamwork in this study refers to collaboration that drives successful outcomes, characterized by efficient communication and coordi-

nation (Leavitt et al., 2016). Given this, it was anticipated that the most accurate evaluation of effective teamwork would come from those directly engaged in the experience, making participant self-reports the chosen method of measurement. Understanding how spatial elements of these seating configurations influence effective teamwork is a central focus of this study. However, specific settings, such as professional tournaments involving pro-gamers or casual multiplayer matches between amateurs, were not explicitly considered in this analysis.

### ***Spatial and interactive factors***

The spatial placement of actors plays a pivotal role in cultivating team coordination, as it induces multiple nodes of interaction to emerge during complex multiplayer scenarios, analogous to cell interactions within a multicellular organism (Depping, 2017).

Different seating arrangements cater to gaming teams of varying sizes. Some configurations benefit smaller teams like duos or trios, promoting close collaboration and streamlined communication. Conversely, other arrangements favour larger teams of eight or more members, providing ample space for coordination.

When devising seating strategies, the two crucial factors determining communication levels are often proximity and orientation (Wannarka, 2008). A noteworthy study from the past explored the correlation between students' seating placement in a sizable lecture hall and their academic performance. The findings revealed that students positioned closer to the primary source of information, typically where the professor stands and delivers lectures, demonstrated greater knowledge absorption owing to their immediate proximity to the information source (Benedict et al., 2004). While the study refrains from definitively attributing the findings to improved visual and auditory capabilities or heightened focus, it demonstrates a strong correlation between closer proximity and increased engagement and immersion within the learning environment.

The research conducted by Norazman, Ismail, and Ja'afar (2019, p. 32–35) studies optimizing learning efficiency in classroom ecology, particularly for smaller student populations. The study explores and compares five distinct formations: rows and columns, U-shaped, runway-style, clustered, and stadium. Each formation's efficacy is intricately tied to its orientation. Traditional rows and columns (p. 32) or stadium formations (p. 35) are well-suited for teacher-centric lectures, as they facilitate direct visual engagement between the teacher and students. Conversely, U-shaped (p. 33) and runway-style (p. 34) configurations enhance student interaction opportunities, with students oriented towards each other, enabling greater utilization of classroom space and facilitating teacher intervention. The clustered formation (34), uniquely, prioritizes group work, with students focused solely on their group members rather than the entire class, and the teacher positioned separately from the interactive spatial perimeter.

Multiplayer gaming shares similarities with group work among students, as both involve a collective pursuit of a shared objective through cognitive and social processes (Voulgari et al., 2011), encompassing the exchange of information and feedback. Consequently, the significance of proximity and orientation becomes dominant. However, multiplayer gaming diverges in that it often intertwines competition with collaboration, resulting in tightly-knit and fast-paced interactions. Players bear the responsibility of processing and responding to a myriad of stimuli within a short time frame. This encompasses tasks such as preemptively assessing teammates' positions and strategies, as well as swiftly formulating and executing instantaneous decisions (Peña et al., 2006). Hence, with the significance of the clustered formation in multiplayer gaming acknowledged, it becomes crucial to develop a seating configuration that is aligned with the specific requirements and relevance of gaming.

Although numerous seating configurations exist, the focus is placed on these two arrangements, given their notable differences. Table 1 presents key differences in desk arrangements, as informed by previous research on the efficacy of desk arrangements (Rosenfield et al., 1985). It summarizes variations in player proximity and orientation, the existence of a centerpoint, typical usage scenarios, and how these arrangements are perceived in gaming culture.

	<b>Stellate Polygonal</b>	<b>Linear</b>
Proximity	<ul style="list-style-type: none"> <li>• Equal between players</li> <li>• Far end seats don't exist</li> </ul>	<ul style="list-style-type: none"> <li>• Unequal between players</li> <li>• Far end seats exist</li> </ul>
Orientation	<ul style="list-style-type: none"> <li>• Facing different directions</li> </ul>	<ul style="list-style-type: none"> <li>• Facing the same direction</li> </ul>
Centerpoint	<ul style="list-style-type: none"> <li>• Pronounced centerpoint</li> </ul>	<ul style="list-style-type: none"> <li>• Obscure centerpoint</li> </ul>
Common Use	<ul style="list-style-type: none"> <li>• Strong focus on interaction</li> <li>• Collaborative team tasking</li> <li>• Meetings, workshops, seminars, creative studios, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Weak focus on interaction</li> <li>• Individual tasking</li> <li>• Examinations, presentations, waiting spaces, lectures, etc.</li> </ul>
In Gaming Culture	<ul style="list-style-type: none"> <li>• Emerging seating layout</li> </ul>	<ul style="list-style-type: none"> <li>• Traditional seating layout</li> </ul>

Table 1. Stellate polygonal seating versus linear seating breakdown.

### **Linear seating**

Linear seating, currently the dominant and extensively employed seating configuration, positions team players in a straight line. Players are devoid of face-to-face interaction, but oriented in the same vertical direction, as visible from Figure 1, a visualization of linear seating. When seated linearly, the distances from a single player

to the centerpoint as well as the interaction distance between two players vary by player.

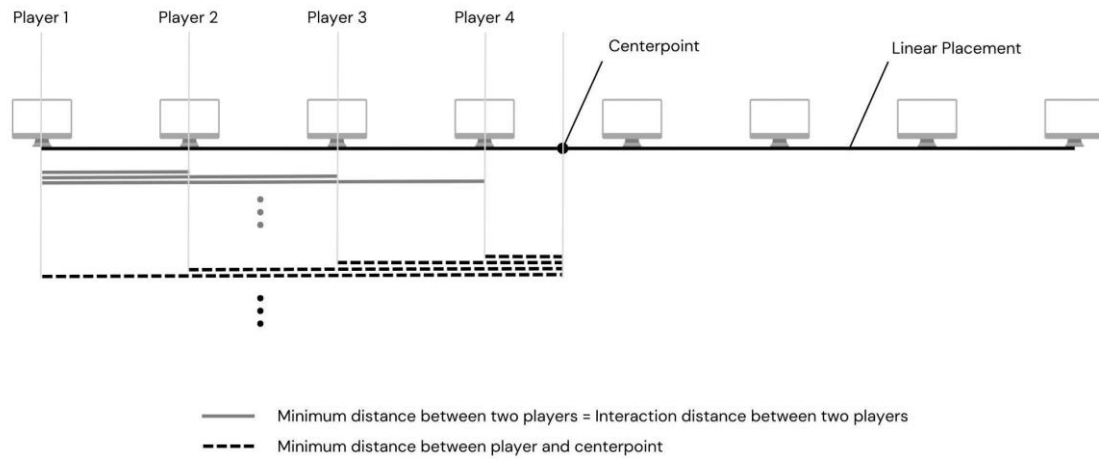


Figure 1. A visual description of linear seating (eight players).

The prevalence of linear seating in gaming can be attributed primarily to the constraints of limited space. In scenarios where the gaming area is compact yet must accommodate multiple gamers, opting for a linear layout becomes pivotal in maximizing space efficiency. Furthermore, linear seating facilitates streamlined organization and optimal placement of gaming equipment, encompassing computers, monitors, keyboards, and mice. This configuration not only simplifies the wiring process but also enhances cable management, culminating in an uncluttered setup.

The rise in popularity of linear seating configurations within gaming environments may be influenced by the prevalent setups seen in online gaming streams and esports tournaments. Platforms like Twitch, which surpassed 3 billion total hours watched in the first quarter of 2020 (TechCrunch, 2020), and Facebook Gaming, with its significant rise to 822 million hours watched, a threefold increase from the previous year (Streamlabs, 2020), have not only captivated gaming audiences but also subtly shaped gaming culture and practices. The linear seating often showcased in these streamed events, selected for optimal camera angles and production values to enhance viewer engagement, appears to have set a perceived standard. Many gamers, both in streaming and non-streaming contexts, might be adopting these configurations, assuming their effectiveness in enhancing the gaming experience. The visibility and success of these streaming platforms suggest a correlation between their preferred seating arrangements and the adoption of similar layouts in everyday gaming settings.

Through such platforms, viewers now have enhanced access to immersive sportified content that promotes active competition among teams and participants (Turtiainen

et al., 2020). These popular platforms also provide a captivating window into the world of professional gamers, showcasing their meticulously crafted game-specific environments that optimize the gaming experience and facilitate extraordinary gameplay moments (Hamari et al., 2017, p. 9–11). The highly renowned esports event, the League of Legends (LoL) World Championship, amassed 142 million total viewing hours in 2022 alone (EarlyGame, 2022). This spectacle, alongside other prominent tournaments such as The International (Dota 2), Fortnite World Cup, Counter-Strike: Global Offensive (CS:GO) Major Championships, and Overwatch League Grand Finals, has leveraged multimedia platforms to engage with a vast audience, where they employ the linear seating style throughout most, if not all, rounds.

### ***Stellate polygonal seating***

The crux of this research revolves around the stellate polygon, which is a concept derived from the clustered formation. Stellate polygons, by definition, encompass polygonal structures that perpetually expand either through infinite length or iterative replication of the original shape (Salatino, 2019). Figure 2 below is a visualization of stellate polygonal seating. Fundamentally, stellate polygonal seating takes the form of a stellar configuration, where players are strategically positioned at each vertex. As demonstrated in the figure, the stellate polygon in this study exemplifies a symmetrical star shape, and all players are equitably positioned at its vertices. Notably, this polygon maintains equal distances between each player and the central focal point, in an impartial arrangement for all participants.

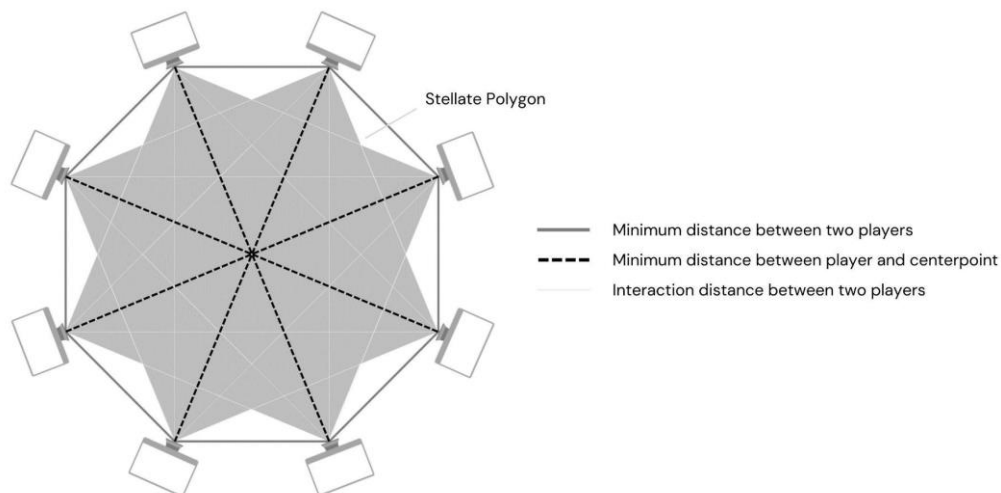


Figure 2. A visual description of stellate polygonal seating (eight players).

Note that in Figure 2, the seating arrangement exemplifies a scenario with an 8-player team. It is important to acknowledge that when accommodating a different

number of players, the stellate polygon will possess a corresponding number of additional vertices for seating. However, all other conditions and principles governing the seating arrangement remain unaltered regardless of the specific player count.

The stellate polygon accentuates spatial elements to a greater extent when compared to basic circular seating, exemplified through the following facets:

- **Straight Line Distances:** Unlike circular seating, where the minimum distances between adjacent players are represented as arcs, the stellate polygon ensures that these distances are conveyed as straight lines, reinforcing a direct and unobstructed spatial relationship.
- **Farthest Point Distances:** The stellate polygon emphasizes the equal minimum distances between the centerpoint and each player. In this regard, the stellate polygon considers the longest distance, extending from the centerpoint to any individual point within the polygon.
- **Interactive Distance Depiction:** A distinctive characteristic of the stellate polygon lies in its ability to effectively portray the interactive distance between every player. Each connection between players within the configuration forms a stellate polygon in itself, accentuating the interconnectedness and spatial dynamics of the seating arrangement.

By virtue of these elements, stellate polygonal seating is visually represented and studied in this research instead of circular seating.

## **Research objectives and hypotheses**

However, the question arises: does the prevalence of linear seating in gaming environments necessarily imply that it is the most effective seating configuration? Is it possible that we might be overlooking a more effective seating arrangement for gaming simply because we stick to the prevailing norm? This study aims to compare the effectiveness of two primary seating configurations – stellate polygonal and linear – in various identifiable aspects.

The research objectives of this study are as follows:

- Compare the effectiveness of stellate polygonal seating to linear seating in esports, focusing on whether and how they impact team performance and outcomes.
- Investigate the potential of stellate polygonal seating as a catalyst for enhancing team collaboration and interaction within spatial dynamics of gaming environments.

- Determine if stellate polygonal seating, as opposed to conventional linear seating, yields increased levels of spatial and team interaction in esports settings.

Based on these objectives, this study proposes the following hypotheses to empirically test the impact of seating configuration on gaming performance and team dynamics.

H1: A correlation exists between seating configuration and in-game performance.

H2: Stellate polygonal seating will yield higher kill counts compared to linear seating, implying that the specific arrangement of seating positions in a stellate polygonal configuration enhances players' in-game performance.

H3: Participants will rate stellate polygonal seating more favourably than linear seating in most categories, reflected by higher scoring.

## Methods

### *Method I overview*

The method I aim to evaluate the effectiveness of stellate polygonal versus linear seating configurations in multiplayer gaming, focusing on their impact on team performance and dynamics. This method tests the hypothesis that seating arrangements significantly influence in-game performance by engaging real players in competitive matches.

In this method, gameplay was carried out involving participants selected based on two key factors: their level of familiarity with the chosen game (PUBG) and their proximity to the physical location where the matches took place (Busan, South Korea). Furthermore, in order to ensure minimal constraints during matches, participants were required to possess prior experience in playing both PUBG and PUBG Mobile. It should be noted that proficiency in the game was not a mandatory criterion for participation. This was accomplished by recruiting participants from an online gaming community. Subsequently, those who expressed their willingness to take part and were conveniently located were requested to provide a self-assessment of their proficiency in playing PUBG. This evaluation was based on three specific criteria: (i) K/D ratio (kill-death ratio), calculated by dividing the total number of kills by the total number of deaths, (ii) tier, as determined by the most recent tier system in effect since C1S1 (Cycle 1 Season 1) in July 2021, and (iii) the number of years they had been actively engaged in playing the game, as indicated in their account information. Finally, following participants' provision of informed consent, participants were meticulously selected and organized into three well-balanced

teams of eight, taking into account their individually assessed skill levels in PUBG. The teams were formed to comprise players categorized as SSS (expert; K/D Ratio:  $7.00 \leq K/D$ ; Tier: Ace Dominator ~ Conqueror; Playtime: 3 Years  $\leq$  PT), SS (advanced; K/D Ratio:  $5.00 \leq K/D < 7.00$ ; Tier: Crown ~ Ace Master; Playtime: 2 Years  $\leq$  PT < 3 Years), and S (intermediate; K/D Ratio:  $3.00 \leq K/D < 5.00$ ; Tier: Platinum ~ Crown; Playtime: 1 Year  $\leq$  PT < 2 Years), with the aim of minimizing significant skill disparities between teams that could potentially impact outcomes. Candidates at the beginner level were excluded for similar reasons.

Subsequently, the three teams were assigned randomly to either the tested teams or the fixed opponent team. One team was designated as the fixed opponent team, responsible for assuming the role of the opponent in all matches. The opposing team was instructed to remain at their respective locations and participate in the match, with all forms of communication, including popular platforms like Discord, blocked. On the other hand, the remaining two teams were instructed to be physically present at the gameplay area, where designated seating arrangements were implemented. Moving forward, the two tested teams were referred to as Team I and Team II, while the fixed opponent team was identified as Team C.

In order to establish a fair gameplay setting, several decisions were made regarding the matches and gameplay settings. The following decisions were implemented:

#### *Selection of game and control of variables*

PUBG was selected for this study due to its multiplayer battle royale format emphasizing team strategies and agility, coupled with its user-friendly controls. The game also encourages diverse player interactions, including combat, looting, item sharing, revival, and zone management.

PUBG is typically played in two primary squad modes: (1) physically present as a squad with direct communication and (2) online, often accompanied by microphones, headphones, or voice chat, connecting players from different locations. Squads can be formed through automated matchmaking or by pre-arrangement among clan members or co-players. To ensure unbiased results, this research specifically avoided pairing players who had previously teamed up, excluding unrecorded random matchmaking from consideration. This precaution was taken to avoid situations where players who had previously teamed up might have already developed efficient strategies and strong bonds, potentially hindering natural interactions during gameplay.

As gamers who physically gather in shared spaces predominantly do so in urban internet cafés equipped with multiple linear seating arrangements and internet-accessible gaming devices (Powell, 2004, p. 12), it is worth considering that the participants in this study may have greater familiarity with linear seating than with stellate polygonal seating. Nonetheless, it is important to note that this variable was not

controlled during the study, aligning with the broader research objective of investigating whether stellate polygonal seating can facilitate improved gameplay performance, even when contrasted with the more acquainted and conventional linear seating.

#### *Utilization of PUBG Mobile on a laptop platform*

To facilitate a comprehensive exploration of proximity and orientation effects, a departure from the conventional 4-person team structure was made, and instead, 8-person teams were employed for testing purposes. Among the available match modes in PUBG Mobile, the 8 vs 8 Santorini Team Deathmatch was identified as the most fitting for the study's objectives. This particular match mode was chosen due to its clear-cut scoring system and time-efficient nature, with the winning team being determined simply through a higher kill count and each match lasting no more than 10 minutes.

Although the specific type of game platform (PC or mobile) was not a significant factor in this study, a deliberate decision was made to present this mobile game on a larger screen. Notably, mobile gamers have a tendency to assume a flexed-head and unsupported-arm posture, naturally leaning forward while intensifying their focus or straining their eyes on handheld screens (Ashok et al., 2020; Lam et al., 2022, p. 7–8). Recognizing that such behaviour could impact the proximity between team members, the mobile game was accordingly adapted to a laptop screen-friendly format using BlueStacks X software and played on larger screens. Given that all participants were experienced players of both PUBG and PUBG Mobile, they quickly adapted to new control systems.

#### *Utilization of chair–desk combos*

Similarly, the potential issue of inadvertent chair movement, as players unknowingly drag their chairs in and out while engrossed in the game, emerged as a concern. This tendency, particularly evident when rollable gaming chairs are employed, can contribute to a head-forward slumping posture (Zwibel et al., 2019, p. 757). Moreover, it may unintentionally lead to variations in the distances between players. To mitigate this factor, a strategic decision was made to furnish the gameplay area with chair-desk combos instead of traditional gaming chairs. These chair-desk combos consist of individual units where the chair legs are merged or securely interlocked with the desk legs, restricting free movement of the chair without displacing the entire unit. This approach ensures more precise and consistent gameplay outcomes, minimizing the potential for unintended disparities in player-to-player distances. For each seating configuration, the spacing between each chair-desk combination was arranged to be 2.62 feet (80cm), determined according to the dimensions of the gameplay area.

