Phenomenology and Digital Games: Perspectives on Why and Directions on How

Virgínia Fernandes Mota[1,2,*], Emanuel Felipe Duarte[1]

[1]Instituto de Computação, Universidade Estadual de Campinas, Campinas, Brazil
[2]Colégio Técnico, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil

Abstract

Phenomenology offers a valuable perspective for understanding digital games by focusing on how they are lived and experienced. In Human-Computer Interaction, phenomenology emphasizes embodiment, intentionality, and participatory sense-making, core aspects of how players engage with games. This paper explores how phenomenology can inform game research and design by centering first-person experience and socio-cultural contexts in which play emerges. Drawing on classical phenomenology and enactivist cognition, we present perspectives on why play is not a neutral or universal activity, but one shaped by embodied interaction, intersubjectivity, and cultural values. We also incorporate decolonial and intersectional perspectives to challenge dominant assumptions in game design. This approach invites more inclusive, accessible, and reflective practices that recognize the plurality of ways people experience, perform, and make meaning through play.

Keywords

Game Design, Phenomenology, Enactivist Cognition, Intersectionality, Decolonialism

1. Introduction

Phenomenology can be simply defined as the philosophical study of how things appear to us in experience, before we interpret or explain them through theories [1, 2]. Rather than focusing on objects as they exist independently, phenomenology is concerned with how we encounter them, how they manifest in perception, thought, imagination, or emotion. It systematically describes these appearances by examining the structures of consciousness, such as intentionality, and by emphasizing our first-person perspective on the world [2]. In this sense, phenomenology invites us to explore not only what we think about things, but how we live through them as experiences unfolding over time. In Human-Computer Interaction (HCI), this approach shifts focus from technical performance to how people actually experience technology in their everyday lives. It emphasizes the user's embodied and meaningful engagement with systems. As Paul Dourish [3, p. 127-154] notes, phenomenology moves HCI from seeing interaction as mere information exchange to understanding it as the generation of meaning.

Phenomenology matters for digital games because it helps us understand that games are not just systems of rules or collections of stories, but experiences that we live through. Imagine the first time you play Super Mario: the screen opens to a brightly colored world, the music starts, you press a button and Mario jumps, his body moving in exact response to yours. You feel the rhythm of running and jumping, the frustration of missing a platform, the thrill of discovery a hidden block. From a phenomenological view, these sensations are not just mechanics. Play emerges from this lived engagement, shaped by how we perceive, act, and feel within the game environment. The act of playing — whether as children playing, performing in a play, playing an instrument, or engaging with a digital game — is an intrinsically human and social activity [4, 5]. Moreover, play is not only a form of expression but also a space for negotiation and critique, making it deeply political as well [6]. Phenomenology allows us to focus on

PhenoHCI'25: Phenomenological Concepts and Methods for HCI Research Workshop, September 09, 2025, Belo Horizonte, MG, Brazil

*Corresponding author.
virginia@teiacoltec.org (V. F. Mota); emanuel@ic.unicamp.br (E. F. Duarte)
0000-0002-6766-718X (V. F. Mota); 0000-0002-1445-1238 (E. F. Duarte)

these embodied, social, and affective dimensions of play, highlighting how games are experienced as meaningful activities rather than mere technological artifacts.

The purpose of this essay is to explore how phenomenology can help us better understand digital games and rethink game design by focusing on the lived experiences of players. Rather than seeing games only as technical systems or narratives, a phenomenological perspective emphasizes how players engage with, perceive, and make sense of games as meaningful experiences.

2. Perspectives on Why Phenomenology Matters for Understanding Digital Games

Phenomenology is essential for understanding digital games because it foregrounds the first-person experience of play: how players perceive, feel, and act within game environments. As Merleau-Ponty [7] argues, all perception is embodied: we experience the world through our bodies, and this embodiment extends into digital play through interfaces such as controllers, keyboards, or virtual reality systems. These technological mediations become part of our bodily schema, enabling players to feel present within game worlds, moving avatars and interacting with virtual objects as extensions of themselves.

Moreover, phenomenology emphasizes intentionality, the idea that consciousness is always directed toward something, as the original definition by Husserl [8]. When playing a game, our attention is directed toward specific goals, actions, or narratives; the virtual world becomes meaningful through this directed engagement. Varela *et al.* [9] deepen this understanding through the concept of enactive cognition: sense-making arises through embodied action, not through detached analysis. In games, we make sense of mechanics, challenges, and narratives by actively participating, experimenting, and acting within the game environment, rather than solely by contemplating its rules.

