

Acta Ludologica

Faculty of Mass Media Communication



Theory Education Design Development Research History Marketing Experience Criticism Psychology Social Aspects Future

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Acta Ludologica is a scientific journal in the field of games and digital games. The journal contains professional scientific reflections on digital games; it also offers academic discourses on games, especially media and digital competencies, creation, design, marketing, research, development, psychology, sociology, history and the future of digital games and game studies.

Acta Ludologica is a double-blind peer reviewed journal published twice a year. It focuses on theoretical studies, theoretical and empirical studies, research results and their implementation into practice, as well as professional publication and scientific reviews of digital games.

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Editorial

Learn to Play for the Future

The reality is that although digital games are a common part of young people's lives, their potential in education often remains untapped. Future teachers often lack awareness of the possibilities of using game elements in teaching, while game developers may not understand the pedagogical goals and needs of the educational process. Two years ago, Jakub Žaludko and Veronika Golianová from the game studio Impact Games mentored our students from the Department of Digital Games at the University of St. Cyril and Methodius in Trnava (UCM) in the creation of educational games as part of this course, and no one could have foreseen where this collaboration would lead.

As experts, they know very well how to combine game elements with didactic and educational goals, so the course far exceeded students' expectations. In addition, interesting games were created that were ready for further development and use in teaching. This collaboration inspired us to try to further expand this effort, perhaps even worldwide, and we therefore submitted a project focused on developing the skills of future teachers and game developers under the Erasmus+ KA220 higher education scheme. The Learn2Plav4Future project (see https://www.learn2play4future.eu/) is now creating a space for interdisciplinary collaboration where these two groups learn from each other and jointly create educational games with a real impact on learning.

The main goal of this project is to develop university courses, or syllabi, that will provide future teachers and game developers with the skills to create educational games and use game-based learning. The research also focuses on analysing the needs of future teachers and game developers at universities, as well as their teachers. Until 2027, the established syllabi will be tested on real subjects with real university students in three phases to ensure that feedback from students on these university courses is implemented, and the best possible version of the syllabi can be published. A secondary output is the Edu Game Maker Toolbox, a universal tool that allows educators to design and implement their own educational games. In addition, as part of testing the syllabi with students, practical educational digital and board games will be developed, the effectiveness of which is intended to be tested in real teaching situations with children in primary and secondary schools. The further dissemination of the project's outputs within the academic sphere is therefore inevitable, particularly within the international community of educators and game developers who share a passion for innovative learning.

Our project partners must be acknowledged for their sustained endeavours to achieve optimal outcomes since the project's initiation, namely Impact Games (Slovakia) – a non-profit organization focused on the creation of educational games and gamification tools for schools; Comenius University in Bratislava (Slovakia), experts in pedagogy and innovative teaching methods; the Polish University of Bielsko-Biala (Poland), specialists in teacher training and language pedagogy; and South-Eastern Finland University of Applied Sciences (XAMK, Finland), a leader in the digital economy and creative industries; and last but not least, my colleagues from UCM, who are leading the project with their expertise in digital games and gamification.

The Learn to Play for the Future project represents an important step towards the integration of digital games into education. It brings together experts from different fields, promotes interdisciplinary cooperation, and provides specific tools and methodologies for modern education. The results of the project have the potential to contribute to increasing student engagement and improving the quality of education across Europe.

The variety of topics covered in the current issue of Acta Ludologica reflects the extent to which digital games and game studies are integrated into society, just like the Learn to Play for the Future project. Caio Tulio Olimpio Pereira da Costa explores the complex interactions between public spaces and digital games. The history and rise of eSports in China are reflected by Pengze Zheng. André Carita investigates the importance and challenges of teaching the analysis and critique of digital games in higher education. Pascal Verheul examines the representation of nature in The Last of Us through an ecodystopian and anthropocentric perspective. A paper ball is philosophically explored in the context of play and game concepts by Juan Sebastián Goyburu. Lizbeth Kanyat and Allan Novaes examine Board Game Cafes in Japan as spaces of sociability and community building. Christopher Noël deals with the body and embodiment in the context of digital games to understand the somatic enrichment of play experiences. The last study, by Kristína Pupáková, focuses on the transformation of the visual presentation of Czech games through the evolution of game box art.