### *Match mode and game setting details*

Furthermore, various additional configurations were standardized to ensure consistency throughout the study. Specifically, the laptops employed in this research were comprised either personal or rented MacBook Airs or MacBook Pros. To facilitate the matches, two distinct private rooms were established, one allocated for Team I and the other for Team II, while Team C competed in both rooms. These rooms were acoustically isolated, ensuring that communication within one team's space could not be overheard by the opposing team. Team C, the fixed opponent, was located remotely and had no auditory or visual access to either Team I or Team II during gameplay. Furthermore, to maintain uniformity, game settings including graphics, audio, and sensitivity were harmonized as follows: graphics set to smooth, frame rate set to medium, style set to realistic, anti-aliasing set to close, brightness set to 120%, sensitivity set to most used, and loadout consisting of one M416 and one frag grenade, with the provision to acquire new weapons throughout the match. It is noteworthy that all matches were conducted in third-person perspective (TPP).

Table 2 below visually depicts the match schedule for this study. In total, a series of eight matches were conducted, four matches each day. As previously mentioned, Team C was involved in all eight matches, playing four matches against Team I and four matches against Team II. Team I and Team II, on the other hand, each competed in four matches, with two matches conducted in a linear seating arrangement and two matches in a stellate polygonal seating arrangement. It is worth noting that all matches for Team I were held on the same day, while the matches for Team II took place on the subsequent day.

<b>Match Name</b>	<b>Team I</b>	<b>Team II</b>	<b>Team C</b>
<i>Day 1</i>			
I-1	Linear Seating	×	Remote
I-2	Stellate Polygonal Seating	×	Remote
I-3	Linear Seating	×	Remote
I-4	Stellate Polygonal Seating	×	Remote
<i>Day 2</i>			
II-1	×	Linear Seating	Remote
II-2	×	Stellate Polygonal Seating	Remote

II-3	×	Linear Seating	Remote
II-4	×	Stellate Polygonal Seating	Remote

Table 2. Method I Match Schedule.

Additionally, brief observer notes were recorded to capture immediately noticeable behaviours during gameplay. The goal was not to document every interaction between players but to gain insight into the types of communication and key communicative patterns that emerged.

### **Method II overview**

Method II seeks to understand participants' perceptions and insights, both qualitatively and quantitatively, regarding linear and stellate polygonal seating configurations based on their firsthand experiences. This method examines the hypothesis that participants will generally rate stellate polygonal seating more favourably than linear seating across different categories, as indicated by higher scores.

A comprehensive evaluation of collaborative performance encompassed eight key categories deemed essential for effective task completion. In terms of the eight selected categories, this study employs the conceptual framework established in Manninen's research (2003) in defining the realm of player-to-player (PTP) communication within the context of multiplayer gameplay. Manninen's study on interaction within multiplayer games underscores the multifaceted nature of players' engagement in communicative gameplay, particularly focusing on PTP interaction encompassing oculosics, kinesics, facial expressions, language-based communication, non-verbal audio cues, physical contact, and spatial behaviour. Participants provided self-assessments in the following areas: team cognition (T), motivation (M), discussion (D), cue-reading (Q), speculation (S), flexibility (F), recognition (R), and bounce-back (B). While participants were unaware of the specific question-area correspondence during the survey, for reference purposes, these associations have been included in Table 3. The selection of these criteria was based on previous research in the field of collaborative tasking (Barros et al., 2000, p. 228; Gratton et al., 2007; Gutwin et al., 2004, p. 6–12; Kraut et al., 1996). The questions in this survey were presented twice to the participants; once after linear seating gameplay and once after stellate polygonal seating gameplay. A full copy of the survey is provided in Table 3.



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*Bounce-back (B)*

How was your experience bouncing back after encountering difficulties?

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1	2	3	4	5	6	7	8	9	10
Worst									Best

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**Section 2**

Gameplay Experience Evaluation 🗣️ Free Response

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What was the best part about playing a multiplayer game in linear/stellate polygonal seating? (Write one thing.)

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Response

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What was the worst part about playing a multiplayer game in linear/stellate polygonal seating? (Write one thing.)

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Response

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Table 3. Method II survey sheet.

As can be seen from Table 3, participants were requested to rate their experiences in these categories on a Likert scale from 1 (worst) to 10 (best), drawing from their gaming experiences in Method I. Following the scaling questions, participants were also presented with two open-ended questions to share their insights on the notable advantages and disadvantages of the seating configuration.

### ***Participant profile***

Table 4 provides an overview of the participant demographics for Method I and II. Each number in Table 4 represents the age of the participant, while the letters M and F indicate their sex. In the leftmost column, S, SS, and SSS represent the aforementioned game skill levels, determined by factors such as the K/D ratio, tier, and playtime. The cohort of 24 participants analyzed in this study comprised 19 male individuals and 5 female individuals. Demographically, 20 participants fell within the age bracket of their twenties, with the remaining 4 participants in their thirties.

	Team I	Team II	Team C
SSS (Expert)	23 / M	29 / M	27 / M
	24 / M	23 / F	20 / M
SS (Advanced)	28 / M	30 / M	24 / M
	20 / M	33 / M	26 / F

	27 / M	24 / M	20 / M
S (Intermediate)	29 / F	25 / M	26 / M
	22 / F	26 / M	30 / M
	32 / M	21 / F	28 / M

Table 4. Method II survey sheet.

## Results

### Method I results

Match Name	Kill Count		Kill Gap
	Team I	Team C	
I-1	80	65	15
I-2	48	80	32
I-3	80	71	9
I-4	58	80	22
	Team II	Team C	
II-1	80	77	3
II-2	42	80	38
II-3	80	67	13
II-4	60	80	20

Table 5. Method I results: kill count.

A total of four matches were conducted for each of Team I and Team II, utilizing distinct seating arrangements for each match. Specifically, the first and third matches were played in a linear seating configuration, while the second and fourth matches utilized stellate polygonal seating.

Results were recorded for all eight matches, and Table 5 is a depiction of these outcomes. As the table denotes, in linear seating, both Team I and Team II scored 80 kills in each of the four matches. However, when matches were conducted using the stellate polygonal seating arrangement, the number of kills varied with values of 48, 58, 42, and 60 for matches I-2, I-4, II-2, and II-4 respectively. Interestingly, in all

matches played with stellate polygonal seating, Team I or Team II was defeated, and the difference between 80 (the target kill count) and the losing team's actual kill count was notably larger compared to the losing gap of Team C, who played separately without communication.

	<b>Team I Average Kills</b>	<b>Team II Average Kills</b>	<b>Average of Average Kills</b>
Linear Seating	80	80	80
Stellate Polygonal Seating	53	51	52

Table 6. Method I results: average kills.

Table 6 shows the average number of kills per team in each seating scenario. Results suggest that the stellate polygonal seating configuration may have negatively impacted the performance and outcomes of Team I and Team II, as can be seen from the steep drop in average kill counts for both teams.

During the course of the matches, an interesting pattern emerged. When Team I or Team II was seated in a linear configuration, they won. However, when they were seated in a stellate polygonal configuration, they were defeated.

<b>Source</b>	<b>Sum of Squares (SS)</b>	<b>Degrees of Freedom (df)</b>	<b>Mean Square (MS)</b>	<b>F-statistic</b>	<b>F-critical</b>
Between Groups	1568.0	1	1568.0	43.56	5.99
Within Groups	216.0	6	36.0		
Total	1784.0	7			

Table 7. Method I results: ANOVA test.

An ANOVA test was performed to evaluate the outcomes of Method I and whether there is a significant difference in players' gaming outcomes according to seating configuration. The mean number of kills was 80 for teams in linear seating and 52 for teams in stellate polygonal seating. Conducting the test with a significance level of 0.05, the calculated F-statistic of 196 exceeded the critical F-value of 5.99. Therefore, the null hypothesis was rejected, providing evidence to support that there is indeed a significant difference in gaming outcomes. This difference in gaming outcomes directly addresses the first research objective, which aims to compare the

impact of stellate polygonal and linear seating on team performance, thereby testing the first hypothesis (H1) regarding the correlation between seating configuration and in-game performance.

Additionally, observer notes were taken for each match and compiled based on the seating arrangement of the on-site team. The table below presents a condensed version of the raw notes collected.

<b>Linear</b>
<ul style="list-style-type: none"> <li>• Frequent shouting</li> <li>• Intense screen focus, minimal eye movement</li> <li>• Far-end players fidget when interacting with those opposite</li> <li>• Low levels of dialogue</li> </ul>
<b>Stellate Polygonal</b>
<ul style="list-style-type: none"> <li>• Frequent head movement</li> <li>• Players often look up to make eye contact</li> <li>• Occasional conversations unrelated to gameplay</li> <li>• Frequent shared emotions, like group laughter or shouting</li> </ul>

Table 8. Method I results: observer notes.

The observer notes revealed significant contrasts between the linear and stellate polygonal setups. In the linear arrangement, players demonstrated strong focus on their screens with minimal interaction, though louder vocalizations and fidgeting were more common among those seated at the far ends. Conversely, the stellate polygonal setup encouraged more head movement and eye contact, with occasional conversations unrelated to gameplay. Additionally, this arrangement fostered more shared emotional expressions, such as group laughter and raised voices. These findings will be further analyzed alongside the results of Method II in the Method II Discussion section.

## **Method II results**

Initially, the survey responses from Section 1 were compiled and visualized into Table 9, presented below. Within each figure, each bar encapsulates the mean score, maximum score, and minimum score for the respective categories of team cognition (T), motivation (M), discussion (D), cue-reading (Q), speculation (S), flexibility (F), recognition (R), and bounce-back (B). Mean scores per seating for individual categories were rounded to the nearest whole number, with the total average being the mean value of those means.

Category	Linear			Stellate Polygonal			p-value	Significance
	Mean	Max	Min	Mean	Max	Min		
Team Cognition (T)	5	7	4	8	10	5	< 0.05	Yes
Motivation (M)	3	5	1	8	10	6	< 0.05	Yes
Discussion (D)	3	5	1	8	10	6	< 0.05	Yes
Cue-reading (Q)	1	3	1	6	9	3	< 0.05	Yes
Speculation (S)	6	8	3	6	8	3	0.84	No
Flexibility (F)	7	9	5	5	7	3	< 0.05	Yes
Recognition (R)	3	5	1	5	9	4	< 0.05	Yes
Bounce-back (B)	4	6	1	4	5	1	< 0.05	Yes
Total Average	4.16			6.34				

Table 9. Method II results: section 1 responses.

A Mann-Whitney U test was employed to analyze the data, revealing significant differences ( $p < 0.05$ ) between the two seating configurations across all categories but speculation (S), which showed no statistically significant difference ( $p = 0.84$ ).

The survey responses from Section 1 produced intriguing results. Despite linear seating yielding superior in-game performance, stellate polygonal seating had a higher overall mean score ( $\mu = 6.34$ ) compared to linear seating ( $\mu = 4.16$ ), indicating that participants perceived stellate polygonal seating more favorably, particularly for team collaboration—a key focus of the second research objective.

Stellate polygonal seating scored higher in six out of eight categories, reflecting its potential to foster a team-oriented environment, which is central to assessing its impact on spatial and team interaction. Speculation (S) showed almost no difference between the two configurations (linear seating  $\mu = 5.5$ ; stellate polygonal seating  $\mu = 5.63$ ), while flexibility (F) and bounce-back (B) scored lower in stellate polygonal seating compared to linear seating.

While the statistical significance of these findings is clear, the practical implications warrant further consideration. The measures used in this study—such as team cognition, discussion, and cue-reading—were adapted specifically for this research context and have not been previously validated in other studies. As such, while differences in mean scores across seating configurations were found to be statistically significant, it remains uncertain whether these differences reflect meaningful or impactful changes in actual gameplay experience. Similarly to how clinical significance is used alongside statistical significance in health research, future studies should

aim to evaluate the real-world significance of these effects in the context of multi-player gaming. Nonetheless, the trends observed here offer valuable starting points for further exploration.

Next, a Tukey's HSD Test was conducted to assess whether reported scores differed significantly based on three factors: age, gender, and proficiency.

\*SP = Stellate Polygonal

Category	Comparison	Mean Difference	p-value	Significance (Yes/No)
Team Cognition (T) SP	SS vs. SSS	-2.75	0.0027	Yes
	SS vs. S	2.00	0.0111	Yes
	SSS vs. S	4.75	0.0010	Yes
Motivation (M) SP	SS vs. SSS	-1.75	0.0149	Yes
	SS vs. S	0.25	0.9000	No
	SSS vs. S	2.00	0.0045	Yes
Discussion (D) SP	SS vs. SSS	-1.75	0.0149	Yes
	SS vs. S	0.25	0.9000	No
	SSS vs. S	2.00	0.0045	Yes
Cue-reading (Q) SP	SS vs. SSS	-2.00	0.0045	Yes
	SS vs. S	0.25	0.9000	No
	SSS vs. S	2.25	0.0034	Yes

Table 10. Method II results: section 1 Tukey's test.

Table 10 shows the key statistics where significant differences were observed. Notably, player proficiency levels — classified as S, SS, and SSS — had a significant impact on the scores in the Method II survey, particularly within the four categories of team cognition (T), motivation (M), discussion (D), and cue-reading (Q), but only in the context of stellate polygonal seating. The findings suggest that higher proficiency levels corresponded with higher scores assigned to each of these categories. In contrast, neither age nor gender emerged as significant factors.

However, the question remains: what could explain the divergence between performance and perception? The free responses obtained from Section 2 could be effectively classified into the following categories with the number of respondents for each category.

Gameplay Experience Evaluation ② Free Response	
What was the best part about playing a multiplayer game in linear seating? (Write one thing.)	
Enhanced individual focus	10
Low levels of distraction	6
What was the worst part about playing a multiplayer game in linear seating? (Write one thing.)	
Difficult to communicate with teammates	9
Less team motivation	5
Felt more nervous	1
Felt spatially separate from the team	1
What was the best part about playing a multiplayer game in stellate polygonal seating? (Write one thing.)	
Team mindset	8
Felt more energized and motivated	7
Felt less nervous	1
What was the worst part about playing a multiplayer game in stellate polygonal seating? (Write one thing.)	
High levels of distraction	13
Scared to make a mistake	2
Team mood swings dramatically	1

Table 11. Method II results: section 2 responses.

Table 11 illustrates the differential impacts of linear and stellate polygonal seating on gaming experience. Linear seating was associated with improved individual focus, as reported by ten participants, yet it appeared to impede team communication, as reported by nine participants. On the other hand, stellate polygonal seating was conducive to fostering a team-oriented mentality, referenced by eight participants, and heightened motivation, mentioned by seven. However, this configuration also introduced greater distractions, which was problematic for 13 participants. In summary, while linear seating may augment individual performance, stellate polygonal seating seems to bolster team dynamics, though not without introducing certain challenges. These observations directly relate to the study's third objective,

which seeks to assess whether stellate polygonal seating leads to increased spatial and team interaction compared to traditional linear seating, thereby addressing the hypothesis that different seating configurations can significantly influence player experience and team dynamics.

## Discussion

### Method I discussion

The discussion of these results clearly aligns with the study's objectives of comparing the impact of seating arrangements on team performance and exploring the potential of stellate polygonal seating to enhance team collaboration. The results provide insights into the impact of seating configuration on gaming performance, specifically focusing on two hypotheses, H1 and H2.

Team	Kill Counts		t-statistic	p-value	Significance
	Linear	Stellate Polygonal			
Team I	80, 80	48, 58	27.00	$\cong 0.00$	Yes
Team II	80, 80	42, 60	10.27	$\cong 0.00$	Yes

Table 12. Method I discussion: t-test.

A t-test performed to test the first hypothesis (H1) aimed to determine whether there is a significant correlation between seating configuration and in-game performance. The t-test for Team I revealed a significant difference in average kills between linear and stellate polygonal seating, with a high t-statistic (27.00) and very low p-value ( $\cong 0.00$ ), strongly reinforcing H1 by demonstrating that seating configuration significantly affects gaming performance. Similarly, the t-test for Team II also indicated a significant difference, with a high t-statistic (10.27) and very low p-value ( $\cong 0.00$ ), further substantiating the hypothesis that seating arrangement plays a crucial role in gaming outcomes for both teams.

Regarding the second hypothesis (H2), the data does not support the expectation that stellate polygonal seating will yield more kills compared to linear seating. In fact, the average number of kills for teams seated in linear seating was higher (80) compared to teams seated in stellate polygonal seating (52). This outcome, contradicting H2, suggests that while stellate polygonal seating may foster team interaction, it does not necessarily translate into better gaming performance as hypothesized. The conducted t-test demonstrates statistical significance in the disparities observed in average numbers of kills, providing a quantitative evaluation of H2's assumptions.

In summary, the pattern observed throughout the eight matches conducted, where Team I and Team II won when seated in a linear configuration but were defeated when seated in a stellate polygonal configuration, not only illustrates the practical implications of seating arrangements but also directly relates to the study's inquiry into the effectiveness of different seating configurations. The ANOVA test and t-test results support the hypothesis (H1) that a correlation exists between seating configuration and in-game performance. However, they challenge the hypothesis (H2) regarding better in-game performance of stellate polygonal seating, offering a comprehensive understanding of how seating arrangements influence multiplayer gaming dynamics.

Additionally, players' greater familiarity with the conventional linear seating likely contributed to their stronger performance in that configuration, introducing a potential confounding variable that warrants further examination in future studies. Furthermore, while kill count served as a clear and quantifiable outcome, it may not capture other important aspects of performance such as tactical positioning, communication efficiency, or strategic survival, suggesting the value of incorporating additional metrics in future experiments.

### ***Method II discussion***

The survey results provide deeper insight into the second and third research objectives, particularly the potential of stellate polygonal seating to enhance team collaboration and affect spatial dynamics. This supports the hypothesis that seating configurations influence team effectiveness. While the survey did not ask participants to explain their scores, higher ratings for stellate polygonal seating in teamwork-related categories, such as collaborative thinking and discussions, suggest that this arrangement improves team dynamics. However, lower scores in categories like speculation (S), flexibility (F), and bounce-back (B) highlight its limitations for individual focus. Future research could also replicate this experiment using headset-based voice communication rather than face-to-face interaction, to explore how mediated communication may impact team dynamics under different seating configurations.

Although stellate polygonal seating was preferred for teamwork, this did not result in superior game performance, indicating a complex relationship between seating arrangements and performance. These findings align with observer notes: in linear seating, players, especially at the far ends, struggled with communication, showing low dialogue and limited interaction, while stellate polygonal seating encouraged more communication and emotional exchanges but also introduced distractions, such as off-screen focus and irrelevant conversations.

Free responses confirmed these observations. Participants noted that linear seating reduced distractions and improved focus, but they found stellate polygonal seating more conducive to fostering a team mindset and motivation. This suggests that

while linear seating may boost performance, stellate polygonal seating offers a better team experience, demonstrating that effective teamwork does not always equate to an enhanced team experience. This suggests that teams unfamiliar with the stellate polygonal layout may initially struggle, but with dedicated practice, they might develop coordination strategies that improve their performance over time.