Phenomenology also draws attention to intersubjectivity, the shared nature of experience. Playing with others, whether cooperatively or competitively, creates a shared world of meanings and emotions. This participatory sense-making, as described by De Jaegher and Di Paolo [10], illustrates how meaning in games emerges through the coordination of actions and experiences between players. The social dynamics of multiplayer games, guilds, or co-op missions exemplify how digital play is not only about individual engagement but also about creating and negotiating shared experiences.

This attention to relational experience can be deepened by engaging with decolonial perspectives, which expands phenomenology's relevance for understanding digital games. Africana phenomenology, as articulated by scholars like Paget Henry [11], emphasizes the need to account for the historical, cultural, and social experiences specific to African and diasporic subjects. This approach critiques the Eurocentric foundations of classical phenomenology and calls for a more pluralistic understanding of lived experience. In the context of digital games, Africana phenomenology invites researchers and designers to consider how race, colonial histories, and cultural identity shape both the creation and experience of games. Integrating such decolonial perspectives enriches phenomenological inquiry by foregrounding the diversity of lived experiences and challenging universalist assumptions often embedded in game design and research. Dandara [12], a Brazilian game embeds local references, from its title to visual inspirations like Tarsila do Amaral's art and even neighborhoods of Belo Horizonte, home of the studio. Black Myth: Wukong [13] reclaims Chinese mythology, while Never Alone [14] was co-created with Iñupiaq Indigenous people. Together, these games illustrate how cultural identity, race, and history reshape what it means to design and experience play, that is what Africana phenomenology invites us to foreground.

Just as decolonial phenomenology foregrounds race and history in lived experience, feminist phenomenology attends to the ways gender, embodiment, and social norms shape how subjects move through and perceive the world. For example, Iris Marion Young's foundational essay [15], reveals how female embodiment is shaped by cultural norms that inhibit bodily movement and spatial freedom. Linda Fisher [16] further argues that feminist phenomenology should not only interrogate lived gendered experience but amplify feminist voices within phenomenology itself, applying it to issues such as racialization, sexuality, disability, and social belonging. This view of phenomenology offers critical tools

to examine how interfaces, avatars, and mechanics reproduce or resist gendered norms through embodied interaction. The report "Changing the Narrative: Why Representation in Video Games Matters" by the Geena Davis Institute [17] highlights critical insights into diversity and representation within the gaming industry. For instance, despite women constituting nearly half of the gaming audience across global markets, significant disparities persist in representation. Additionally, the portrayal of women is often problematic, with 25% depicted in revealing clothing and 12% in some state of nudity, compared to only 2% and 3%, respectively, for men. The report also mentions other marginalized groups underrepresented in digital games, *e.g.*, people of color, disabled people, and non-binary individuals. From a phenomenological lens, these representational imbalances directly shape how players experience embodiment through avatars: whether they feel seen, stereotyped, or excluded.

Africana phenomenology and feminist phenomenology both resonate with the broader field of critical phenomenology, which emphasizes how culture, race, gender, and power relations shape lived experience [18]. This orientation also aligns with decolonial and intersectional approaches that challenge universalist assumptions and foreground the plurality of ways of being, knowing, and playing. In the context of digital games, such perspectives provide conceptual and methodological tools to interrogate how interfaces, narratives and mechanics may reproduce or resist cultural and social hierarchies, while also opening ways for more inclusive and plural practices of play.

Some scholars have pushed phenomenology even further by questioning whether subjectivity must be human at all. Bogost [19] argues that we should also consider how the material components of games, such as software routines, hardware interfaces, and procedural systems, interact independently of human players. Drawing on object-oriented ontology, Bogost suggests that games can be understood as assemblages of interacting objects, each with their own roles and agencies, thus broadening the phenomenological scope to include non-human actors.

Altogether, phenomenology helps us recognize that games are not merely technical systems or aesthetic products, but lived experiences shaped by embodiment, intentional engagement, social interaction, and material agency. This perspective allows for a richer, more nuanced understanding of digital games as dynamic sites of human-technology relations.

3. Directions on How Phenomenology Can Help Game Design and Research

Phenomenology can contribute to game design and research by focusing on how players feel and experience games, rather than solely on how games function. While technical systems and mechanics are essential to game development, they do not fully account for how games are encountered, interpreted, and lived by players. A phenomenological approach could redirect attention from external behavior to first-person experience, encompassing how a game is perceived, acted upon, and made meaningful through embodied engagement. Thus, researchers and designers are allowed to ask not only whether a game works, but how it feels to play, how it resonates with a player's body, emotions, context, and so on.