The next section of the issue presents reviews on three recently published publications: *The Middle Ages in computer games*, reviewed by Jacob Abell, *Localisation of video games in Slovakia*, reviewed by Zdenko Mago, and *Central and Eastern European histories and heritages in video games*, reviewed by Adam Kysler. Martin Engler then reflects on the current crisis facing artists, not only in the digital gaming sector, in the Add-ons section.

I hope that this issue will enrich you and bring you new perspectives not only in your scientific work, but also in your lives.

> Mgr. Magdaléna Švecová, PhD. Leader of the project Learn2Play4Future



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Among Pixels and Pavement: Exploring the Feedback Loop Between Digital Games and Public Spaces

Caio Tulio Olimpio Pereira da Costa

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4 Game Studies

ABSTRACT:

The paper explores the complex interactions between public spaces and digital games, highlighting how these environments both influence and are influenced by each other on real and virtual worlds. Drawing on Johan Huizinga's concept of Homo ludens, the study underscores the importance of play as a fundamental aspect of human culture and its extension into contemporary digital interfaces. In addition, the paper argues that the feedback loop between game and reality reshapes our understanding of public spaces and games, exploring mini-cases as potential examples for the discussion. The analysis also considers Dewey's notion of experience and Janet Murray's concept of immersion, positioning the player as a critical mediator who navigates the thin line between virtual and real worlds. As a methodological approach, this study employs qualitative and bibliographic research to offer a theoretical perspective on how digital games and architectural dynamics intertwine, as well as using SimCity as a primary case study of public spaces in digital games. As result, the paper states that public spaces and their intertwining with digital games behave in the modern era as a projection of the user's experience, with their cultural, social, and aesthetic values represented by instances that transit between the real and virtual, even narrowing the ties between these two fields.

KEY WORDS:

digital games, public spaces, urban and architectural dynamics, virtual environments.

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Introduction

It is intriguing to observe how the act of playing permeates contemporary cultures, even as many individuals consciously distance themselves from this practice. However, this detachment does not exempt linguistic expressions and sayings that frequently reference games in our daily lives. Unconsciously, people often live and speak about 'having a game of skill', 'understanding the game behind the scenes', or 'not agreeing with a dirty game', while preferring a 'clean game'. They admire a clever 'play on words', yet hate 'games of interest'. Individuals live the 'game of life', resist the 'political game' (sometimes even the game of power or thrones), and when faced with a lack of transparency, they recognize the 'game of shadows'. We see 'games of chance' transform into 'games of patience' after a 'tough game'. Thus, one possibility as a truth is that playing is an integral part of our culture. Moreover, culture itself may not exist or be formed without the act of playing.

This perspective is what led the Dutch historian and linguist Johan Huizinga, as early as the late 1930s, to outline in his proposals on the theory of history and cultural criticism a trajectory of play that predates and transcends the human label as Homo sapiens. This concept, in fact, contextualizes not only contemporary societies but also the human condition as a whole. It might be overly simplistic to assert that every activity around people is a form of play, but for Huizinga (2024), this is self-evident. Beyond its biological factor, to play is older than culture itself, as the latter presupposes the clear presence of human

society. However, animals did not wait for humans to introduce them to playful activities, which supports and corroborates the idea that civilizations did not add any essential characteristics to the concept of play, considering that animals engage in play in much the same way.

Thus, it is precisely this shared context between animals that positions contemporary humans above and beyond Homo sapiens. It states people, above other categories, as Homo ludens. In this context, it is essential to understand that the game of life is a framework that generates tensions and frictions. As people live, they unconsciously and consciously seek to create tensions in life performances. Thus, the concept of play can become a new way of entering the landscape of interpreting the world around us. This is because all daily activities are acts of translation, interpretation, and communication (Dewey, 2010).

Considering this epistemological anchor, to play means to live immersively. It means constantly creating tension, and this makes all the difference in the human experience, especially if people are capable of viewing the game as a source of rejuvenation and revitalization in the same way humans can approach and interpret the world around them. In this scenario, in various strands of research on digital games, culture itself is often understood as being formulated, developed, and unfolded through the intrinsic act of playing (da Costa, 2024; Loures, 2020).