Unexpectedly, gaming proficiency demonstrated a significant effect on the scores in certain categories of Method II—specifically, team cognition (T), motivation (M), discussion (D), and cue-reading (Q)—within the context of stellate polygonal seating. Although this was not a primary focus of the study nor aligned with the initial hypotheses, the result offers valuable insights. The categories influenced by proficiency are characterized by more interactive and immediate team dynamics, in contrast to the unaffected categories—speculation (S), flexibility (F), recognition (R), and bounce-back (B)—which are more strategic and reflective. Given that stellate polygonal seating is less commonly used by most players, a potential interpretation is that higher proficiency enabled players to better adapt to the unfamiliar setup, resulting in reduced disorientation when executing immediate tasks. Moreover, age and gender did not emerge as significant factors. However, this analysis is based solely on the current observations; further research may uncover additional explanations for why more proficient players reported a better experience in stellate polygonal seating.

## **Applications to gaming culture**

### ***Addressing toxicity in gaming culture***

While this study focuses on the impact of seating configurations—linear and stellate polygonal—on team performance and collaboration, it is crucial to place these findings within the broader context of multiplayer gaming environments, where toxicity remains a pervasive issue. Toxic behaviors, often driven by aggressive interactions in high-pressure gameplay (Kordyaka et al., 2023), manifest through profane language, insults, and exclusionary practices (Märtens et al., 2015). These behaviors severely disrupt teamwork and communication, making effective collaboration increasingly difficult. Players in competitive and violent multiplayer genres, especially in games involving large numbers of anonymous participants, are particularly vulnerable to such behaviors (Zsila et al., 2022), making toxicity a significant challenge within the gaming landscape.

In offline multiplayer gaming settings, stellate polygonal seating could offer a strategy to reduce toxicity by fostering more direct interaction between players. However, problematic behaviors in online environments often stem from the anonymity that cyberspace provides (Saarinen, 2017, 14), which makes individuals less likely to adhere to social norms and more prone to engage in behaviors they would other-

wise avoid in face-to-face interactions (17). This anonymity limits the direct applicability of stellate polygonal seating in fully online environments, as the physical presence that helps mitigate toxic behaviour offline is absent. Research has further stressed the normalization of toxicity in gaming culture, where toxic behaviours are accepted as part of the gaming experience (Beres et al., 2021, 1), perpetuating a cycle of moral disengagement in which players feel disconnected from the consequences of their actions (14).

Despite these challenges, the findings from this study offer valuable insights for addressing toxicity in online gaming spaces. By drawing on the principles of stellate polygonal seating, online environments could encourage more direct player interaction through features such as video chat, real-time voice communication, or personalized avatars. These tools can help foster accountability and reduce toxic behaviours by mimicking the face-to-face engagement that stellate polygonal seating promotes. In this study, players reported feeling more motivated, energized, and connected simply by adjusting their seating to face one another, emphasizing the positive effects of direct interaction. This aligns with research showing that cooperative team dynamics can significantly reduce hostility among teammates (Reid et al., 2022). Encouraging direct engagement, both online and offline, could be a powerful strategy for combating toxicity in gaming culture, warranting further research to explore this relationship more deeply.

### ***Therapeutic potentials***

With the rise of toxicity in modern online gaming and concerns like game addiction, positive aspects such as motivation and immersive enjoyment (Johannes et al., 2021) are often overshadowed. However, online gaming has increasingly been integrated into psychotherapy for conditions such as anxiety disorders, autism, and cognitive therapy (Wilkinson et al., 2008). Multiplayer gaming, in particular, offers rich opportunities for social interaction that can enhance players' socio-cognitive skills (Ozgur et al., 2022). As game therapy evolves—incorporating role-playing, virtual reality (Amichai-Hamburger et al., 2014), and therapeutic games shown to build emotional resilience (David et al., 2021)—the design of gaming spaces, both virtual and physical, could further amplify these benefits.

In this context, stellate polygonal seating may play a critical role in promoting mental well-being among players. Findings from this study suggest that, although this seating arrangement did not directly improve match outcomes, it significantly enhanced team interaction and cohesion. Participants reported feeling more motivated and described a stronger team mindset when seated in a stellate polygon formation. These results highlight the potential for spatial design in gaming environments to offer valuable therapeutic applications. The positive social effects observed with stellate polygonal seating call for further exploration, as studying how these design elements impact players' mental well-being could advance the role of online gaming in therapy.

## Limitations and suggestions for future research

While the study employed two methods to ensure greater accuracy, it is important to note that the sample size was limited to only 16 participants (excluding the eight team members of Team C) and their respective gameplay evaluations. Consequently, it is crucial to recognize that expanding the number of test subjects significantly could potentially yield different outcomes. Additionally, since the study was conducted in South Korea where LAN cafés and communal gaming environments are common, the generalizability of these findings to countries where individual or at-home gaming dominates may be limited.

Furthermore, this study specifically focused on an 8-member team gameplay scenario, with the intention of examining interactive factors such as proximity and orientation. However, it is worth considering that outcomes may vary for smaller teams, such as duos or 3-man squads, as richness and accuracy in communication are significantly enhanced at group-level for smaller groups (Lowry et al., 2006, p. 656–657).

To enhance this study's findings and deepen the understanding of how spatial and interactive factors affect multiplayer gameplay, future research should include a more diverse range of participants. Additionally, exploring improvements to the commonly used linear seating and broader applications of stellate polygonal seating in gaming culture is recommended. This would provide a more comprehensive view of the subject.

## Conclusion

This study investigated the effects of two seating configurations—linear and stellate polygonal—on team performance and dynamics in multiplayer gaming. Across eight matches, linear seating consistently resulted in higher kill counts, with both Team I and Team II averaging 80 kills per match. In contrast, stellate polygonal seating led to significantly lower performance, with Team I averaging 53 kills and Team II 51 kills. The ANOVA test confirmed that seating configuration had a significant impact on performance ( $F$ -statistic of 43.56,  $p < 0.05$ ), indicating that linear seating is more suited to enhancing individual focus and in-game success. These findings highlight the competitive advantage of linear seating in terms of measurable performance metrics, especially in fast-paced, high-stakes gaming environments.

Despite the lower kill counts, Method II survey results demonstrated that stellate polygonal seating offered benefits in fostering team dynamics. Participants rated stellate polygonal seating higher in categories such as team cognition, motivation, and discussion, reflecting its role in promoting better communication and interaction among team members. While these benefits did not translate into improved performance metrics, they suggest that stellate polygonal seating contributes to a

more collaborative and cohesive team experience. The contrast between objective performance outcomes and subjective team experiences underscores the complexity of seating configurations, suggesting that the success of a seating arrangement depends not only on individual performance but also on the quality of team interaction it fosters.

Beyond performance, the study's findings point to broader implications for team-based esports, collaborative learning, and therapeutic gaming environments. Stelate polygonal seating, by promoting direct engagement and reducing anonymity, could help mitigate toxicity and enhance group cohesion in various gaming contexts.

However, the study's limitations, such as the small sample size and focus on 8-player teams, suggest that future research should explore these dynamics across more diverse participants, larger teams, and different game genres to strengthen the findings.

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## Conflicts of interest

The author declares that there is no conflict of interest.

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# **From Tradition to Interaction**

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# From Tradition to Interaction

## A Systematic Literature Review of Cultural Heritage Representation in Entertainment Videogames

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### Abstract

Nowadays, an increasing number of videogames have incorporated cultural heritage elements that belong to a wide variety of regions. This has prompted a growing body of academic research regarding this topic. This paper presents the results of a systematic literature review, investigating how different aspects of cultural heritage are represented in entertainment videogames. A thematic analysis of 80 publications was conducted, categorising the studied cultural heritage elements into tangible and intangible themes of cultural heritage. Our review revealed that existing publications have extensively explored the representation of tangible cultural heritage in games, especially architecture and artefacts. In contrast, the representation of intangible cultural heritage has received significantly less attention, such as religious rituals, folklore, and symbolic references. Moreover, we observed that game designers tend to select cultural heritage elements familiar to their target audiences, which lied in depictions of historical periods, notable historical figures, and architectural styles. Finally, this review highlights gaps in current research including a narrow focus on certain game genres and a lack of in-depth study on the representation of intangible cultural heritage.

### Keywords

Videogames; cultural heritage; history; culture; representation; systematic literature review

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**Videogames have long been the subject of societal debate**, often conceptualized as a superficial medium that lacks the artistic depth and cultural significance attributed to other forms of creative expression, such as music and film (Ebert, 2010). However, this perception has been challenged in recent years, as videogames have evolved to encompass greater social and cultural depth, supported by advancements in computer technology. With increasingly sophisticated visual design and narrative complexity, many entertainment videogames—which are those digital

games played on electronic systems primarily designed for enjoyment and engagement rather than educational and serious purposes—now engage with meaningful themes and offer profound, emotionally resonant experiences (Klimmt & Possler, 2019; Oliver & Bartsch, 2010; Possler et al., 2021).

One significant area where videogames have evolved is in the representation of cultural heritage. The rich and diverse cultural heritage of humankind has become a prominent resource for game developers, allowing videogames to offer more meaningful interactions by immersing players in narratives that reflect historical and cultural identities (Camuñas-García et al., 2023). Research has shown that the representation of cultural heritage in media not only promotes national identity but also enhances players' sense of cultural belonging and provides eudaimonic experiences, where players feel deeply moved and connected to the content (Edney, 2015; Fung, 2014). As videogames continue to grow as a medium for cultural expression, game scholars have increasingly highlighted the culturally relevant experiences they can offer through the representation of cultural heritage (Shaw, 2010; Klimmt & Possler, 2019). These representations allow videogames to go beyond mere entertainment, fostering an enriched interaction with cultural history and identity.

This paper presents a systematic literature review focused on the academic investigation of how cultural heritage is represented in entertainment videogames. Previous literature reviews have covered this topic, but they lacked a specific focus on publications of entertainment videogame content. For example, Khan et al. (2020) focused on literature studying cultural heritage represented in both serious games and entertainment games, and Marques et al. (2023) included studies of game content, player groups, and game technology regarding the representation of cultural heritage. In this literature review we specifically focused on publications investigating entertainment videogames with game content analysis as their methodology. This purposeful focus assists in highlighting the state of the art of academic research regarding the representation of cultural heritage in entertainment games.

The analysis included a total of 80 publications that were published between 2005 and 2022 and stored in Scopus and was guided by the following research question: *What aspects of cultural heritage represented in entertainment videogames have been investigated within the academic realm?*

## **Cultural heritage and its dimensions**

In this section we define and conceptualise the concept 'cultural heritage' and how it is understood within the scope of this study. According to UNESCO, cultural heritage encompasses legacies that carry social, historical, and aesthetic meanings, which contribute to the identity and continuity of communities. These legacies can be divided into both tangible and intangible forms (UNESCO, n.d.-a; UNESCO Insti-

tute for Statistics, 2009). UNESCO Institute for Statistics (2009) defines tangible cultural heritage to be physical artefacts, structures, and locations that can be found in different types of environments, lands, waters, and spaces. In contrast, intangible cultural heritage refers to the non-material aspects of culture, such as rituals, traditions, performing arts, social practices, and other forms of knowledge and expression that are transmitted through generations (UNESCO, n.d.-b).

For the purposes of analysing cultural heritage in videogames, it is important to adopt a structured framework that captures both tangible and intangible dimensions. Balela and Mundy (2015) proposed a theoretical model that facilitates the analysis of cultural heritage representation in videogames by distinguishing between these two dimensions. Their framework organizes cultural heritage into four thematic categories: arts and artefacts, environment, people, and history (see Appendix 1 and figure 1). By employing this framework, we are able to systematically examine how different dimensions of cultural heritage – whether through physical objects, landscapes, historical narratives, or cultural practices— have been analysed in the existing academic literature on this topic. This approach enables us to assess the breadth and depth of existing academic literature on the representation of cultural heritage in entertainment videogames, also helping to identify how cultural heritage has been represented and understood in the context of entertainment videogames.

Tangible Dimensions					
		No Evidence	Limited Evidence	Satisfactory Evidence	Significant Evidence
Arts and Artifacts	Architecture; Sculpture; Visual Image; Documents and Writing; Performance Arts; Clothes; Design Ethos; Other Arts				
Environment	Places of Scenic Interest; Landscape				
People	People				
History	Historic Sites; Historic Artifacts; Historic People				
Intangible Dimensions					
Arts and Artifacts	Language; Music; Folklore				
Environment	Climate				
People	Behaviour				
History	Religion; Customs; Time; Ages				

Figure 1. Dimensions of cultural heritage proposed by Balela and Mundy (2015).

## Methodology

For the purpose of this research, a systematic literature review was conducted. To uphold the credibility of this systematic review, we followed the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) outlined by Page et al. (2021, p. 5) (see Figure 2). The systematic review was conducted through May to July 2023, and it encompassed a collection of 80 publications published between 2005 and 2022.

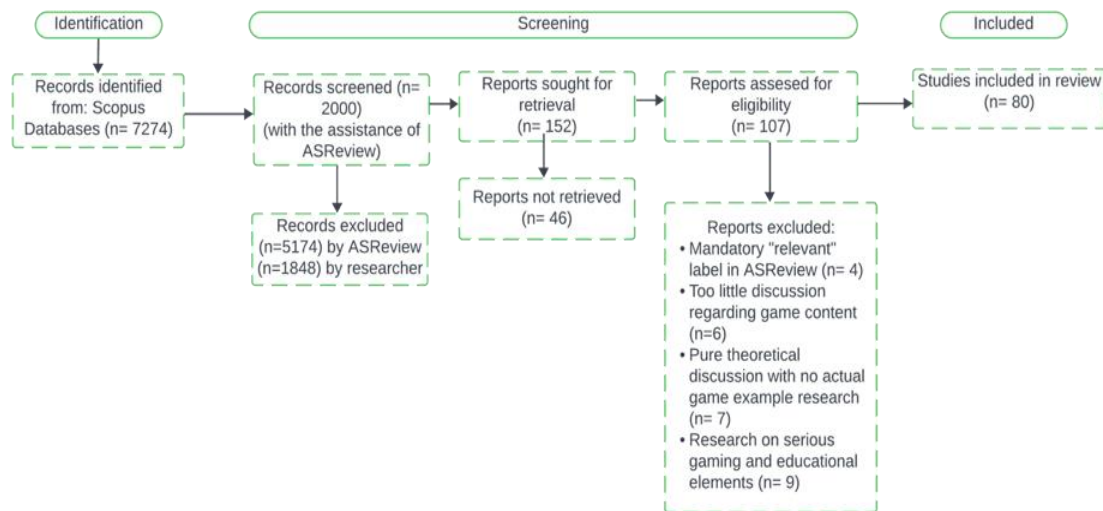


Figure 2. PRISMA flow diagram.

## Data research

The sampling process for this systematic review began with the development and execution of a search protocol. Scopus was selected as the primary database due to its expertly curated database (Page et al., 2021). The search string used was (culture\* OR heritage OR "cultural heritage" OR "cultural elements") AND (game\* OR "mobile game\*" OR "videogame\*" OR "digital game\*"). The search string was designed to include various aspects of cultural heritage and different genres of videogames. After testing different combination of keywords, this resulted to be the most efficient to identify studies exploring the intersection of cultural heritage, representation, and videogames. In the identification phase, the research string was used to search within titles and abstracts of the publications from Scopus. We limited our search to the specific domains of social sciences (including psychology), arts, and humanities, because we were interested in papers focused on the meaning and interpretation of the representation of cultural heritage in games. We therefore excluded studies from other disciplines such as computer sciences, as these are more focused on technical aspects of these representations. No year limitation was included. We exported the yielded results from Scopus at the last date of search on March 27<sup>th</sup>, 2023.

This stage yielded 7274 results, including articles, book chapters, review articles, and books.

In the second phase, we screened the 7274 publications by applying three inclusion and exclusion criteria. Firstly, only publications related to representation of cultural heritage in videogames were included. Secondly, considering the language skills of the complete research team, only studies written in English, translated to English, or summarised in English were selected. Thirdly, only studies targeting entertainment videogames were selected. Lastly, only published articles, books, and book sections were included. Other formats, such as blogs, online newspaper articles, and website pages, were excluded.

To facilitate the screening process, we employed ASReview LAB (v.1.1), a machine learning tool designed to assist with literature screening (ASReview LAB Developers, 2023). After uploading the entire set of publications to ASReview LAB, we manually labelled a subset of publications as "relevant" or "irrelevant" based on our inclusion criteria. ASReview LAB then used this labelling history to generate a ranked list of potentially relevant publications, which were presented for further manual review. The program continually learned from our decisions, allowing us to focus on the most relevant studies without needing to screen all 7,274 results. After reaching a saturation point—where the majority of publications presented by the tool were consistently labelled as irrelevant—we concluded the screening process, having reviewed the titles and abstracts of approximately 2,000 publications. The screening process resulted in 157 publications labelled as "relevant". Of these, 107 publications were accessible for full-text download. The first author was responsible of the screening process, the results of each phase of the screening process were reviewed by the other two authors.

After reading through these full texts, we excluded 27 publications for the following reasons: four were deemed irrelevant despite being initially marked as "relevant" by ASReview LAB, six provided limited discussion of game content, seven were theoretical without specific game research, and nine focused on serious or educational games. Ultimately, 80 publications were selected for inclusion in this study. The data collection was conducted during March and April 2023, covering publications from 2005 to 2022.

### ***Data analysis and operationalisation***

The theoretical framework for our method of data analysis was drawn from Balela and Mundy (2015) as explained in the previous section. Based on the framework, we constructed a codebook for data analysis. The codebook consists of two main dimensions of cultural heritage, namely tangible and intangible ones. However, we also found several categories and examples that are not appropriate in the theoretical framework from Balela and Mundy (2015). In concrete, although UNESCO considers natural heritage as part of cultural heritage, this aspect of cultural heritage is

not contemplated in the theoretical framework proposed by Balela and Mundy, which is focused on aspects related to the representation of cultural identity, history, and traditions. Additionally, some examples of cultural heritage provided in the categorisation proposed by Balela and Mundy (2015) were reassigned to more appropriate categories considering UNESCO's definition of tangible and intangible cultural heritage. In concrete, we moved "performing arts" under the tangible Arts and Artefacts category to the intangible one. The final codebook focused on three key aspects under each dimension: history, arts and artefacts, and people (see Appendix 2 for codebook examples). Besides this, we have also coded the countries of the corresponding author's affiliations, the methodologies used in the studies analysed as well as types of games analysed in these publications to understand the state of the art in the field.

We employed thematic analysis as the primary method for analysing the data, following Braun and Clarke's (2022) six-phase process: (1) becoming familiar with the dataset, (2) coding, (3) generating initial themes, (4) developing and reviewing themes, (5) refining and defining themes, and (6) writing (Braun & Clarke, 2022). We uploaded the selected publications onto Atlas.ti (v.8.4.5.), a qualitative data analysis software, and conducted a close reading of each publication. Relevant information, particularly from the discussion and analysis sections, was marked according to the codebook. Then, we gathered all the topics and organised them, classifying the codes into sub-themes such as historical times, after which we summarised all the sub-themes into themes according to our codebook. The first author was responsible of the coding process, the results of each phase of the coding and analysis process were reviewed by the other two authors.