> **Proposition 1.** Game design benefits from centering the lived, embodied experience of players - not just system mechanics - because experience is where meaning emerges.

Schell [20] emphasizes that the most important question in game design is: "What will the player experience?". This perspective aligns with phenomenological approaches that prioritize the player's lived experience over the internal logic of the game system. By encouraging designers to view their creations through the player, what they will perceive, feel, and do, Schell resonates with phenomenology's commitment to understanding how meaning arises through interaction. His concept of designing through "lenses" also resonates with phenomenology's methodological emphasis on systematically exploring different aspects of experience to better grasp its structure and essence.

Other researchers also highlight how phenomenology can inform both game analysis and design. For example, systematic reviews such as Mol *et al.* [21] emphasize the underexplored potential of

phenomenological approaches in game research, advocating for their broader application to better understand player experiences. Similarly, phenomenological frameworks have been proposed to analyze spatial experiences in open-world games [22], game feel and temporality [23], and the aesthetics of player engagement [24].

> **Proposition 2.** Phenomenological frameworks help researchers and designers attend to spatial, affective, and temporal aspects of play that are essential to lived experience but often overlooked in functionalist models.

Moreover, the work of Baranauskas and colleagues on *Socioenactive Interaction* appropriates phenomenological inquiry by explicitly addressing intersubjectivity in the design of computational technology [25]. This approach foregrounds the inherently social and value-laden nature of interaction with technology, aligning with phenomenology's emphasis on intersubjectivity and participatory sensemaking [10]. In game design, recognizing the socioenactive dimension means attending to how player experiences are shaped not only by embodied interaction but also by cultural, social, and ethical factors embedded within gaming practices and communities. By emphasizing the diversity of embodied and cognitive experiences, phenomenology can help designers recognize and accommodate different ways players engage with games, informing more accessible and inclusive design practices.

> **Proposition 3.** Game interaction is always embedded in social and cultural contexts, therefore, phenomenology helps designers engage with this embedded context rather than neglect it.

Approaching play from a phenomenological perspective reveals that play can be described as an emergent, lived, and culturally situated experience, something that unfolds through embodied, intentional, and social interaction. Rather than viewing play as a universal or neutral category, such an approach recognizes its multiplicity and rootedness in specific historical, linguistic, and epistemological contexts. This perspective aligns with the notion of *socioenactive interaction*, where play is not merely something one does alone, but something enacted with others, within systems of shared values, norms, and practices. As argued in [26], the question is no longer just "what is play?" but "whose play counts?". Phenomenology offers the tools to foreground these lived experiences of play and to support game practices that reflect and respond to diverse ways of knowing, being, and playing.

> **Proposition 4.** A intersectional phenomenology of play invites us to challenge dominant norms - colonial, gender normative, geographical, etc - by asking whose play is visible, valued, and designed for.

By integrating phenomenological insights with socioenactive perspectives, game design and research can move toward creating more inclusive, accessible, and meaningful experiences. Phenomenology provides a framework for designers to consider not just the functionality of game systems but how these systems are lived and experienced by diverse players within complex socio-technical environments.

4. Conclusion

Phenomenology offers a powerful approach to understanding digital games by focusing on how they are lived and experienced by players. Rather than viewing games solely as systems of rules or technological artifacts, phenomenology emphasizes the embodied, affective, and social dimensions of play. This shift in perspective allows researchers and designers to attend to how players perceive, act, and make sense of digital environments, enriching our understanding of gaming as a fundamentally human activity rooted in lived experience and intentional engagement.

By centering human experience and values, phenomenology opens up new directions for both research and design within games. It encourages the development of more inclusive, accessible, and meaningful

games that resonate with diverse players' experiences. Additionally, it provides methodological tools for exploring aspects of play that are often overlooked, such as emotions, embodiment, and intersubjectivity. As digital technologies continue to evolve, phenomenological approaches will remain essential for ensuring that design practices remain grounded in the complexities of human experience, fostering more empathetic and engaging interactions between players and game systems.

Acknowledgments

This study was financed, in part, by the São Paulo Research Foundation (FAPESP), Brasil, Process Number #2024/16790-5; by the Universidade Estadual de Campinas (UNICAMP), Brasil, FAEPEX grant #2356/24; and by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES), Brasil, Finance Code 001.

Declaration on Generative AI

During the preparation of this work, the author(s) used GPT-4 in order to: Grammar and spelling check. After using these tool(s)/service(s), the author(s) reviewed and edited the content as needed and take(s) full responsibility for the publication's content.