Within this field, the transport into the meticulously simulated universe of a digital game and its narrative, achieved through an immersive process (Murray, 2017), is considered a natural and consequential aspect of how culture evolves. In many contemporary digital games, representations of reality can be identified within fictional settings, often seeking to contextualize their narratives by employing elements of verisimilitude or connections that establish a sense of belonging and validate the game as an extension of a real and possible world (da Costa & Duarte, 2019). This is evident in reinterpretations or representations of historical monuments, such as the *Assassin's Creed* (Ubisoft Montreal et al., 2007-2025) franchise with its development of Notre-Dame Cathedral in Paris or the Great Sphinx of Giza during Cleopatra's Ptolemaic reign (see Radošinská, 2018); likewise, *The Last of Us* (Naughty Dog, 2013) includes the Mormon Temple of Salt Lake City.

This trend of digital environments reflecting global ambience, beyond preservation efforts, also extends in the opposite direction. The EVE Online Monument in Reykjavik, lceland, inscribes the names of all *EVE Online* (CCP Games, 2003) players from 2014 on a five-metre-high monolith, celebrating the game's ten-year anniversary and those who collectively built its narrative and fantastical ambience (Kelly, 2022); similarly, the Block by Block initiative by Mojang, in partnership with the United Nations, has, since 2012, provided a platform for global citizens to design the spaces they wish to inhabit, experience, and exercise their citizenship in *Minecraft* (Mojang Studios, 2011), which can then be translated into real-life projects.

Amid these processes, driven by different forces (from the game to reality/reality to the game), the player emerges as the mediator who most acutely perceives this process in practice. However, when discussing Dewey's concept of experience, even within a pragmatic framework, subjectivity is considered an essential factor in this feedback loop (Dewey, 2010). In other words, the player becomes the conduit through which the 'thin line' between the realms of the real and the virtual is perceived, often highlighting public space as the stage where fictional narratives are formulated and allowing us to embody the role of Homo ludens. In this context, this study aims to exemplify, through a qualitative nature and bibliographic approach to game studies, the concept of public space and its relation when considering this feedback loop, while also discussing Dewey's (2010) conception of experience and Murray's (2017) immersion as key points of articulation.

In this introductory section, it is essential to contextualize the conceptual starting point of the term *immersion*. To this end, the player is considered as the protagonist of the experience and as an active agent in the immersive process, not as someone who becomes passive during immersion, but as part of a phenomenon that often operates in a reversed order, where it is not necessarily the technology that enables immersion, but rather the formative process and the outcomes of the individual's lived experience (Bergson, 2019).

Therefore, for this paper and based on the proposals of Murray (2017) and da Costa (2024), the concept of immersion is understood as a phenomenon that tends to enable, based on formative processes, individual and/or collective experiences and subjectivities, allowing a person to reformulate judgments, exercise different worldviews, and experience realities that are not part of their regular routine, regardless of the nature of the environment in which this experience occurs.

Whether applied to games, dreamlike fields, or even sensitivities triggered through the development of skills and competencies, this conceptual anchor on immersion establishes the starting point of this paper, also serving as a beacon that illuminates potential applications at different levels and instances, thus considering the potentials of contexts that expand knowledge universes. This conceptualization, consequently, opposes the 'rigidities' imposed by different fields/areas in an attempt to claim a singular understanding of what immersion should be. However, it is a concept that is in constant evolution, which may disassemble or be reformulated as post-modernity alters and rewrites realities.

Concerning experience, furthermore, it is considered another key factor in this discussion, particularly from the perspective of exploration, which in this paper is defined as an interaction between an organism and its environment (Quéré, 2013). This perspective moves away from exclusive notions of sensory experiences, which are tied to the senses (hearing, taste, sight, smell, and touch), as well as from conceptions of experience understood solely through the faculty of understanding (Kant, 2021). Thus, the comprehension and treatment of experience are considered within the framework of a theory of emotions, as advocated by Dewey (2010) in his early works. In this context, individuals objectively experience the world they live in through integration with the environment of which they are part. The relationships established by this environment are subject to change, allowing Homo ludens to be affected by various stimuli from the same setting (Duarte, 2015). For instance, the environment of a game is created, extended, re-signified, and interpreted through experience.