## Results

The results presented in this section are structured according to the modified version of the theoretical framework of Balela and Mundy (2015). A detailed coding tree with the references of all reviewed publications is presented in Appendix 3. This section will start with a discussion of general results, and then it presents the identified themes, sub-themes and topics of cultural heritage discussed in the literature.

### ***General results: Research location, methodology, and game genres***

Firstly, this section provides an overview of the sources analysed in this study, including the countries of the corresponding authors' affiliations, methodologies used, and types of games chosen as the body of research in these publications.

Regarding the countries where the studies were conducted (see Figure 3), most of the reviewed publications were conducted in countries in Europe (44/80), while other studies were conducted in Australia (10/80), North America (17/80), and Asia (2/80). This suggests that researchers affiliated with European institutions show

greater academic interest in the topic of cultural heritage representation in videogames. Our thematic analysis showed that the authors in these regions did not necessarily study the local cultural heritage. Their choice of targeted cultural heritage was based on the reputation of the targeted videogames and the popularity of well-known cultural heritage elements in games. Within the wide range of regions with significantly rich cultural heritage, European cultural heritage, such as Nordic European mythology and architecture, has been the largest source of academic scrutiny. Moreover, modern American culture is another centre of academic attention for the popularity of *Grand Theft Auto* series. Meanwhile, representation of Asian cultural heritage is understudied, such as Japanese and Chinese culture.

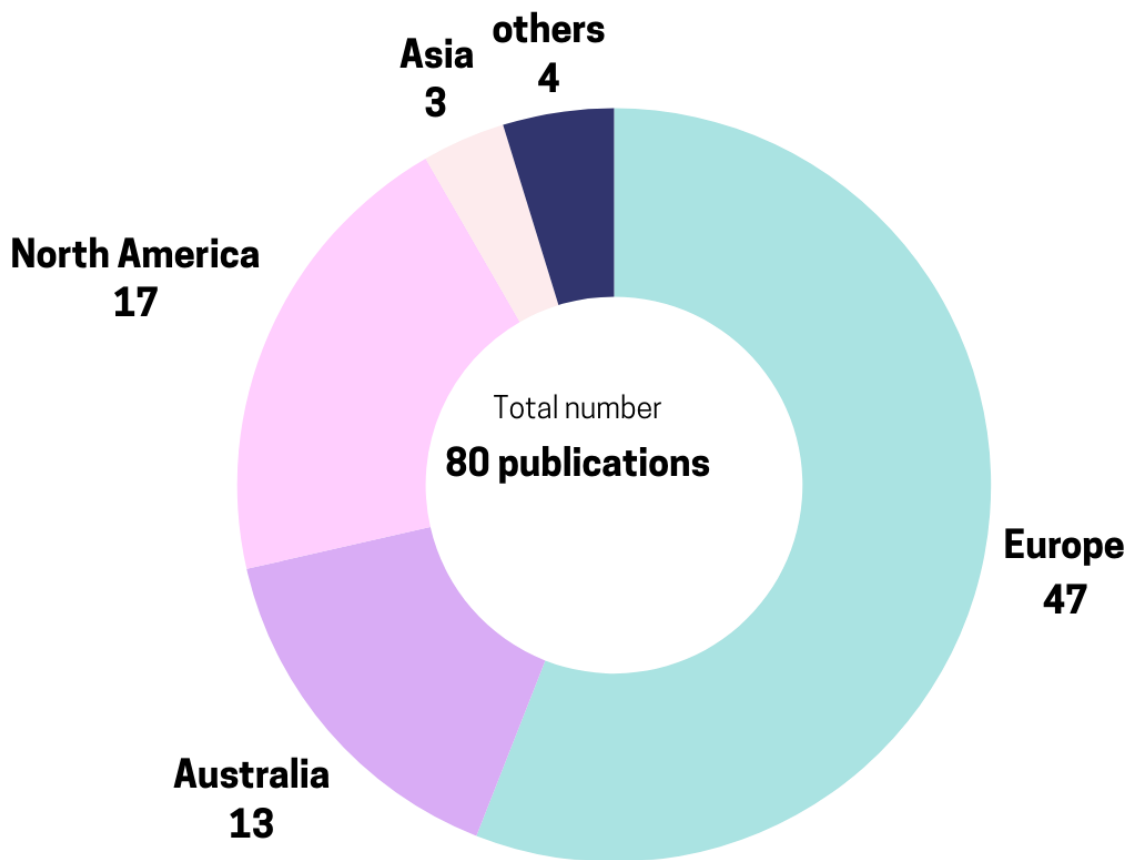


Figure 3. Continent distribution of author affiliations among included studies.

Secondly, in terms of the methodologies used, qualitative game content analysis was the most common methodological approach in the reviewed publications, including visual analysis (e.g., López, 2021), discourse analysis (e.g. Locke & MacKay, 2021; Šisler et al., 2022; Wills, 2021), narrative analysis (e.g. Cole, 2022; Locke & MacKay, 2021; Young, 2016), and textual analysis (e.g. Krzywinska, 2006; Nijdam, 2021; Zabecki, 2019). A few other selected studies were theoretical in focus, using game content analysis for clarification of their theoretical position (e.g. Balela & Mundy, 2016; Zeiler & Thomas, 2021). This shows that qualitative research method was still the preferred method used in game content analysis.

Lastly, as for types of games being investigated in the reviewed publications, Role-Playing games (RPG) and Real-Time Strategy (RTS) games were most frequently analysed (68/80). Furthermore, the reviewed studies mainly opted for Triple-A games produced by leading studios as their body of research, while only a few articles (3) focused on indie games (LaPensée, 2021; Nacher & Jankowski, 2021; Nijdam, 2021). Additionally, the selected studies primarily chose games released on PC and consoles as their body of research, such as PlayStation, Xbox, and Nintendo Switch, while a small portion of the publications (3) in our selection focused on mobile games (e.g. Li, 2021). This result shows that the academia still focuses largely on PC and console RPGs. Meanwhile, there is an academic gap in studying videogames released on other platforms, such as mobile games.

### **Tangible heritage: Touchable traces in the virtual world**

This section focuses on studies that explored the tangible aspects of cultural heritage. Within this theme, we have identified three sub-themes: history, populations and arts and artefacts (see Table 1, for details see Appendix 3).

<b>1. Tangible Cultural Heritage</b>		
1.1. Arts and artefacts		
1.1.1. Architecture (10)	1.1.2. Weapons (7)	1.1.3. Others (3)
1.2. People		
1.2.1. Indigenous residents (7)	1.2.2. Racial diversity (6)	
1.3. History		
1.3.1. Historical figures (6)	1.3.2. Religion (12)	
<b>2. Intangible cultural heritage</b>		
2.1. History		
2.1.1. Time (41)	2.1.2. Mythology (24)	
2.2. People		
2.2.1. Indigenous diversity- morality and behaviour (5)	2.2.2. Racial diversity- morality and behaviour (5)	
2.3. Arts and artefacts		
2.3.1. Language- indigenous language (3)	2.3.2. Others (3)	

Table 1. Quantitative summary of selected paper (sort by the number of articles belonging to each sub-theme).

### *Historical representation: Icons and beliefs in digital spaces*

Based on our theoretical framework, the historical tangible cultural heritage includes physical architecture, buildings, figures, and sites of historical significance.

Within this section we identified two topics studied in eighteen publications that fall within this sub-theme: historical figures and religion. Also, under the topic of religion, we identified two sub-topics: religious gods and the Bible.

### **Historical figures: Designing familiar heroes for global audiences**

Six publications (6/18) have investigated the manifestation of historical figures in videogames, generally conducting visual analysis and narrative analysis to determine which historical figures were represented. Examples of these are the study of the representation of Yip Man and Chunli in the Chinese version of *Temple Run 2* (Dong & Mangiron, 2018) and the study of the fictional adaptation of Abe no Seimei in *Onmyoji* (Noh, 2020). Different from the people sub-theme in the next section, this sub-theme refers to the people who have historical significance and recognisable reputation. Hence, this result contributes to the differentiation between historical figures and population in the modified theoretical framework. Yao and Chen (2022) concluded in their visual analysis that to familiarise players with the characters in a short time period, it is convenient to design a gameworld that borrows character design from history, and such implementation usually took place in Multiplayer Online Battle Arena Games (MOBA games). It is a game genre that presents real-time combats between players with a base of characters (also called heroes) to choose from. This facilitates the representation of historical figures in MOBA games.

Additionally, several studies also concluded that the decision of which historical figures to be included in the games was based on their targeting markets. For example, Dong and Mangiron (2018) investigated the Korean mobile game *Hello Hero: Epic Battle* (SKYWALK, 2023). Their study implied that *Hello Hero: Epic Battle* (SKYWALK, 2023) included characters from the famous Chinese literature *Journey to the West* when designing its Chinese version, such as the Tang Sanzang. The discussions of the historical figures sub-theme stressed the vital role of gamers' acknowledgement to history in the consideration of game design. Game designers tend to depict historical figures that are familiar to players, enabling players to develop a sense of connection and engagement.

### **Religion in games: Holy Characters and selective sacredness**

In the analysed literature, we also identified ten publications (10/18) that included the discussion of the representation of tangible aspects of *religion* in videogames. A range of sub-topics were discussed, with two of them standing out in the publications, which were religious *gods* and the *Bible*. The discussion of the depiction of gods is related to the representation of holy characters in mythical stories, while the discussion of the Bible includes tangible elements inspired by the Bible (e.g. Bainbridge & Bainbridge, 2007; Šisler, 2017).

Firstly, ten studies identified various approaches to portray *gods* in videogames, and they mainly conducted visual analysis. Gods in videogames were mostly found to be unreachable, holy, and virtuous. These sacred characters were represented as pow-

erful and helpful roles but still with a distance (Bainbridge & Bainbridge, 2007; Hemmann, 2021; Xidakis, 2022). For example, Bainbridge and Bainbridge (2007) indicated in their research of the game *Chronicles of Narnia: The Lion, The Witch, and The Wardrobe* (Traveller's Tales, 2005), that the reborn Christ figure Aslan was not interactable, creating a sacred distance from him to the players. Contrastively, another approach of representation studied in the selected literature is creating a down-to-earth image of gods with human-like emotions. For example, Bainbridge and Bainbridge (2007) indicated that Greek gods in *God of War* (Santa Monica Studio et al., 2005) were represented in a complex way with meaningful links to love, familial ties, and losses. This indicates the huge freedom that designers have when portraying fictional cultural elements in terms of their personality and storyline.

Another sub-topic related to religion was the representation of the *Bible* in videogames, which was explored by two studies (Bainbridge & Bainbridge, 2007; Šisler, 2017). There are several references in the analysed literature where videogames borrowed tangible content from the Bible to be represented in their virtual worlds. For example, some fictional weapons utilised by game protagonists were found to be based on the descriptions in the Bible (e.g. Bainbridge & Bainbridge, 2007; Zeiler & Mukherjee, 2022). Bainbridge and Bainbridge (2007) identified several uses of weapons in the game *Constantine* (Bits Studios, 2005) that were inspired by the Bible, including for example a pistol with its bullet from Damascus and holy water grenades. Hence, it is found by the selected publications that designers only pick up random elements that are suitable for depiction and mix them into videogames.

### *Populations: Indigenous residents and racial diversity*

The tangible dimension of population involves the representation of diverse groups of people in videogames, and it also includes the choices made in depicting these populations through character design (Balela & Mundy, 2015, 2016). Within this theme, we identified two topics discussed in thirteen publications: indigenous residents and racial diversity. Within this sub-theme, a total of six publications studied the representation of Native Americans within videogames, with an additional focus on European indigenous Sámi residents in a study by Nijdam (2021). Additionally, the representation of two specific groups within the topic of racial diversity were discussed in six articles: Black people and Asian people. These topics are the most prominent results under this sub-theme and are therefore complementary to the modified theoretical framework.

### **Indigenous residents: Nostalgia and marginalised voices in game narratives**

Indigenous residents used to receive limited attention from mainstream media industries, and the game industry is no exception (Nacher & Jankowski, 2021). However, there are still scholars who dedicate themselves to understanding the depiction of this group of people in entertainment videogames. Altogether seven publications (7/13) discussed the inclusion of indigenous residents, discussing both indie games and Triple-A games. Several researchers noticed that the narratives of the

games analysed in their studies were related to invasion (Bird, 2021; LaPensée, 2021; Nacher & Jankowski, 2021) and the formation of protagonists' identities (Bird, 2021).

Within the selected literature, two types of game characters representing Native Americans were discussed: non-Player Characters (NPCs) and protagonists. These studies showed that the inclusion of indigenous residents is increasing, although it is still relatively limited. For example, Locke and MacKay (2021) investigated the Progressive Era in American history (1890s- 1920s), during which an indigenous NPC was included in the main character's camp in *Red Dead Redemption 2* (Rockstar Studios, 2018), but no specific interactions were triggered if the players avoided contact with him. Bird (2021) also highlighted that *Assassin's Creed III* (AC III) (Ubisoft Montreal, 2012) was the first Triple-A game to feature an American indigenous protagonist. Connor Kenway, or Ratonhnhaké:ton as his Mohawk name, was the protagonist in AC III that was depicted as half-British and half-Mohawk. The Mohawk language was also integrated in AC III (Ubisoft Montreal, 2012).

Three publications analysed indie games representing indigenous residents. For example, LaPensée (2021) and Nacher and Jankowski (2021) have discussed *When Rivers Were Trails* (Indian Land Tenure Foundation et al., 2019) in which Native Americans were integrated as both protagonist and NPCs in the game. Nijdam (2021) pointed out that the visual representation of Sámi people in *Gufihtara eallu* (Karpoff et al., 2018) was limited to vocal narration, giving a sense of nostalgia while saving budget for visual design. This indicated the great potential of various populations to be depicted in videogames, and game genre and budget play vital roles in determining which game elements to be utilised in such representation.

### **Racial diversity: Evolving depictions and persistent stereotypes**

Another topic explored within the theme of population was *racial diversity* (6/13). Our analysis of the literature shows that there is a larger representation of Black and Asian people in videogames compared to indigenous residents. In terms of Black people, for instance, Miller (2008) and Wills (2021) studied *Grand Theft Auto V* (GTA V) (Rockstar North, 2013) where one of the protagonists belonged to the Black community. Miller (2008) and Wills (2021) noticed that the characters players encountered in *GTA V* (Rockstar North, 2013) were predominantly black, that is of African American origin. In contrast, regarding Asian people, only one publication discussed the representation of them in videogames. Leonard (2003) focused on how Asian people were portrayed as NPCs, specifically gangster members, in the game *GTA III* (DMA Design, 2001).

### *Arts and artefacts: Recreating and reimagining cultural treasures*

The tangible aspect of arts and artefacts encompasses art pieces and manufactured artefacts that people utilise, visit, and become accustomed with. These are culturally significant, because they reflect or even represent the aesthetic and technical

uniqueness of cultures (Balela & Mundy, 2015, p. 8). Altogether 20 studies in our selection explored this aspect of cultural heritage represented in entertainment videogames, and they mainly employed the methods of visual analysis. Within this sub-theme we identified that two topics, namely architecture and weapons stood out in the publications.

### **Architecture: Iconic monuments as interactive gameworlds**

Ten publications (10/20) discussed extensively the representation of historically significant architecture in games. For example, López (2021) indicated that the *AC* series, such as *AC Unity* (Ubisoft Montreal, 2014) included architecture that already gained significant fame worldwide. In addition, these studies discussed various approaches of how these architectures were represented in videogames. Within these publications, authors such as Champion (2020) and López (2021) discuss how developers mainly strived for the direct depiction of famous buildings. According to López (2021), this highlights how game designers often incorporate historical monuments into games, because they are easily recognised by players. This was a common phenomenon that occurred mostly in Triple-A games as identified by several publications (Alcindor et al., 2022; Malegiannaki & Daradoumis, 2017; Mochocki, 2021; Wright, 2022). The presence of existing architecture in Triple-A games is understandable because it requires thorough on-site surveying and historical research to ensure an accurate recreation of these existing famous architectures, which is obviously budget-consuming during game development. According to the analysed publications, the direct depiction that the developers strived for is not limited to mere sightseeing landmarks. Instead, these buildings were depicted as locations where players had to complete missions and could interact with major non-Player Characters (NPCs).

These studies also addressed how counterfactual details are sometimes purposively included in the depiction of the buildings. For example, López (2021) paid special attention to the Notre-Dame de Paris in the *AC Unity* (Ubisoft Montreal, 2014). Notre-Dame was represented with its iconic Viollet-le-Duc spire, but the author noticed that the spire was built during the restoration 1840s, which is fifty years after the *AC* narrative taking place. What was highlighted by López (2021) was that the developer still decided to include the spire, because Notre-Dame would not be recognisable for the general public without the Viollet-le-Duc spire. The case investigated by López (2021) stressed the importance of representing iconic and recognisable details of historical buildings when including architecture in games, even when it was counterfactual.

### **Weapons: Historical armaments as tools of immersion**

Seven publications (7/20) investigated the representation of another topic of tangible arts and artefacts, which is weapons. De Groot (2016) and Finney (2017) state that weapons are typically suitable for being integrated into First-person Shooter games (FPS) and action games. Among the publications, the weapons being discussed the most were guns and grenades, which, according to the literature, are

usually represented together with famous historical incidents, such as the First and Second World Wars (Finney, 2017). De Groot (2016), for example, highlights how war games and FPS games tried their best to provide lavish details of military weapons. Also, in three of the publications analysed it is discussed that weapons are not only represented during actual simulated war time but could also be viewed in gamers' storage, which contributes to their cultural relevance (de Groot, 2016; Finney, 2017; Saucier, 2012). The authors discuss how this provides additional appreciation opportunities that are used by military fans to show off their collections. In the same vein, two publications discussed how such representation significantly broadened the horizon of gamers who had little military knowledge (de Groot, 2016; Finney, 2017). According to the studies analysed, because weapons are rarely seen in real life, the representation of weapons is therefore considered to be educational to players in terms of their parameters and responsiveness.

There were other tangible arts and artefacts discussed in the literature, including costumes (e.g., Fu & Liang, 2022), board games (e.g., Che & Ip, 2017), and art works (e.g., Balela & Mundy, 2016). For example, Che and Ip (2017) highlighted the digitalised versions of traditional Chinese tangible board games, such as chess and poker. Within this theme, Balela and Mundy (2016) argued that it is necessary to focus more in research on how statues and paintings are depicted in videogames.

### ***Intangible heritage: Invisible strings in virtual worlds***

The studies reviewed also devoted attention to the representation of intangible facets of cultural heritage. We identified three sub-themes investigated in the analysed literature: arts and artefacts (e.g. Cragoe, 2016; Tozoğlu & Kuran, 2022), history (e.g. Krzywinska, 2013; San Nicolás Romera et al., 2018), and people (e.g. LaPensée, 2021; Young, 2016).

#### *Historical time and religion*

Different from the tangible aspect of history which focused on historical figures and religious works, the intangible elements of history encompass a general understanding of historical time and stories that cannot be depicted with visual images. Instead, their representations are usually manifested in game narratives and gameworld design, which is explored in the publications with narrative analysis and discourse analysis. Within this sub-theme we identified two topics discussed in our sample, which were time and religion.