References

[1] R. Sokolowski, Introduction to Phenomenology, Cambridge University Press, Cambridge, 2000. doi:10.1017/CBO9780511809118.

[2] D. W. Smith, Phenomenology, in: E. N. Zalta (Ed.), The Stanford Encyclopedia of Philosophy, Summer 2018 ed., Metaphysics Research Lab, Stanford University, 2018. First published Sun Nov 16, 2003; substantive revision Mon Dec 16, 2013.

[3] P. Dourish, Where the Action Is: The Foundations of Embodied Interaction, MIT Press, Cambridge, MA, 2001. doi:10.7551/mitpress/7221.001.0001.

[4] J. Huizinga, Homo Ludens: A Study of the Play-element in Culture, Routledge & K. Paul, Abingdon, UK, 1949.

[5] R. Caillois, Man, Play, and Games, The Free Press, Los Angeles, CA, USA, 1961.

[6] M. Flanagan, Critical Play: Radical Game Design, MIT Press, 2009. doi:10.7551/mitpress/7678.001.0001.

[7] M. Merleau-Ponty, Phenomenology of Perception, Routledge and Kegan Paul, 1962. doi:10.1007/978-1-349-19761-3, original work published 1945.

[8] E. Husserl, Logical Investigations, 2 ed., Routledge, London and New York, 2001. Originally published 1900–1901.

[9] F. J. Varela, E. Thompson, E. Rosch, The Embodied Mind: Cognitive Science and Human Experience, MIT Press, 1993. doi:10.7551/mitpress/6730.001.0001.

[10] H. De Jaegher, E. Di Paolo, Participatory sense-making: An enactive approach to social cognition, Phenomenology and the Cognitive Sciences 6 (2007) 485–507. doi:10.1007/s11097-007-9076-9.

[11] P. Henry, Africana phenomenology: Its philosophical implications, CLR James Journal 12 (2005) 79–112. doi:10.5840/clrjames20051113.

[12] Long Hat House, Dandara, 2018.

[13] Game Science, Black myth: Wukong, 2024.

[14] E-Line Media, Never alone, 2014.

[15] I. M. Young, On Female Body Experience: "Throwing Like a Girl" and Other Essays, Oxford University Press, 2005. doi:10.1093/0195161920.001.0001.

[16] L. Fisher, Feminist phenomenological voices, Continental Philosophy Review 43 (2010) 83–95. doi:10.1007/s11007-010-9132-y.

[17] Geena Davis Institute on Gender in Media, Changing the narrative: Why representation in video games matters, 2023. URL: https://geenadavisinstitute.org/research/changing-the-narrative-why-representation-in-video-games-matters/.
[18] L. Guenther, Critical Phenomenology, Northwestern University Press, 2020, pp. 11–16. URL: http://www.jstor.org/stable/j.ctvmx3j22.6.
[19] I. Bogost, The phenomenology of videogames, in: Conference Proceedings of the Philosophy of Computer Games, University Press of Potsdam, 2008, pp. 22–43.
[20] J. Schell, The Art of Game Design: A Book of Lenses, 3rd ed., CRC Press, 2019. doi:10.1201/9780080919171.
[21] A. M. Mol, R. S. Silva, A. A. Rocha, L. Ishitani, Ethnography and phenomenology applied to game research: A systematic literature review, in: Revista de Sistemas e Computação, volume 8, 2018, pp. 12–23.
[22] B. Wang, Z. Gao, M. Shidujaman, Meaningful place: A phenomenological approach to the design of spatial experience in open-world games, Games and Culture 19 (2024) 587–610. doi:10.1177/15554120231171290.
[23] B. K. Walther, L. J. Larsen, Bicycle kicks and camp sites: Towards a phenomenological theory of game feel with special attention towards 'rhythm', Convergence 26 (2020) 1248–1268. doi:10.1177/1354856519885033.
[24] S. Gualeni, D. Vella, Existential ludology and peter wessel zapffe, Perspectives on the European videogame (2021) 175–192.
[25] M. C. C. Baranauskas, R. Bonacin, T. Silva, Socioenactive interaction: Addressing intersubjectivity in ubiquitous design scenarios, International Journal of Human-Computer Interaction (2023). doi:10.1080/10447318.2023.2188536.
[26] V. F. Mota, E. F. Duarte, Revisiting and reframing play: Towards incorporating representation and diversity in contemporary game design, in: T. Darin, K. Rios, G. Cruz, L. Tórtoro, D. Ricca (Eds.), Interaction and Player Research in Game Development, Springer Nature Switzerland, 2025, pp. 19–28.