In this sense, as a way to illustrate this methodological approach, this theoretical academic work employs a collection of mini-cases exploring the interplay between digital games and architectural dynamics, and their interconnections in the representations of public spaces within digital games. This allows for the conceptualization of practical applications of this feedback, highlighting a multidisciplinary nature between the interconnections of public spaces, architectural dynamics, and digital games.

Public Spaces and Digital Games

Public spaces have always been indispensable locations for human daily life, as they were where, since ancient times, the most varied types of cultural and historical manifestations and expressions occurred (Lynch, 1960). As focal points of collective life, these

spaces were not only venues for events but also served as places for rest, leisure, trade, free movement, and social interaction (Habermas, 2023). Although Lynch and Habermas address the notions of public spaces in antiquity in their works, the term was only officially used in the 1970s, within the framework of a public intervention process (Ascher, 1995).

In modern era, cities face numerous challenges due to factors such as unregulated growth, urban planning focused on automotive use, and the lack of efficient public policies to manage this development. This leads to characteristic problems in urban areas that hinder their organization. Issues such as high levels of built-up land, the concentration of large numbers of people in small locations, the reduction and neglect of green spaces, and the lack of pedestrian circulation areas, as well as leisure spaces, result in a mismatch between growth and organization, ultimately leading to a decline in environmental quality in cities.

Many capitals and large metropolises around the world, for example, suffer from the migration of people to more peripheral areas as commerce takes over central neighbourhoods (da Silva & de Queiroz, 2018). Despite increased revenue, public spaces are consequently deteriorating. These spaces, such as streets and squares, are deteriorating due to abandonment and neglect, with no efforts directed towards revitalization and care to ensure that their occupancy is restored, improving the quality of life for the population.

Due to these constant arrangements for development and the pursuit of business/ commercial growth, public spaces are increasingly forgotten, sidelined, and become merely places intended for vehicle circulation. Historically, as urban environments grew, they began to ignore pedestrian activities, as the volume of motor traffic necessitated an infrastructure to accommodate vehicle flow. Consequently, beyond air and noise pollution, obstacles and barriers were created for pedestrians seeking a vibrant, safe, sustainable, and healthy occupation (Global Designing Cities Initiative, 2016). From energy consumption to water, sewage, and transportation management, the concept of a sustainable city permeates the fields of public spaces. For example, when a city is complete and allows citizens to perform daily activities within a comfortable walking distance, it contributes to the formation of a sustainable city, primarily due to the reduction in automotive transport use (Farr, 2018).

Following this line of reasoning, health problems are often tied to the arrangement of public spaces. The replacement of stairs with escalators, for instance, is considered an urban advancement. However, when the population suffers from heart conditions/ obesity, that which should generally facilitate movement can, in fact, be detrimental. The reduction of physical activity in an individual's routine decreases their quality of life. Although not the sole culprit, public spaces require a balanced integration of physical exercise to mitigate such issues. This is where sports plazas or community gyms come into play, transforming cities into healthier environments (Farr, 2018). In this context, a vibrant city emerges from the promise of emitting welcoming signals for social interaction. An empty square and a full square convey two different messages, reflecting a city's identity. However, it is not about the numbers or the size of the locality, but rather the meanings generated by a popular, inviting space utilized by all.

Public spaces are understood as all democratic places, common to all and for public use, accessible free of charge and without profit motives. This includes open environments such as sidewalks, streets, squares, parks, and gardens, as well as enclosed environments like museums, libraries, and public markets. When we understand that public spaces, the urban environment, and the population are interconnected, a scenario arises for various activities, manifestations, festive events, commerce, celebrations, and appropriations that occur when there is a need or interest. According to Calliari (2016), public space provides the energy of a self-sustaining ecosystem, marked by countless relationships. These spaces are indispensable for the well-being of both individuals and the collective, as they are where acts, personalities, and ideologies are expressed; where cultural diversity occurs, where community life unfolds and identity is created. These environments are tasked with the responsibility of improving people's health by promoting spaces for walking, exercising, contemplation, cycling, resting, and engaging in sports activities.