#### **Time: Recreating the past, war, and modernity in-game**

Altogether 42 studies explored how different aspects of time were represented in videogames. Within the topic of *time*, we identified three distinct subtopics: historical time, war time, and modern time, and the selected literature mostly chose narrative analysis and discourse analysis to understand the time depicted in videogames.

*Historical time*, reflecting time in the past, constitutes a significant component in cultural heritage, because it provides a context to its development (Balela & Mundy, 2016). The representation of historical time is explored across various game genres and platforms within 28 studies (28/42), ranging from multiple Triple-A RPGs to a handful of Triple-A strategy games, and from console and PC games to mobile games. For example, the *AC III* (Ubisoft Montreal, 2012) and *AC Unity* (Ubisoft Montreal, 2014) as RPG (López, 2021), and *Disciples: Liberation* (Frima Studio, 2021) as strategy RPG (Šisler et al., 2022). Regarding the choice of historical era, the analysis of the literature shows that the storylines of these RPGs were often set in well-known historical times that would be easily recognised by the general public. For instance, López (2021) highlighted that the *AC* series, such as *AC III* (Ubisoft Montreal, 2012) and *AC Unity* (Ubisoft Montreal, 2014), utilised settings like the Crusades, the Italian Renaissance, or the Victorian era.

Another aspect of time studied in the selected publications was *war time* (10/42). Finney (2017) illustrated that this was mainly seen in FPS games. Šindelář (2022) noticed that Western perspectives, especially on World War I and World War II, became their primary source for battleground design. Our analysis of the literature suggests that videogames designers incorporate war time and war elements to create recognisable scenarios. Šisler et al. (2022), for example, concludes that the game *Disciples: Liberation* (Frima Studio, 2021) withheld a clear historical war background and, instead, revealed the historical war context as memories, traumatising the protagonist and triggering unusual behaviours. According to Krobová et al. (2023), such implementation serves to effectively avoid a cliché scenario of battlefield combat in most war games.

Another aspect of time investigated in four reviewed publications (4/42) was *modern time*, which was also mostly seen in RPGs (e.g. Miller, 2008; Van Der Merwe, 2021; Wills, 2021; Wright, 2022). For example, Wills (2021) investigated how in the *GTA* series modern American times were depicted and with what purpose (DMA Design, 2001; Rockstar North, 2013). What Wills (2021) discovered was that the *GTA* series, implemented a lavish depiction of Southern California for players to fully immerse and mimic the capitalist values espoused by huge corporations. This representation of local lifestyle and the exaggerated parody of modern industries, implied by Wills (2021), was implemented to reveal social and political issues, including inequality, and (racial) exclusion. Therefore, modern times, as implied by the selected literature, is suitable for latently reflecting the reality.

### **Religious narratives: Mythologies and moralities in gameplay**

There were 23 studies also explored the representation of the intangible aspects of religion in videogames (e.g. Bainbridge & Bainbridge, 2007; Champion et al., 2022; Krzywinska, 2006; Podvalnyi, 2019), including the representation of mythological stories and how these stories were incorporated in videogames.

Firstly, all the publications mentioned that intangible elements in mythologies, such as storylines, ideologies, and rituals, were used to construct gameworlds. For example, Fung and Ho (2015) noticed that several Chinese Massive Multiplayer Online Games (MMOGs) followed the terms of magic, power, and Immortal cultivation from Chinese traditional mythic Xianxia (fairies and heroes) and Wuxia (Kungfu and heroes) settings. Also, Yoon (2021) noticed that *World of Warcraft* (Blizzard Entertainment, 2004) structured its plot based on a holy war with battles in dungeons and swamps, which had clearly hinted at some storylines from the Christian Bible.

Secondly, five studies pointed out that games embedded mythology within character design and game mechanics. It refers to the fictional character design of character powers and characteristics based on mythology instead of the inclusion of realistic people that existed in history. For example, according to Yoon (2021), *WoW* (Blizzard Entertainment, 2004) designed the monsters and protagonists to gain mythical powers that linked closely to how some religious groups in history worshiped nature.

### *Behavioural portrayals of indigenous and racial groups*

According to Balela and Mundy (2015), the intangible aspect of the sub-theme populations consists of the depiction of people's behaviour in videogames. This aspect of intangible cultural heritage was present in ten studies of the representation of the behaviour and moral capacity of indigenous residents and racial diversity in videogames.

#### **Indigenous behaviours: From victims to resistance in game narratives**

In terms of the *indigenous residents*, LaPensée (2021) indicated that the depiction of indigenous residents in videogames are usually based on their history of being invaded by foreign parties. Altogether five studies (5/10) investigated how the behaviour and morality of indigenous residents were represented in videogames. The publications discussing these topics concluded that indigenous residents are represented in games in two different ways. Firstly, Native Americans are found to be represented mostly as innocent and weak victims (LaPensée, 2021). They are usually depicted to be vulnerable, in contrast to the invaders that are portrayed as amazingly powerful. Secondly, another example was studied by Zabecki (2019) who found a simplistic representation of the political reality of indigenous people fighting back in *Age of Empires III: The WarChiefs* (Ensemble Studios, 2006).

#### **Racial diversity: Moral capacities and social realities in gameworlds**

Our analysis of the selected literature indicated that the representation of *racial diversity* in videogames tends to align with social reality (5/10). Similar to what was found concerning the representation of indigenous residents, two publications reflected on how population of colours were depicted with low moral capacity. As noticed by Chism (2020), a Eurocentric ideology is manifested in several Middle Earth games where the light-skinned characters were represented as virtuous, while the

dark-skinned figures were portrayed as vicious. In contrast, it was also found that some games steered away from this direction. For example, Locke and MacKay (2021) observed that Rockstar depicted Black characters as less violent than white characters in *Red Dead Redemption 2* (Rockstar Studios, 2018) which according to them served the purpose of satirising toxic masculinity and whiteness in American history. Additionally, Apperley (2018) found a unique case in the game *Victoria: Empire Under the Sun* (Paradox Entertainment, 2003). The game offered a degree of freedom to interact positively with Australian minorities, allowing players to determine the moral capacity of people of colour.

### *Language: Underrepresented voices in the digital realm*

Balela and Mundy (2016) suggested that the intangible aspect of arts and artefacts include language, music, and folklore. In the sources analysed in our study the topic of language occurred and was analysed in three publications only.

#### **Language: The silent legacy of ethnic languages in videogames**

Nowadays, English continues to be one of the most prevalent language options in videogames. This is attributed to the global reach of the English language. Even in countries known for their strong game-developing capability, such as Japan, game studios also build games featuring English-speaking characters. Therefore, the study of *languages* other than English holds potential for providing insights for cultural heritage studies in videogames.

Notably, the representation of *ethnic languages* was a sub-topic within the broader research focused on marginalised or ethnic groups, and this sub-topic was identified in three publications. This was manifested in the study of LaPensée (2021) where *When Rivers Were Trails* (WRWT) (Indian Land Tenure Foundation et al., 2019) was studied. This game focused on the experience of Native Americans during colonisation, most of the NPCs in the game are Native Americans. LaPensée (2021) found that *WRWT* integrates Anishinaabe language into various scenarios, including greetings, goodbyes, and basic questions, which is a result of the involvement of native language speakers in the development of this game. Also, noted by Zabecki (2019), a similar phenomenon of language representation is manifested in other videogames featuring indigenous people. For example, players are able to control indigenous teams who spoke a basic native language in the RTS game *Age of Empires III: WarChiefs* (Ensemble Studios, 2006); *Huni Kuin: Yube Baitana* (Philosophical School of Games, 2016) is available in mainstream languages and Hätxa Kuin, the language of the Kaxinawá people.

## **Discussion and conclusion**

This study aimed to explore the aspects of cultural heritage represented in entertainment videogames as investigated in previous academic research. A systematic

literature review was conducted, analysing 80 scholarly publications. It enabled us to provide an overview of the state of the art on the study of the representation of cultural heritage in entertainment videogames. The review showed that existing literature has investigated the representation of tangible cultural heritage in games extensively, especially the representation of architectures and artefacts. Contrastively, the representation of intangible cultural heritage in games such as religious rituals, folklore, and symbolic references, was studied far less. This gap in the literature suggests a need for future research to more extensively address the representation of intangible heritage in videogames.

Unlike previous studies on related topics, this research contributes to the field of cultural heritage in videogames by providing results from its unique perspectives. Similar to Khan et al. (2020), who explored how gamification techniques are implemented to promote cultural heritage, our focus on entertainment videogames also revealed that tangible cultural heritage received the most academic attention. While Marques et al. (2023) provided insights from publications related to heritage categories, gamification design, and techniques, this analysis explicitly examined studies on entertainment game content analysis regarding cultural heritage representation. Both Khan et al. (2020) and Marques et al. (2023) observed in their selected studies that augmented reality (AR) and virtual reality (VR) were utilised as novel approaches for the gamification of cultural heritage. Contrastively, our analysis identified less instances where AR and VR were emphasised in the representation of cultural heritage within the selected literature. Malegiannaki and Daradoumis (2017), who focused on studies investigating spatial educational games, highlighted the significance of the interactive tangible spaces. Similarly, our literature review regarding entertainment videogames supports this, revealing the importance of interactivity in game design for representing cultural heritage in gameworld. Additionally, this study offered insights into other game genres and their approaches to portraying a systematic categorisation of cultural heritage in the selected publications.

In the realm of tangible heritage, three sub-themes emerged: history, populations, and arts and artefacts. This review identified that research predominantly focused on the representation of historical figures, marginalized populations (such as Black, Indigenous, and Asian people), and artistic depictions of artefacts—both through direct representation and counterfactual adjustments. These studies reveal a strong focus on historical accuracy but also expose issues related to biased or stereotypical representations, particularly concerning marginalized groups.

The analysis on the studies of the representation of intangible cultural heritage in games revealed a narrower scope of previous research on this matter. Existing studies focus mainly on the representation of mythology and the portrayal of marginalized groups. We could conclude from the publications that those games either depicted the marginalised groups as weak and miserable, or focused on the depiction followed a socio-cultural stereotypical image of these groups. Moreover, within the

theme of arts and artefacts, language was the only intangible cultural element explored, suggesting a significant research gap in other intangible aspects like music, dance, and oral traditions.

The analysed publications showed a clear focus with respect to game genre and platform. Genre-wise the research thus far almost exclusively focused on two genres (RPG and RTS) and rarely discussed games in other genres. Other genres, such as fighting games, may also be relevant because of their distinctive features of interactivity, which could relate to different ways of representing cultural heritage. Platform-wise it stood out in our results that the selected studies about cultural heritage mainly focused on games released on PC and consoles, such as PlayStation and Xbox. However, considering the immense popularity of mobile games, it would be relevant to analyse next how cultural heritage is depicted on mobile platforms.

The empirical results discussed so far were embedded in the theoretical framework of Balela and Mundy (2015). Looking back on what our content analysis revealed about the representation of cultural heritage, we can first conclude that the Balela and Mundy framework was instrumental in analysing previous research, for example with respect to the differentiation between tangible and intangible aspects and the themes and sub-themes of cultural heritage. Our second conclusion, however, is that the Balela and Mundy (2015) framework needs to be supplemented. Our research provided more detailed sub-themes with practical examples from the analysed publications, which should be incorporated in the framework. In addition, our research distinguished between the sub-theme 'historical figures' and the theme 'population' to solve the confusion in the Balela and Mundy (2015) framework about why 'historical figures' were categorised under the theme 'history'. This theoretical addition aims to provide a more solid framework for future studies to probe into cultural heritage in game content.

While the current study contributes significantly to understanding the representation of cultural heritage in videogames, it is also limited by its exclusive focus on English-language publications. Firstly, we only included English language publications in our database, which meant that our results are mainly based in the English-speaking academic realm. Other countries, such as China and Japan, are also cradles and markets of videogames, and these countries have their unique and long-lasting cultural heritage, to say the least. Therefore, it is academically valuable for probing into studies conducted and written in Chinese and Japanese languages to gain a wider understanding regarding the representation of cultural heritage in entertainment videogames. Secondly, the analysis of cultural heritage representation of this study concluded at the continent level, such as America, Europe, and Asia. Meanwhile, the specific countries of origin for the cultural heritage explored in the selected studies were not examined in detail. Therefore, future research is suggested to investigate the representation of cultural heritage in videogames at a more detailed level by focusing on individual countries of origin. Lastly, we did not set a time restriction during the initial searching stage on Scopus, and the most recent paper

retrieved was published in 2022. Given continuous development of videogames and cultural heritage study in academia, it is likely that new research perspectives and relevant videogames are likely to have emerged since then. Hence, we recommend that future research consider publications released after 2022.

In conclusion, while the academic study regarding the representation of cultural heritage in videogames has advanced considerably, particularly in what respects to the representation of tangible cultural heritage, significant gaps remain. Future research should prioritize the exploration of the representation of intangible cultural heritage and diversify the genres and platforms analysed. Additionally, expanding the scope to non-English publications is crucial for a more comprehensive understanding of global perspectives on cultural heritage representation in entertainment videogames.

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## Appendix 1

<b>Tangible Dimensions</b>	<b>Intangible Dimensions</b>
<i>Arts and Artefacts</i> Architecture; Sculpture; Visual Image; Documents and Writing; Performance Arts; Clothes; De- sign Ethos; Other Arts	<i>Arts and Artefacts</i> Language; Music; Folklore
<i>Environment</i> Places of Scenic Interest; Landscape	<i>Environment</i> Climate
<i>People</i> People	<i>People</i> Behaviour
<i>History</i> Historical Sites; Historical Artefacts; His- torical People	<i>History</i> Religion; Customs; Time; Ages

Table 2. Dimensions of cultural heritage in game content raised by Balela and Mundy (2015).

## Appendix 2

<b>Tangible Dimensions</b>	<b>Intangible Dimensions</b>
<p><i>Arts and Artefacts</i> Creative expressions in tangible forms and objects created by human. Example: Architecture; Sculpture; Visual Image; Documents and Writing; Clothes; Design Ethos; Other Arts</p>	<p><i>Arts and Artefacts</i> Creative expressions in intangible forms and non-physical human culture Example: Language; Music; Folklore; Performance Arts</p>
<p><i>Population</i> Example: people, race, ethnicity</p>	<p><i>Population</i> Example: Behaviour and morality of people, race, ethnicity</p>
<p><i>History</i> Physical existence of heritage related to history. Example: Historical Sites; Historical Figures; Religious characters</p>	<p><i>History</i> Non-physical elements related to history. Example: Religious mythology; Religious Customs; Time; Ages</p>
<p><b>General Aspects About the Study</b></p>	
<p><i>Methodology used</i> Content analysis, thematic analysis, narrative analysis, discourse analysis.</p>	
<p><i>Type of game analysed in the study</i> Genre: Real-time Strategy games, Role-Playing games, Multiplayer Online Battle Arena games, First-Person Shooter games, fighting games, Platform: PC (personal computer), console (PlayStation, Xbox, Nintendo Switch), mobile phone Tripple A/Indie games</p>	
<p><i>Continents of the corresponding author's affiliations</i> Europe, North America, Asia, Australia</p>	

Table 3. Codebook for data analysis.

## Appendix 3

<b>Tangible cultural heritage</b>		
<b>Arts and artefacts</b>	<b>People</b>	<b>History</b>
<i>Architecture</i> (Alcindor et al., 2022; Champion et al., 2022; López, 2021; Malegiannaki & Daradoumis, 2017; Mochocki, 2021; Ramos, 2020; Rosenbaum, 2012; Wright, 2022; Yamamura, 2018; Zeiler & Mukherjee, 2022)	<i>Indigenous residents</i> (Bird, 2021; Champion, 2020; LaPensée, 2021; Locke & MacKay, 2021; Nacher & Jankowski, 2021; Nijdam, 2021; Zeiler & Thomas, 2021)	<i>Historical figures</i> (Dong & Mangiron, 2018; Li, 2021; Liboriussen & Martin, 2020; Noh, 2020; Spanos, 2021; Yao & Chen, 2022)
<i>Weapons</i> (Bainbridge & Bainbridge, 2007; Cole, 2022; de Groot, 2016; Finney, 2017; Robinson, 2019; Saucier, 2012; Watabe, 2021)	<i>Racial diversity</i> (Apperley, 2018; Hinton, 2013; Miller, 2008; Mukherjee, 2017; Pashchenko et al., 2021; Wright, 2022)	<i>Religion- religious gods</i> (Bainbridge & Bainbridge, 2007; de Wildt & Aupers, 2023; Geraci, 2012; Hemmann, 2021; Otmazgin, 2021; Podvalnyi, 2019; Scholtz, 2005; Spanos, 2021; Yoon, 2021; Zeiler & Mukherjee, 2022)
<i>Others</i> (Balela & Mundy, 2016; Haahr, 2018; Suominen & Sivula, 2013)		<i>Religion- bible</i> (Bainbridge & Bainbridge, 2007; Šisler, 2017)
<b>Intangible cultural heritage</b>		
<b>History</b>	<b>People</b>	<b>Arts and artefacts</b>
<i>Time- historical time</i> (Allison, 2018; Belyaev & Belyaeva, 2021; Champion, 2020; Champion et al., 2022; Cole, 2022; de Byl, 2019; de Groot, 2016; de Wildt & Aupers, 2023; Finney, 2017; Grever & Van Nieuwenhuysse, 2020; Körber et al., 2021; Krzywinska, 2013; Li, 2021; Liboriussen & Martin, 2020; López, 2021; Mochocki, 2021; Naji & Iwar, 2013; Ramos, 2020; Rosenbaum, 2012; San Nicolás Romera	<i>Indigenous diversity- morality and behaviour</i> (Bird, 2021; LaPensée, 2021; Locke & MacKay, 2021; Nacher & Jankowski, 2021; Zeiler & Thomas, 2021)	<i>Language- indigenous language</i> (LaPensée, 2021; Nacher & Jankowski, 2021; Zabecki, 2019)

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et al., 2018; Snyder, 2022; Spanos, 2021; Sukhov, 2018; Suominen & Sivula, 2013; Tozoğlu & Kuran, 2022; Wainwright, 2019; Yamamura, 2018; Yao & Chen, 2022)

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*Time- war time*

(de Groot, 2016; Grever & Van Nieuwenhuyse, 2020; Krobová et al., 2023; Mukherjee, 2017; Otmazgin, 2021; Robinson, 2019; Saucier, 2012; Šindelář, 2022; Sukhov, 2018; Žukauskas, 2018)

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*Racial diversity- morality and behaviour*

(Apperley, 2018; Miller, 2008; Mukherjee, 2017; Wright, 2022; Young, 2016)

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*Others*

(Foster & Tolbert, 2016; Fu & Liang, 2022; Miller, 2008)

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*Time- modern time*

(Miller, 2008; Van Der Merwe, 2021; Wills, 2021; Wright, 2022)

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*Religion- mythology*

(Andreen 2014; Bainbridge & Bainbridge, 2007; Buchanan-Oliver & Seo, 2012; Champion et al., 2022; Cragoe, 2016; de Byl, 2019; de Wildt & Aupers, 2020, 2023; Geraci, 2012; Harwood, 2022; Hemmann, 2021; Krzywinska, 2006, 2013; Noh, 2020; Otmazgin, 2021; Podvalnyi, 2019; Scholtz, 2005; Šisler, 2017; Spanos, 2021; Tozoğlu & Kuran, 2022; Xidakis, 2022; Yoon, 2021; Zeiler & Mukherjee, 2022; Zeiler & Thomas, 2021)

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Table 4. Coding tree with references of literature.

## Appendix 4: Search string history

Search string	Number of results
culture* AND game*	7866
culture* AND heritage AND game*	1581
heritage AND game*	2443
(culture* OR heritage OR "cultural heritage" OR "cultural elements") AND (game* OR "mobile game*" OR "video game*" OR "digi- tal game*")	7274

Table 5. Search string history.

## Appendix 5: Summary of included literature

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## **Book Review**

***Gaming Democracy: How Silicon Valley Leveled Up  
the Far Right* by Adrienne L. Massanari  
(The MIT Press, 2024)**

Megan Condis

*Eludamos: Journal for Computer Game Culture*  
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# Book Review

## ***Gaming Democracy: How Silicon Valley Leveled Up the Far Right* by Adrienne L. Massanari (The MIT Press, 2024)**

MEGAN CONDIS

### **Abstract**

A Review of Adrienne L. Massanari's *Gaming Democracy: How Silicon Valley Leveled Up the Far Right*. Published by The MIT Press, 2024. ISBN: 9780262380331, 238 pages.

### **Keywords**

Game production; game labour; game developers; project-based workplaces; work regulation; industrial citizenship



Figure 1. Image from subreddit r/SocialistGaming.

**The above meme was posted to the subreddit r/SocialistGaming** on January 7<sup>th</sup>, 2021, the day after an angry mob stormed the United States Capitol in hopes of stopping the certification of the 2020 presidential election (Tiny\_Tim1956, 2021). The image is an example of the Domino Effect meme template, which is typically used to illustrate the ways in which a small, seemingly insignificant event can cause a chain reaction that results in far-reaching, unforeseen consequences (Philipp, 2022). This instance of the meme in particular is referencing #Gamergate, a social media harassment campaign that focused on female game creators and critics who, participants believed, were exercising undue influence in gaming culture and “ruining” games with their feminist politics. The “free game about depression” refers to *Depression Quest*, a project created by indie game developer Zoë Quinn (2013). In the summer of 2014, Quinn’s ex-boyfriend Eron Gonji wrote a scathing blog post denouncing Zoë and accusing her of sleeping with a games journalist in exchange for favourable reviews of her project (Blodgett, 2020) despite the fact that said journalist never actually reviewed *Depression Quest* (Totilo, 2014). The post, which had been strategically seeded by Gonji on multiple gaming forums (Massanari, 2017), started to gain traction within some corners of the community. The post “triggered harassment (including death and rape threats) against Quinn and anyone who publicly defended her” (Blogdet, 2020), with the second round of targets including feminist games critic and YouTuber Anita Sarkeesian, indie game developers Brianna Wu and Phil Fish, and actress Felicia Day, all of whom faced harassment, doxing, and death threats. Sarkeesian in particular was the recipient of especially brutal treatment, as #Gamergaters vandalized her Wikipedia page, sent her drawings of herself being sexually assaulted, created a game that would allow players to “Beat Up Anita Sarkeesian” (Liss-Schultz, 2014), and even disrupted a planned speaking event of hers by emailing a threat to execute “the deadliest school shooting in American history” if the event wasn’t cancelled (Marco, 2014).

The meme suggests that the #Gamergate movement, which was a fertile recruiting ground for the alt-right and was even explicitly courted by the Trump presidential campaign in 2016 (Condis, 2018), was a crucial factor leading to Trump’s first election victory and therefore, it could be argued, is one of the key factors leading up to the events of January 6<sup>th</sup>. Untangling this history and the ties that connect esoteric fan discourse in obscure online forums like 4chan and 8kun to the rise of right-wing violence in America is vital to understanding the political landscape of 2025, a landscape in which unelected social media platform owner Elon Musk brags about his (possibly fraudulent) accomplishments in games like *Diablo IV* (Blizzard Team 3 and Blizzard Albany, 2023) and *Path of Exile 2* (Grinding Gear Games, 2024) from Donald Trump’s White House (Tan and Isaac, 2025). But perhaps even more important, is understanding how the ways in which the gamified communication platforms upon which memes like these are distributed have paved the way for our current moment. And that is why Adrienne L. Massanari’s book *Gaming Democracy: How Silicon Valley Leveled Up the Far Right* (2024), is such an important and necessary contribution to not only games studies and platform studies but also to the process of assembling the first draft of this era in American history.

Massanari details “how internet spaces structure our participation through their design and affordances ... and how the unstated values that engineers, designers, and, most important, marketers hold are crafted into these platforms” (2024, p. ix). Internet platforms in the social media age use gamified logics to shape how we communicate, making every interaction a kind of contest for attention and engagement (Massanari, 2024, p. ix). Furthermore, an aesthetic of playfulness permeates these platforms, encouraging the development of new communicational formats like hashtags, memes, and trolling that enable serious political messaging to be masked in layers of irony and tongue-in-cheek mischievousness that is difficult for those on the outside to parse (Massanari, 2024, pp. 118–119). And, unfortunately for American democracy, the alternative right, a coalition of online conservatives whose politics revolve around a sense of aggrieved entitlement and a disdain for ‘DEI’ née ‘critical race theory’ née ‘social justice warriors’ née ‘political correctness’, has developed a talent for exploiting the games social media platforms encourage us to play.

The book focuses on three case studies that are expertly explicated in an engaging and approachable way. The first case study focuses on #Gamergate and the ways in which subsequent online harassment campaigns and even conspiracy theories like QAnon copied its synergistic melding of fan communities, right-wing rhetoric, and gamified platforms. The narrative of QAnon, Massanari compellingly argues, is delivered to its adherents in the form of an ARG, an alternate reality game that requires players to collaboratively assemble clues and solve puzzles in order to solve a mystery that exists in plain sight, just under the noses of ordinary citizens that are too apathetic, lazy, or cowardly to put the pieces together.

The second case study examines the cyberlibertarian philosophy that has come to be associated with Silicon Valley and its connection to the so-called “intellectual dark web.” This cyberlibertarianism consists of “an uncritical technological determinism” (2024, p. 67) paired with a belief in “the sacrosanct nature of the individual and an unwavering belief in meritocratic explanations for success and failure” (2024, p. 68) as well as a commitment to free markets. When paired with notions of “geek masculinity” (Kendall, 2000) that pervade certain online spaces, cyberlibertarianism provides “brogrammers” with a convenient excuse to “re-entrench existing systems of inequality (around gender, race, and sexuality), perpetuating them in new and more pernicious ways” (2000, p. 75). This particular case study looks at two examples of workplace controversies: former Google employee James Damore’s infamous 2017 antidiversity memo and the backlash over software developer Adria Richards’s complaints about sexualized comments at a tech conference that came to be known as “Donglegate.” As Massanari points out, “while both Damore and Richards were later fired, Damore was welcomed into the alt-right fold, while Richards was silenced by her experience. ... These cases exemplify how tech culture valorizes particular bodies over others” (2024, p. 25).

The third and final case study looks at the subreddit r/The\_Donald, which, Massanari argues, are “engaged in a particular kind of memetic play that is best understood as

a form of dark play” with “the figure of Trump himself as a transmedia object” of fandom (2024, p. 25). Participants would post memes and replies (often times video game themed) to earn subcultural capital that was easily trackable within the Reddit infrastructure in the form of upvotes and awards.

Each case study provides crucial insights into the ways in which the alt-right is attempting to “use technology to metagame democracy” (2024, p. 26). The book is written in such a way that it is easy to follow, even for those who aren’t “extremely online,” and will be of interest to researchers, students, and interested citizens who are invested in understanding our current media ecosystem. Massanari’s writing has me convinced that such understanding is necessary if those who are invested in American democracy are to have a chance at developing their own ‘game plans’ to save it.

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## **Book Review**

***The Rise of the Roguelite: Inside a  
Gaming Phenomenon, edited by  
James Cartlidge (CRC Press, 2025)***

David Matencio Durán

*Eludamos: Journal for Computer Game Culture*  
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# Book Review

## ***The Rise of the Roguelite: Inside a Gaming Phenomenon*, edited by James Cartlidge (CRC Press, 2025)**

DAVID MATENCIO DURÁN

### Abstract

A review of James Cartlidge's edited volume, *The Rise of the Roguelite: Inside a Gaming Phenomenon*. Published by CRC Press, 2025. ISBN: 978-1-00341-547-3, 200 pages.

### Keywords

Roguelites; game design; game analysis; book review

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**In April 2025, the book *The Rise of the Roguelite: Inside a Gaming Phenomenon*** edited by James Cartlidge was published by CRC Press. After books that are mainly interested in the exploration and history of roguelike video games, CRC Press has published this edited collection, shifting the focus to roguelite video games. I received this book with excitement, as a game scholar interested in roguelite and roguelike games, and as a fan wanting to know more about them.

For those unfamiliar with roguelike and roguelite video games, the roguelike genre was developed after the success of the video game *Rogue* (Toy & Wichman, 1980). They have many possible features, but the most common ones are a cyclical permanent death system, procedurally generated scenarios or levels and a grid-based movement system. Roguelite video games stem from roguelike video games. Roguelites may include real-time action-based gameplay, permanent upgrades for the player character after their death, synergies between upgrades, or characteristics that are rooted in other video game genres. For more information about roguelikes, I recommend *Exploring Roguelike Games* (Harris, 2020), *Game Design Deep Dive: Roguelikes* (Bycer, 2021), and *Dungeon Hacks* (Craddock, 2022).

*The Rise of the Roguelite* starts setting clearly its objectives and expectations: it wants to analyse the wave of roguelite video games that have enchanted players in the last decade, situating them in a sociocultural and historical context that makes them thrive. Similarly, James Cartlidge sets the profile of the book's expected readers: game studies researchers, game designers and students of any of those disciplines. To achieve these objectives, the book offers a wide range of perspectives that should satisfy different interested specialists, but it also provides easy and clear texts that are accessible for students. Cartlidge is supported by ten scholars that offer different perspectives on the success and potential of roguelite video games. Game design, politics, gender studies, queer studies or philosophy are some of the fields that try to explain the outstanding potential of this genre of video games in ten chapters and an introduction.

Since the chapters are not grouped in sections, for the sake of a more cohesive review, I will sort them depending on the main topics of their discussions in three groups: those that are focused on roguelites' design and mechanics (chapters 3, 4, 8); those that are interested in analysing them from a historicist perspective (chapters 2, 5, 6, 7), and a third group that analyses how genre and identity can be potentially depicted in roguelites (chapters 9, 10, 11). Despite their differences, all these chapters show an interest in roguelites' game design turning them into a coherent group of chapters that is in dialogue with each other.

The introduction presents an easy-to-understand and brief explanation on the rise of roguelites, their main design concerns, and the purpose of the book, opening the door to the different chapters with a short description of each one. James Cartlidge uses Steam data to explain the rising popularity of the genre and the number of players that enjoy them, showing their importance in the global video game industry. For example, Cartlidge points out that in January 2025, there were 9,998 games labelled as roguelites in Steam. Apart from this, Cartlidge shows that roguelites have established a strong presence in the indie scene, mentioning some recently published video games. Similarly, they introduce the reader to the 'Berlin Interpretation' of roguelikes to set some important characteristics of roguelike video games that are also part of roguelites. A good example of Cartlidge's use of the Berlin Interpretation is that it is not explained as a set of compulsory characteristics that make roguelikes as such, but as a dynamic set of characteristics for future developers to be used, giving flexibility to the interpretation. Cartlidge finishes the introduction showing the variety of disciplines that roguelites bring over the table (politics, philosophy, game design, etc.), while introducing the chapters featured in the book.

Shifting the focus towards the chapters focused on roguelites' game design and mechanics, chapter 3 "What Makes a Good Roguelite?" by Marc Dolgin offers an analysis of the main characteristics of this genre. Among the various aspects analysed in this chapter, the section dedicated to 'synergies' is especially well described. A synergy in roguelites is the result of the interaction between two upgrades obtained during

the gameplay that affects positively the player's character performance. Dolgin offers an interesting segmentation of synergies in three types: minor synergies, major synergies, and scripted synergies. Minor synergies are those that simply affect increase the stats of the player's character, major synergies significantly boost the performance of the player through emergent interactions between upgrades, and scripted synergies happen when two specific upgrades have been coded to shape a synergy. In my opinion, this division will prove useful in the future, since it allows a more comprehensive organized analysis of roguelites' mechanics by sorting synergies in coherent groups. Similarly, the author accurately describes meta-progression as one of the key traits of roguelites and a core difference with roguelikes. However, I observe a lack of engagement with previous literature about roguelikes and roguelites design, like *Game Design Deep Dive: Roguelikes* (Bycer, 2021) or "Genre, Prototype Theory and the Berlin Interpretation of Roguelikes" (Cartlidge, 2024). It is true that this chapter is one of the first texts explaining roguelites' main characteristics and how they are implemented, but their description could have been richer if a conversation with previous research would have been established. Nonetheless, I consider that the analysis is detailed, well thought out, easy to understand, and it opens the path to more comprehensive analyses of roguelites' design.

Chapter 4, "Roguelites and the Problem of Ludonarrative Dissonance" by Leonardo Codamo, brings over the table one of the main narrative problems of roguelite video games. As a scholar trained in narrativity and literature, I have struggled with the ludonarrative dissonance that roguelites' mechanics cause in stories that, otherwise, would have been much deeper and more believable. Since the eternal cycle of life and death is not represented diegetically, roguelites usually break players' immersion and throw them off the fictional world that is depicted. They usually feature stories that do not acknowledge what it is happening in the gameplay. Codamo tackles this problem and proposes ludonarrative harmony as a necessary step in roguelites' design to craft richer storyworlds that players could enjoy. To achieve this, the author introduces several examples of video games (for example, *Hades*, *The Binding of Isaac* or *Rogue Legacy*) that have tried to solve the issue and offers some design choices that could be implemented to alleviate this problem, like introducing machine learning that may support emergent storytelling linked to gameplay. In addition, the author effectively establishes a conversation with previous research about the topic, mentioning key authors like Clint Hocking (2009), or Miłosz Markocki (2021). I just miss a reference to the article on ludonarrative dissonance made by Paweł Grabarczyk and Bo Kampmann Walther (2022). I consider this chapter especially useful for those who want to delve into the topic in this specific genre.

The last chapter that is mainly focused on game design is Chapter 8, "Edit Wands Always: Experimentation, Modding, and Metagaming in *Noita*" by Andrew Bailey. This chapter analyses *Noita's* (Nolla Games, 2019) modding community and how they interact with the original game design, as well as with the expectations of its developers. This chapter cleverly uses the analysis of social media to understand the

nature of *Noita's* mods as an answer to the general design concerns of the fan community, like the necessity of checkpoints or easier wand customization mechanics. Bailey's approach to this topic is rooted in previous literature about the use of fandom or fan communities in the analysis of video games. These studies are combined with their knowledge about the game, data from *Noita's* fan Reddit and Discord communities, and the conferences and other documenting material made by the developers. This way, Bailey intersects the views from the fans and the developers to explain the singularity which is *Noita* within roguelite video games. Additionally, this chapter's structure and clarity when providing key points make it an easy-to-read text that fulfils its objectives.

In the case of the group of chapters that approach roguelite video games from a historicist perspective (chapters 2, 5, 6, 7), chapter 2 "When Darwin Met Lovecraft: Generating Mystery and Discovery in *The Curious Expedition*" has been written by Mark Johnson. This chapter combines literary analysis from Lovecraft's work, sociocultural contextualization about the influence of European scientific explorations of the 19<sup>th</sup> century, and an analysis of game design choices that inspire a sense of discovery in the player. Due to my academic background, I appreciate the scrupulous effort made by Johnson to explain the influence of Lovecraft's take on mystery and horror literature in *The Curious Expedition*. From my point of view, the main attractive point in this chapter is that Johnson explains how to effectively express the literary influence of this writer in the form of mechanics and game systems that are focused on discovering the unknown, for example emergently finding isolated tribes. Despite using just one roguelite video game as an example, this text can be applied to other video games, especially roguelites, that are influenced by this type of literature. I also consider that this text can be used by game designers as a source of strategies that may make players feel curious and intrigued continuously in roguelite video games or games with replayable cycles. As a downside, this chapter does not engage with previous academic texts about the influence of Lovecraft in video games that could have been useful for their analysis like Kevin Corstorphine and Matthew Crofts' study of Lovecraftian gothic spaces in video games (2021) or André Cowen's paper (2023) on cultural otherness in Lovecraft-influenced video games. Occasionally, this leads to the self-citation of the chapter's author due to the lack of secondary bibliography.

In Chapter 5, "Players' Will and Characters' Deeds: Agency and Legacy", Robert Seddon is interested in the effects that roguelite video games may have in the feelings of the player. Seddon focuses their chapter on the player's moral choices implied in the continuous cycle of life and death of roguelite video games. Their objective is showing that meta-progressive roguelite games trivialize the death of the playable characters in pursuit of a higher objective. The topic of discussion and the objective of the chapter are from my point of view particularly important if we want to analyse roguelite video games from a psychological point of view. For example, the success of *Hades* (Supergiant Games, 2019) or *The Binding of Isaac* (Nicalis, 2014) have proved that players like video games that have moral implications after or during each cycle.

However, I consider that this chapter suffers from a structural problem in the way it manages its citations. There are too many long consecutive citations that dilute the author's main argument. Similarly, the description of previous moral discussions about certain video games are also lacking since the author uses articles in different media but does not engage with academic writings about dark play. Despite these two problems, Seddon cleverly brings over the table the role of death and player agency in roguelites' permadeath cycles.

Chapters 6 and 7 can be understood as a group since both share a similar strong historicist approach that converts them into complementary chapters. In fact, I think of them as the highlights of the book because they show the potential of interpreting roguelites and their mechanics as the result of a certain sociocultural context. The editor of this collection, James Cartlidge, is in charge of chapter 6, "The Chain of Power: Foucault's Philosophy and *Vampire Survivors*-like Roguelites", and Steven Harvie has written chapter 7, "Historicizing the Roguelite: The Legacy of Neoliberalism and the Dawn of Social Media". Cartlidge explains that roguelite games may work as a metaphor for power structures since, sometimes, their mechanics imply chaining different powerful upgrades or downgrades. They use and assimilate Foucault's works about power like *The History of Sexuality* (1978) and cleverly applies them to *Vampire Survivors* (poncle, 2022). Similarly, Harvie dissects how neoliberalism gave birth to self-help books and other cultural artifacts that place the individual as the cause behind current political, social, and economic problems. Harvie explains that, in roguelite video games, players are the main cause of failure. In other words, it is completely the player's fault that they fail, not the system's fault. This complements Cartlidge idea of roguelites as an example of the effects of structures of power. Both chapters show that video games are children of our age, and they reflect the problems we experience, something that the authors have understood perfectly. I hope that these authors keep researching these topics, since they resonate with current challenges in game studies and, in general, in historicist analysis.

Chapters 9, 10 and 11 are focused on the expression of identity and queerness in roguelites. As roguelites are political objects that are the result of certain sociocultural circumstances, they carry the capability to portray certain identities. In chapter 9, "Simulation Gaps, Failures, and the Potential for Queer Game Design", Xavier Ho talks about the potential of roguelite video games to introduce queer voices. For that, they show game design choices that may encourage this, like introducing silenced voices that experience frustration both in narrative and gameplay. I agree with Ho's idea that failure and resistance in roguelite video games allow the introduction of complex identities that have suffered mistreatment or have been relegated to ostracism. Introducing and assimilating fundamental authors like Adrienne Shaw or Bo Ruberg, Ho shows wide knowledge of the fields that are being used in the chapter while explaining the potentialities of roguelite video games.

This potential is shown in Chapter 10, "Roguelites, Romance, and the Power of Genre-Bending in *Boyfriend Dungeon*", by Christine Tomlinson. In this chapter, the

author explains the flexibility of roguelites video games as a genre, especially in its narrative aspects, since it allows the introduction of non-normative stories or stories related to identity. Using *Boyfriend Dungeon* (Kitfox Games, 2021) as the main case study, Tomlinson explains that through using roguelite mechanics and a story that acknowledges them diegetically it is possible to introduce elements of, for example, romance video games and dating sims. This author shows that the potential of queering the narrative of roguelite games also invites the introduction of aesthetics and genres that have not been usually applied to roguelike or roguelite video games before, except for *Hades*. In fact, in Chapter 11, “*Hades, the Queerness of Roguelites, and the Recursivity of Trauma*”, Kit von Campe shares part of their argument with Tomlinson and Ho: they show that roguelite mechanics offer a clear potential for complex identities. In the case of von Campe’s research, the complex identities refer to those based on trauma. This author accurately explains the implications of permadeath and meta-progressing roguelites and how *Hades* carry them in its narrative to tell a story of family trauma. In my opinion, chapters 9, 10 and 11 use their sources and assimilate them very well. As a remarkable note, these chapters are in an indirect discussion with each other, expanding the scope of the topics the three authors develop in their texts.

All these chapters show that *The Rise of the Roguelite* does an excellent job in providing a mixture of perspectives about the reasons why roguelites are nowadays so popular and which aspects of them should be studied deeply. Despite some downsides, all the chapters establish a connection with other disciplines and authors, while opening new paths of research. Cartlidge, as the editor, does not limit this constructive approach here, but also introduces an appendix with key books and papers that can be used to improve the reader’s knowledge about roguelite and roguelike video games. This starts a general dialogue with previous literature about the topic and directly acknowledges the place of this edited book in the field of study. Due to all of this, I heartily recommend this book to anyone who is interested in the genre, especially if they have just started their research on it.

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## **Book Review**

***The Middle Ages in Computer Games: Ludic Approaches to the Medieval and Medievalism*  
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Evan C. Moore

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# Book Review

## ***The Middle Ages in Computer Games: Ludic Approaches to the Medieval and Medievalism* by Robert Houghton (D. S. Brewer, 2024)**

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### **Abstract**

A review of Robert Houghton's book *The Middle Ages in Computer Games: Ludic Approaches to the Medieval and Medievalism*. Published by D. S. Brewer, 2024. ISBN: 978-1-84384-729-8, 355 pages.

### **Keywords**

Medievalism; ludic medievalism; game studies; game genre; historiography; interactive pedagogy; game mechanics

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**Computer games that represent a medieval** or medieval-like world are caught, as other media are, between authentic representation on one side and practical demands and artistic expression on the other. Developers choose which aspects of the Middle Ages to prioritize in their gameworlds and which aspects to ignore or alter. Little scholarship has been devoted to addressing medievalist computer games beyond their accuracy or authenticity to their source materials and/or historical reality. Indeed, there is hardly any scholarship that sets up a schema or framework by which game studies scholars and historians can both explore, examine, and analyze such medievalist computer games. Such is the gap in game studies frameworks which Robert Houghton seeks to fill in his 2024 book *The Middle Ages in Computer Games*. Indeed, this new book is a continuation and expansion on Houghton's 2023 edited collection *Playing the Middle Ages: Pitfalls and Potential in Modern Games*, which he begins by declaring, "The study of the Middle Ages in modern games is no longer a new field" (Houghton 2023, p. 1). While no longer brand new, the field is still young, and Houghton seeks to provide a groundwork for future study.

Houghton presents his book as the beginning of a new subfield worthy of study, a necessary text as game studies continues to rise in the academy and as more and more scholars from various fields begin to analyze games through their own lenses. The title is general in order to show just how wide and how important the current work truly is. Houghton's goal is not, as he says, to present a "case-study approach" to any games (2024, p. 29). Nor is it an "encyclopedic catalogue of medievalist games and tropes" (2024, p. 29). Rather, Houghton made a "deliberate choice" to privilege "breadth over depth" and "create a broad thematic survey with reference to a substantial range of games, similar to the approach utilised by Wainwright and Kempshall" (2024, p. 29). There, he refers to A. Martin Wainwright's 2019 book *Virtual History: How Videogames Portray the Past* and Chris Kempshall's 2015 book *The First World War in Computer Games*. Houghton situates his book as a continuation in style from those, even paraphrasing Kempshall's apt title, while in content he sets out an invitation or instigation for further discussion and scholarship.

Houghton accomplishes this instigation by leading the reader, chapter by chapter, through several possible themes, frameworks, or tropes worthy of study within any single game or group of games. The introduction and first two chapters establish Houghton's credentials and present the reason for this text, how to analyze games and gameplay, and the scope of medievalism within game genres. They are broad chapters, and Houghton never offers a full or deep examination of any particular game, rather sticking to brief summaries or descriptions as he lists the games pertinent to any given theme or larger concept. Other chapters are more specific in their lenses and approaches—such as 'Combat and Warfare', 'Science, Technology, and the Dark Ages', 'Race and Nationality', and more—but his discussion of individual games remains, understandably, surface-level.

The central focus of *The Middle Ages in Computer Games* is methodology, not specific textual or adaptation analysis. Houghton clearly and effectively demonstrates and provides examples for the major trends and habits of medievalist computer games, based on the aspects of the medieval world which those games represent or adapt. Gender, religious practice, and the position of rulers all receive their due attention. The benefit of Houghton's newest project is clear from his own careful and abundant citations: he has built, coagulated, and now reproduced the litany of game studies and medievalist scholarship that preceded this project (including his previous work). As a foundational text for a new subfield of ludic medievalism, it has no peer. Its breadth and his confidence in that breadth are commendable in themselves; even more praiseworthy are the ways in which Houghton engages with contemporary scholarship and establishes the main themes and lenses of academic discussion from a bird's eye view. Houghton establishes these themes and lenses through careful and introductory observation and examination, rather than individual textual or mechanical analysis (he offers these broadly and briefly, and only at some points throughout the book). His claims in each chapter—and indeed, for the book itself—are structured to erect a foundation of relatively low-level and basic axioms. His

claims say little brand new in themselves, but they set the groundwork for more detailed and precise scholarship to come afterward.

*The Middle Ages in Computer Games* similarly presents very few precise, detailed, and new claims about any game. Some scholars may, therefore, find some of Houghton's brief descriptions of some games either imprecise or without their deserved complexity. Houghton himself admits that his approach for the whole book will necessarily lose "detail and nuance" (2024, p. 29) in his treatment of games and of theoretical lenses. The book's purpose as a survey of methods and games and as a foundation for future scholarship produces short and unnuanced mentions of games. For example, when differentiating between games that present a fully magical world and ones that present a more mundane one, Houghton briefly describes *Pentiment* (Obsidian Entertainment, 2022) and *Kingdom Come: Deliverance* (Warhorse Studios, 2018) as two of those rare "games that eschew the supernatural" (2024, p. 60). His privileging breadth over depth helps his rhetorical goals here, despite the loss of a detailed view of *Pentiment's* complex dealings with the supernatural. Taking two extra paragraphs to describe, in detail and with textual evidence, how *Pentiment* features ecstatic dream visions in every act and a mystical abstract relationship with space and movement in its final moments would not further support any of Houghton's arguments or observations. The trend for medievalist games to portray a world filled with magic is still prevalent, and *Pentiment* (generally speaking) is still a rare exception to that trend.

Like the short references, examples, and one-off suggestions of games, Houghton's claims for the entire book and for each individual chapter are more observational than argumentative. His arguments themselves are relatively surface-level and are meant only to begin critical thought and ignite interest. The nature of these claims is due to the book's purpose as a grand view of scholarship and thematic approaches, and they succeed in inspiring the reader to go the next steps on their own. That is, the claims are less for Houghton to demonstrate his own encyclopedic and omniscient grasp over all of ludic medievalism—they are more for Houghton to gesture to his audience, invite them to the conversation, and then hand off some of the reins. There is always an implication—sometimes outright said—that there is more to explore here and better, deeper theses to find. I expect more detailed analyses of these brief mentions to come from Houghton, his collaborators from *Playing the Middle Ages*, and many more scholars inspired by this new text.

*Middle Ages in Computer Games* has a secondary use as an introduction to game studies and medievalism scholarship, particularly useful for those beginning their academic journeys now. The sheer volume of Houghton's bibliography and ludography at the end (together over 40 pages) and his constant references to previous scholarship (the introduction and every chapter average 150 footnotes each) function as a cultivated database of academic sources on game studies, medieval history, medievalism, adaptation studies, and other fields. Though Houghton himself acknowl-

edged that his book is not an encyclopedia—and surely, it would be nearly impossible to categorize and precisely summarize or describe every single computer game that depicts a gameworld and/or narrative that harkens back to the Middle Ages—his book nonetheless categorizes and describes hundreds of such games and, more importantly, thematic and theoretical scholarship.

The introduction itself is an introduction to ludic medievalism. It functions not only as an outline for the coming chapters, nor is it only a defense of Houghton's purposes and goals. In only 29 pages, Houghton takes the reader through every major thematic area which he will discuss more fully in the nine full chapters. He also cites an overwhelming plethora of scholarship, ranging in scope and time from Marc Prensky's 2006 book on computer games and education and Kaspar Pobłocki's 2002 article on the *Civilization* series (1991–2001) and imperialism to Alberto Venegas Ramos's 2022 article on games' reconstruction of the Middle Ages and Houghton's own first chapter in *Playing the Middle Ages*. Throughout the introduction (and the rest of the book), Houghton cites heavily across game studies subfields, including books on pedagogy and culture and the journals *Game Studies* and *Gamevironments*, and across medievalist scholarship, most notably the previous entries into the Medievalism series of monographs and collections to which *The Middle Ages in Computer Games* belongs. Right from the start, Houghton creates a network and review of literature spanning several interdisciplinary fields and even reaching back into the earliest days of true gaming-focused scholarship. In doing so, Houghton also exemplifies how to bring together the study of games and the study of medievalism, forming a rhetorical guide for engaging in his fledgling ludic medievalism. Any citation which a reader does not know and that is within a subfield of interest to that reader should be noted for future research.

Houghton begins the first chapter, 'Mechanical and Social Pressures', with a brief review of Espen Aarseth's "tripartite model of game elements:" gameplay, game-structure, and game-world (2024, p. 31). This first chapter outlines what makes games separate from other forms of media, and therefore what makes ludic medievalism worthy of its own approaches and name. Games are inherently interactive, are bound by unique mechanical rules and requirements, and are therefore also bound by social pressures, expectations, and identities. Ludic medievalism, like a medievalist study of modern films, must acknowledge the tropes and conventions born of audience expectation rather than historical authenticity. Unlike film or novels, however, ludic medievalism must also reckon with the fact that players are co-authors of ludonarrative, not merely audiences.

Chapter 2 discusses the "common ludic trends" in gaming genre conventions that affect medievalism (2024, p. 55). Houghton sets out broad genre trends in use for telling medievalist stories or creating a medieval-like gameworld, from roleplaying games and roguelikes to adventures and action-adventures. This chapter is best for scholars needing a quick grasp of the gaming genre landscape, including names, styles, and conventions.

Chapters 3 and 4 discuss two themes that most affect medievalist gaming: combat and warfare, and technological stagnation. Medievalist games overwhelmingly present the period as overly violent and defined by war, in part due to videogames' tendency toward violent gameplay in the first place. Chapter 4 is a long discussion on the Dark Ages and its clash with games' promise that the player might improve at the playing itself and that the character might unlock better equipment, find better materials, and improve their skills. There was real technological and scientific advancement during the Middle Ages, even in Europe, but in popular culture the few examples of lost technology remain characteristic of modern ideas of the 'Dark Ages', like Roman concrete. Many medievalist games follow suit and give an individual player free rein to improve their skills and explore in a world defined by stagnation or even regression.

Chapters 5 and 6 discuss more cultural matters represented simplistically in medievalist games: the aristocracy and the clergy/Church. Outside of a few authentic examples, computer games tend to portray a Middle Ages with the absolute rule of kings and a Church fundamentally conservative, restrictive, and powerful. Neither of these characterizations are authentic to the realities of medieval Europe: as Houghton explains, games in general overstate the power the Church held over individuals and mundane life, and royalty did not have absolute power—political authority lay with a decentralized nobility, and specifics differed across the centuries and the continent.

Chapter 7 explores how games represent moral decisions in a medieval worldview. It is almost always based on a Christian point-of-view, and even then usually a more modern progressive one with some older ideas for flavor. Violence is justified by a greater good or by an ultimate goal deemed worthy of bloodshed. The Church tends to control the moral systems with the game with a firm hand. Christian symbolism (demon horns, crosses, etc.) is often leveraged to indicate friend and foe in games. People of other faiths, when they are enemies, are often dehumanized (more on this in the next chapter) so that the player may act violently toward them without moral scruples.

Chapters 8 and 9 explore modern critical lenses in terms of ludic medievalism, exemplifying how to apply to videogames such frameworks as queer studies, gender and sexuality more broadly, nationalism, and orientalism. Games tend to alienate, otherize, or discard non-white and indigenous groups. Medievalist strategy games present clear and exact borders and rightful rulership, and games in general portray pride and ethnic awareness beyond one's city—even though these were not common until the rise of nationalism in Europe in the eighteenth and nineteenth centuries. Games tend to overrepresent how white medieval populations were, even in European cities, despite consistent scholarly evidence that people in the Middle Ages traveled and moved like anyone else. Games also homogenize other races—most commonly in fantasy games, but in historical games as well. Games prioritize

European cultural artefacts as belonging to the global Middle Ages, as well, universalizing ideas, weaponry, and governance that can only be found in medieval Europe. Medievalist games similarly underrepresent women and queer characters, tending to allow them as main characters only when they subvert gender roles, such as dressing as men. While representation across the board has been improving, and more games are subverting the old trends, computer games still marginalize identities that are not straight white men, and they rely on stereotypes.

Houghton's grasp of gameplay, fan discourse, history, and potential theoretical lenses for so many games is also quite useful for younger scholars and reifies his ethos. For example, in the fourth chapter, 'Science, Technology, and the Dark Ages', Houghton refers to "peaceful barbarian encampments" within the *Civilization* franchise as "Goody Huts" (2024, p. 112). These "Goody Huts" grant the player small bonuses when the player guides a unit to the tile where the hut is. "Goody Huts" as a term is never used within the franchise itself, instead calling this type of tile feature (that is, some item or location placed on a single tile) an "Ancient Ruin" (*Civilization V* [Firaxis Games, 2010]), "Tribal Village", (*Civilization VI* [Firaxis Games, 2016]), or something similar. Because the games change what they call this tile feature, fans call them "Goody Huts" in general whenever it is appropriate to discuss them across several games. While I've been playing *Civilization* games for 15 years, I only first encountered "Goody Huts" online about a year ago. It is possible to enjoy the games and even study them critically without ever knowing the term. Houghton's use of "Goody Hut" demonstrates that either he has played *Civilization* for a while and has engaged in fan discourse online, or that he has read from scholars who have. In either case, he displays a care for and a love of the fan community and of the games themselves. Such knowledge of the gameplay across the franchise and of fan discourse can only support his applying theoretical lenses to the franchise. He knows it well, and he shows a connection to themes, not just enjoyment or the playing itself.

Houghton's seminal book *The Middles Ages in Computer Games*, then, is a great fit for the new scholar who needs guidance into the scholarly landscape, the graduate student still learning how to find gaming analysis in the themes they love, the established scholar seeking to expand their grasp of either medievalist or videogaming academic writing, and any scholar willing to heed and respond to Houghton's call to action. It is past time for medievalism to dive into the games that portray the Middle Ages, and Houghton's concept of ludic medievalism opens the door wider than ever before. If we are willing to follow in the first footsteps of this foundational text, as an even firmer basis coming from *Playing the Middle Ages*, we can only benefit the academy. Each of Houghton's references, examples, and one-off suggestions could become full projects in themselves. Each of his chapters could be expanded into monographs, and none are better posed at this moment than Houghton himself as the nucleus of this new study.

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# **The State of Native Representation in Videogames**

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Lukwe'tiyó | Oneida for "He is a Good Man"

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# The State of Native Representation in Videogames

THOMAS JAMES REED

LUKWE'TIYÓ | ONEIDA FOR "HE IS A GOOD MAN"

## Abstract

This commentary examines the state of Native representation in videogames from a Native perspective. Also, this commentary offers examples of Native Representation in Videogames from 1971 to 2025. Furthermore, I provide decolonizing and indigenizing examples of Natives in videogames. The paper also contains recommendations for further research and suggests good practices for videogame developers to facilitate design of positive Native representation as a decolonizing practice of indigeneity. This commentary closes with a call for positive representation, as seen in *Never Alone* (Upper One Games, 2014), the first videogame made by an indigenous-owned videogame studio.

## Keywords

Native representation in videogames; Native representation; videogames; Native American; American Indian; indigenous; decolonizing; indigeneity

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One of the things I think a lot of people need to understand is, we aren't a museum piece. The Iñupiat people are a living people, and a living culture. ... It's very important to me. It's who I am as a person. And we're very proud of who we are, and we want to continue that. (Upper One Games, 2014, A Living Culture, *Never Alone [Kisima Ingitchuna]* Insight Collection)

**While researchers have already delved into Native**, or Indigenous, representation in videogames (Burgess, Dill, Stermer, Burgess, & Brown, 2011; Dickerman, Christensen, & Kerl-McClain, 2008; Glaubke, Miller, Parker, & Espejo, 2001; Lagace, 2018; Leonard, 2006; Martínez Linares, 2018; Rushing & Stephens, 2011; Wardhana & Rizqiyanto, 2024; Wisniewski, 2018), a Native perspective is still a needed contribution to this field of research. The medium of videogames is an interactive, ever-growing storytelling device, that also features Native peoples or their cultures. While

sometimes being detrimental and negative in their depiction of Native peoples, there are also instances of videogames being used as a decolonizing tool for Native peoples to tell their own story.

Whilst a third-person perspective is traditional for a commentary piece, it is pertinent to mention my own positionality as a Native person who is a member of the Oneida Nation, having grown up playing many of these videogames, with a PhD on the Indigenous Haudenosaunee game of lacrosse, and am an Assistant Professor in American Indian Studies at California State University of Long Beach. My Oneida name is Lukwe'tiyó, which translates in English to "He is a Good Man". I received this name at the age of nine from an elder female whose role within our Nation is to bestow names upon Tribal Members. I am Oneida, part of the Haudenosaunee Confederacy, I belong to the Turtle Clan, which is passed down matrilineally through generations. I am a third-generation survivor of Carlisle Indian Boarding School, and I descend from a long line of chieftains and clan mothers. I'm a Native gamer, educated, and passionate about seeing my peoples represented positively and on our own terms.

In many ways, I started researching this theme in 1995 when I was five years old and encountered Native characters on screen in a videogame for the first time—Nightwolf in *Mortal Kombat 3* (Midway, 1995) and T. Hawk in *Super Street Fighter II: The New Challengers* (Capcom, 1993). Native representation in videogames shaped the way I saw the world, as well as the way others saw me, so much so that my friends would call me Nighthawk growing up, a combination of Nightwolf and T. Hawk. Sometimes I felt like it was used as a compliment in sports, and other times used against me if others were perceiving me as upset. Native representation in videogames did not merely shape the way I was molding my own identity, it also shaped the way others saw me. As I have gotten older, and seen the power and importance of positive representation, I see games like *Never Alone [Kisima Ingitchuna]* (Upper One Games, 2014) as the model for other videogame developers to learn from in positive representation.

In my commentary, I will first examine Videogames from a Native perspective. Then, I will identify examples of Native Representation in Videogames before moving on to decolonizing and indigenizing examples. Finally, I offer recommendations for further research and suggest good practices for videogame developers.

## Terms and scope

Before delving into Native representation in videogames, I will have to define the terms and scope of research. The focus of this commentary is primarily on indigenous peoples of North America, South America, Hawaii, and New Zealand. I take the term *decolonizing* from Linda Tuhwai Smith's (2019) *Decolonizing Methodologies*,

which includes techniques such as reclaiming, storytelling, representing, and discovering the beauty of our knowledge. Concepts such as Indigeneity are used to not only deconstruct colonial ways, but to reconstruct traditional indigenous ways of being.

## **Native representation in videogames from a Native perspective**

Steve Newcomb (2017), Shawnee and Lenape scholar, says we can view history from the perspective of settlers arriving on the shores in their boats, or we can view history from the people who have already existed on those shores for millennia. In the same regard, it is important to interrogate whose point of view is being depicted in videogames. Is it Native people telling their own stories or is it others rendering their perception of Native people?

### ***Themes of negative Native representation in videogames***

Negative Native representation in videogames dehumanizes and exoticizes Native peoples. Negative Native representation in videogames tends to reinforce stereotypes in a reductive, oversimplified way, perpetuating the colonizing notions of the 'dumb savage', 'mystical warrior', or hypersexualized Native women. These depictions are rarely in a modern setting, can use a generic or fictional tribe, and are hardly ever portrayed by Native peoples themselves. Often, these are videogames made by non-Native peoples that use Native people to draw attention, fascination, and sometimes spectacle. Over the past decades many videogames have followed these patterns. In the following, I will briefly introduce the games *Custer's Revenge* (Mystique, 1982), *Super Street Fighter 2: The New Challengers* (Capcom, 1993), *Horizon Zero Dawn* (Guerrilla Games, 2017), and *Red Dead Redemption 2* (Rockstar Games, 2018) that constitute specifically obnoxious examples for these representational conventions.

### ***Examples of Native representation in videogames***

This commentary will briefly examine the state of Native representation in videogames over half a century, from 1971 to 2025. The era of the 1970's and 80's was a brutal time for harmful Native representation in videogames with Native characters and perspectives largely absent or grossly exoticizing. The most egregious, offensive, and harmful representation of Native peoples, whether videogames or other media, is *Custer's Revenge* (Mystique, 1982). The user plays as Custer who goes across the screen to rape a Native woman tied to a tree. This is literally the entire game, with a fixed pixelated screen, the background only slightly changing between levels, as the user has to control the character and move him across the screen to rape a Native woman with a feather in her hair. The next level continues with more of the

same. *Custer's Revenge* is hailed as one of the worst games of all time across different reviews (Cassidy, 2002; Plunkett, 2011). Surprisingly, when reading the reviews, I would expect people to deem the game horrible because of the sickening depiction and treatment of Native women, however, multiple comments are focused on the game being bad because it is redundant and repetitive. When the developer was pressed about this action of rape in the game, due to protests by Women's groups and Native groups and lawsuit by Atari for damaging the company's name and reputation, the developer Joel Miller's response was, "he's seducing her, but she's a willing participant" (Plunkett, 2011). A woman being tied to a tree and the game being called *Custer's Revenge* both imply it is clearly not a consensual act. For historical reference, General George Custer led the massacre of Wounded Knee and was killed in the Battle of Little Big Horn after being told repeatedly not to go into the Lakota territory because he was severely outnumbered. This victory by the Lakota at Little Big Horn is one of the few defeats in the United States' military history. The notion of *Custer's Revenge* is to get back at Native people for killing Custer, and in this instance through raping a pixelated Native woman tied to a tree. Despite the game being so notoriously obnoxious, it still draws attention in YouTube video reviews and articles (including this one), which unfortunately give attention to this horrific abomination of Native representation in videogames.

The 1990s brought fighting game characters. Think the aforementioned *Super Street Fighter II: The New Challengers* (Capcom, 1993) with T. Hawk from the fictional Thunderfoot Tribe. There were many other games, with many other characters. When I tell people I am researching Native representation in videogames, most non-Native millennials will tell me a Native fighting character they were brought up with playing. While there are many to choose from, I selected T. Hawk from *Street Fighter II: The New Challengers* as my example here because he was one of the first such characters I encountered on screen. He was reductive, simplistic, would sit cross-legged and put one right hand straight up in a greetings fashion after a win, or lean on a bended knee while swiping his thumb with his nose. T. Hawk was tough, stoic, angry, and did not take no nonsense from anyone. While coming from a fictional tribe of Thunderfoot and not pretending to perpetuate the real culture of any one tribe, T. Hawk was the first Native character I experienced in media who fought back for his land. In the final cut scene of the game, if you beat the game with T. Hawk, he adamantly tells M. Bison, "here is my homeland. Here is where I belong! ... I'll reconstruct this place at all costs ... No one shall disgrace my land and people again! I swear upon the honor and blood of our tribe!" While perpetuating the angry, simple savage, this was also a cornerstone for me as a five year old in being exposed to a simplistic notion of decolonizing and indigenizing which I did not yet have the academic vocabulary to articulate. The representation of T. Hawk was not perfect, but it still gave me a representation of another Native who wanted to do whatever he could to protect his homeland and culture.

*Horizon Zero Dawn* (Guerrilla Games, 2017) and *Horizon Forbidden West* (Guerrilla Games, 2022) feature fictional tribes in the distant future. When I play *Horizon Zero*

*Dawn*, it feels like developers have extracted like a vulture our Native culture out of fascination, while erasing Native people's resiliency and existence. It does not feel great. These games feel weird to play as a Native person. The game features many Native cultural references, while Native people have been erased from existence in this imagined post-apocalyptic landscape. While the created world attempts to be post-racial in this futuristic setting, it erases the possibility of Native tribes' and peoples' existence. While Native people are erased from the game, there are Native references of culture ever present in the game. A medicine wheel is a traditional circle symbol, used across Tribes of North America, and is sometimes of black, red, white, and yellow, or sometimes blue instead of black. This can stand for many things, including the physical, mental, emotional, and spiritual, as well as all colors of people being connected as human beings. In the game, there are medicine wheels on loading screens or in certain architecture. Bow and arrow, traditional Native hunting tools, are used, as are certain housing units which have indigenous-inspired designs. Or there are animal hides being tanned in a traditional fashion. So, in this imagined future, Native culture has survived, however it would seem Native peoples and Tribes were not able to survive. This notion perpetuates a notion of colonization, erasure, and negates Native peoples' resiliency.

In the United States today, there are 574 federally recognized Tribes, over 100 state-recognized Tribes, and over 100 Tribes who are seeking recognition in 2025. Each has its own distinct customs, languages, histories, practices, and stories, so generic Native American culture in games can cause confusion to audiences regarding what is fiction and nonfiction. During quarantine in 2020, many Native women from different Tribal Nations and organizations would tell us, 'we have lived through pandemics and ends of the world, and we will survive through this'.

I share the example of *Red Dead Redemption 2* (Rockstar Games, 2018) because whenever I tell people I am researching Natives in videogames, this is often the first question people will ask me my thoughts on. I feel like people are asking to see what kind of a Native person I am, whether in their eyes if I am a 'cool' Native who does not get easily offended, or an easily offended and 'angry' Native person to avoid. I would view it as being a person who accommodates their own oppression, or a human being who advocates for more equitable and just representation of our Native people.

Well, how you play determines how Arthur Morgan perceives and treats Native people in Chapter 6 of the game. If you play as 'good', then Arthur views the Native peoples as noble and just in their struggle as he supports them. If you play as 'bad', then Arthur views Natives as resources to be exploited for his own personal benefit. Here is my point of contention: the game takes 40+ hours to play and it is remarkably difficult to play as a 'good' or benevolent Arthur. After carefully playing the game for a span of over two years, with every decision and choice being made intentionally to make sure I got a good ending, my character was still neutral between bad and good. The game mechanics may even allow you to accidentally bump into someone on

your coach and wagon, an involuntary act that can accidentally kill someone. If a bystander witnesses this and reports you to the sherriff, you will be hunted until you die. Consequently, it is in the interest of the survival of your character to kill any bystanders before they can run away and tell anyone about what you did. This vicious cycle can make it very difficult to play as a good character, and my belief is that a majority of people who play this game will never experience the good ending of Arthur's benevolence towards Native peoples and will instead likely get the bad ending where Arthur views Native peoples as subhumans to exploit. A point of appreciation I have for the game is that the late Oneida Actor Graham Greene plays Rains Fall of the fictional Wapiti Tribe. Western games in general tend to glorify westward expansion, as opposed to viewing it as an invasion, colonization, and genocide.

### **Themes of decolonization and indigeneity in Native representation in videogames**

Videogames which decolonize and indigenize Native peoples tend to humanize Native characters. Often, these characters are portrayed by Native peoples, in voice acting, facial, and motion capture. When done with the most respect, Native characters in games are designed and created by Native peoples, or in consultation with Tribal Nations or Indigenous groups. Examples of decolonization and indigeneity are Native people telling their own stories through the interactive medium of videogames. These are done with respect and reverence in their stories, with Native language, culture, and customs infused throughout the game. These instances educate about Native culture and history while also being an enjoyable and fun experience for the player. Decolonizing and indigenizing examples can be done in a modern setting, not just fixated in the past or in an imagined future. During the course of recent decades, certain videogames have implemented these patterns. In the upcoming section, I will introduce the games *Never Alone [Kisima Ingitchuna]* (Upper One Games, 2014), *Raven and the Light* (Basedow, 2015), *Mulaka* (Lienzo, 2018), and *Aztech Forgotten Gods* (Lienzo, 2021) which exemplify decolonized and indigenized representational conventions.

#### *Decolonizing and indigenizing examples of Natives in videogames*

The most powerful examples of indigeneity and decolonization are Native peoples telling their own stories through videogames. *Never Alone [Kisima Ingitchuna]* (2014), made by the first Native-owned videogame studio, Upper One Games, tells a traditional story narrated by Iñupiat elders with cultural insights about the Iñupiat as in-game achievements. The user plays this side-scrolling puzzle-platformer, switching between, or playing co-op, as a nine-year-old Iñupiat girl or her pet arctic fox. While the story of the game is set in the past, the cultural insights in the forms of videos which are unlocked take place in the present, with Iñupiat cultural leaders educating the viewer on Iñupiat ways of being. This is one of my favorite games of all time. It is aesthetically gorgeous and shows the possibility of what videogames are capable of

when used as a storytelling tool by Native people. The game plays like a meditation or prayer. One of my favorite things to do is to play this game while my little white pet Maltese dog sits on my lap and watches.

An additional example of indigeneity and decolonization of Natives in videogames, is *Raven and the Light* (Basedow, 2015), a horror PC game about Indian Residential Schools, where the real-life motto was “kill the Indian to save the man”. I am a third-generation survivor of an Indian Boarding School. My great-grandfather Anderson William Cornelius ran away twice and eventually escaped from Carlisle Indian Boarding School, and my great-great Uncle Joshua was killed while trying to escape. This PC game gave me the chills, triggered some intergenerational PTSD, and still I had to see more. I needed to complete the game. The horror aspect was genuinely appreciated as someone who lives with the horrors of these inherited memories.

I hope as many people as possible play *Raven and the Light*, and witness how institutions like religion were used to say things like, “Jesus loves you”, while the sexual assault of boys and girls by school officials at the over 450 Indian Boarding Schools and over 150 Indian Residential Schools in Canada was widespread and rampant (Desjardins, Hudgins, & Cuevas, 2024; PBS NewsHour, 2024). If a school official, often a church official, impregnated a young Native woman by rape, the baby would be burnt alive in furnaces (NoiseCat & Kassie, 2024). My great-grandpa talks about hearing the babies’ screams and seeing their bones in the furnaces. The National Geographic documentary, *Sugarcane*, by Julian Brave NoiseCat and Emily Kassie in 2024, talks about such events (NoiseCat & Kassie, 2024). The film is about a man who was found as a baby in a furnace in an empty ice cream container. He later had a son and abandoned him. Then, the son, Julian Brave NoiseCat, made the documentary to tell the truth about this painful part of Canadian and United States history of infanticide and genocide at the Indian Boarding and Residential Schools. Go play *Raven and the Light*, but brace yourself, especially after knowing the history. Or perhaps the game will make you want to go learn about the history on your own—I hope it does.

The game *Mulaka* (Lienzo, 2018) is about a shaman who fights off creatures from Sierra Tarahumar culture. It features Sukurúama, a shaman protagonist. Throughout the game, especially in loading screens, whenever you meet a new creature, or in dialogue with non-playable characters, the game exposes users to facts about Sierra Tarahumara culture. The game is a prime example of the educational value and potentials of videogames. Funds from game sales support the Sierra Tarahumara in modern day Mexico. I think this is a great model for other videogame studios and developers to follow. In collaborating with Tribes to tell their own stories and have these as sources of economic development for self-determination.

My final example, *Aztech Forgotten Gods* (Lienzo, 2021), explores indigenous futurism. Indigenous futurism (Nelson, 2020) can be compared to and draws inspiration from Afrofuturism (Dery, 1994), with a widely known example being the depiction of

Wakanda by Ryan Coogler in the film *Black Panther*. Indigenous futurism seamlessly blends the past and the future while continuing the traditional values of a people. A graphic novel example of an anthology of Indigenous Futurism from different Tribal Nations is in *Moonshoot Volume 3* (Nelson, 2020). In *Aztech Forgotten Gods*, the user plays as the protagonist of an uncolonized Aztech people, also known as Mexica, who now have flying vehicles amidst their technologically updated temples. While I think that Native people should be shown in the present to remind people we are still here, I appreciate the possibility and positivity of Indigenous futurism, and *Aztech Forgotten Gods* brings Mexica culture, the plot, dialogue, and gameplay.

## Recommendations for further research

For further research on the state of Native representation in videogames, it is recommended for people of specific Tribal Nations to review games where their tribe is being depicted. This would be helpful in assessing the accuracy of representation of Native cultures and histories. In addition, it would facilitate awareness for what it feels like to have a person's Tribal Nation depicted in correct or incorrect, positive or negative manners.

There are many more titles that were not included in the scope of this commentary which are worthy of exploration. This endeavor I will have to leave to other researchers and critics. Lastly, this commentary risks being outdated by the time it is read. New videogames are being developed daily, and the medium is a creative landscape that is ever changing. It deserves our constant, vigilant attention.

## Suggested good practices for Native representation in videogames

For videogame developers curious about how to positively represent Native peoples in videogames in a decolonized, indigenized way, the following are good practices that can be emulated. Cultural insights in *Never Alone* (Upper One Games, 2014) come from having Tribal members share their culture in unlockable videos as achievements, and this should be implemented widely. Having a loading screen with cultural learning like in *Mulaka* (Lienzo, 2018) is a way to share cultural wisdom, worldviews, and the beauty of Native ways of being. Culturally infused storytelling like in *Aztech Forgotten Gods* (Lienzo, 2021) is something other game developers can implement in telling more Native stories. Language is a key part of culture, and having an Indigenous language with translated subtitles, like in *Never Alone* (Upper One Games, 2014) and in parts of *Assassin's Creed 3* (Ubisoft Montreal, 2012), do a form of poetic justice to a Native audience's ears, and are healing for others. Through such games players and others can learn about Native peoples and experience that we as Native people are still here. In addition, having more instances of a humanized

protagonist who lives in the modern era like in *Infamous Second Son* (Sucker Punch Productions, 2014) is a sight that is profoundly liberating and healing to see.

Eleanor Bailey Cornelius, my grandmother and an elder in the Oneida Nation, grew up at some point in Seattle, Washington, and was profoundly positively impacted when she heard of a videogame that showed Native people in a city where she had lived, in a modern era. Having Native people crystallized and frozen in the past, or situated in a fictional future, tends to perpetuate a narrative of Native people not existing in the present. There were 9.7 million Native people in the United States of America at the 2020 Census (U.S. Census Bureau, (2023), 1.8 million First Nations people in Canada (Statistics Canada, 2023), approximately 50 million Indigenous peoples in Latin America—including Central and South America (de Dios, 2020)—and nearly one million Maori people in New Zealand (Raine, 2024). They and all other Indigenous and Native peoples deserve representations that reflect their cultures, histories, and identities as they themselves see them.

## Closing takeaways

A student of mine, Audrey Spencer, taught me that “beyond entertainment or engagement, [videogames] can be used as tools, so representation of underrepresented groups, like Native people, should be handled with care” (Audrey Spencer, personal communication, 4 December 2025). Arlie Neskah, a Diné elder, taught me that human beings have the power to close our eyes and imagine a world like this one, only better. Our responsibility as human beings is to lead people to such imagined places (Arlie Neskahi, Diné Elder, personal communication, 22 February 2016).

If every game handles Native representation with care like the first Native-owned videogame studio, Upper One Games, then this world would be a better place. Each Tribal Nation is unique and has their own cultural beliefs, and a key commonality is the notion of seven generations. Seven generations means that in everything we do, we do not just do it for this generation but do it for a better world for seven generations to come. We as human beings are storytelling animals. We as Native peoples are referred to as the Eagle People (Craig Stone, Ojibwe Elder and Professor Emeritus at CSULB in American Indian Studies, personal communication, 10 December 2025), with visions and stories to share. Videogames are a medium for us as Native people to tell our stories, in our own languages, as human beings. Native representation in videogames impacts not only Native peoples, but all human beings. In the words of Dr. Donald Warne, a member of the Lakota Nation whose Lakota name is Pejuta Wicasa, which means Medicine Man:

Let us remember, we all drink from the same stream of consciousness. We are all connected by that same stream of consciousness. We are all related. What we do to each other, we do to ourselves. Act kindly toward

my people, for indeed my people are your people (TEDx Talks, 2014, 00:18:40).

Yaw^ko, thank you in Oneida, for engaging in this commentary with me. As we say in Oneida, let's put our minds together, so be it in our minds.

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