When well-designed and well-maintained, public spaces reduce crime rates in the area. As a result, various socio-cultural and economic activities arise, contributing to familiarity, a sense of belonging, and security. Affective memory also develops in this process. Thus, public spaces form the environments where the common life of all unfolds, freely used by individuals or groups and accessible to everyone without exception. These same spaces must always strive to improve the quality of life for citizens, serving the social function for which they were designed, and thus contributing to urban planning and the sustainability of cities.

To measure and understand the spectrum surrounding interactions between city life and public spaces, various investigative methods have been developed as strategic tools aimed at analysing spaces, so that they can later improve and become more functional. Assuming that good architecture originates from this aforementioned interaction, it becomes essential to understand that everything observed when walking in the streets is relevant. Streets, alleys, squares, as well as the journey to and from school, plus people walking and cycling, all contribute to the versatility that unfolds in public spaces (Gehl & Svarre, 2013). Consequently, the interrelation between life and space in all its aspects serves as the guiding force for analytical processes that categorize, classify, interpret, and understand this relationship.

Bringing this discussion into the realm of digital games, as products of human production influenced by social and civic contexts based on the rights and duties to which both consumers and developers are exposed daily, it is possible to find representations of this very issue of public spaces in various game titles, spanning genres, styles, and designs, making evident a gaming culture based on the human condition itself (Huizinga, 2024). Within this perspective, franchises like *The Sims* (Maxis, 2000) and *SimCity* (Maxis, 1989) emerge, for example (Alves & Pratschke, 2015; da Silva Nunes et al., 2018).

Digital Games in Public Spaces

From the concept of public spaces, it is possible to observe the reverse movement of habitation between the real and virtual worlds. In other words, just as public spaces are represented and transposed from our real world into the context and environment of digital games in the modern era, the reverse also occurs when elements from digital narratives or ambiences cross screens and devices to inhabit the real world. Regardless of their reasons and motives (such as marketing actions or promotional campaigns), this paper aims only to identify a range of facets rather than map and discern their intentions.

In the introduction, brief examples such as the Block by Block initiative and the EVE Online Monument were presented. However, this section will discuss practices considered more incisive regarding this feedback loop between digital games and public spaces, particularly focusing on examples that have taken root in Brazilian public spaces. Firstly, there is the initiative associated with the location-based game *Pokémon GO* (Niantic, 2016), which, despite being widely discussed in research on location-based games, saw several public spaces in the city of Suzano, São Paulo, receive interventions with statues of characters from the transmedia franchise. On March 26, 2018, a statue of the Pokémon Bulbasaur was installed in a public space in the city. Consequently, on March 30, the 'legendary' Pokémons Celebi and Mew made their appearance as statues. The following month, on the 20th, it was Charizard's turn to appear (Prandoni, 2018).

All the statues were located in public areas of the city of Suzano and were contextualized within the *Pokémon GO* digital game through special thematic events. According to some news portals, Suzano even became the Brazilian capital of Pokémon, despite the fact that by the end of May 2018, Ibirapuera Park in São Paulo had also received the monuments in its public space. This *Pokémon GO* initiative was the second of its kind worldwide, with the first being a Pikachu statue placed in a public square in New Orleans, United States, in 2016 (Prandoni, 2018).

Another case that exemplifies the intertwining of architectural dynamics, public spaces, and digital games is the 2013 *Paulista Invaders* initiative, which humanized Paulista Ave. in São Paulo by creating a public space interaction and experience for players, blending digital game elements with reality (Venturelli, 2015). The project, a game art initiative, was developed by researchers from MidiaLab, the Computational Art Research Laboratory at the University of Brasília, led by Suzete Venturelli, who, along with her team, has been conducting digital and augmented reality urban interventions since 1986 (Venturelli, 2015).

The project transformed the FIESP/SESI building into the largest open-air digital art gallery in Latin America, displaying on the building's facade an integration of digital art and urban fabric, where the classic 1978 Japanese digital game Space Invaders could be played in a reinterpreted form by passersby on Paulista Ave. With a combination of 100,000 LED lights and up to 4.3 billion colour combinations (Venturelli, 2015), *Paulista Invaders* presented a sustainability proposal, where the space creatures and weapons were replaced by cars and bicycles. On Paulista Ave., passersby were guided by FIESP/SESI monitors who taught people how to play in real-time using iPads (Venturelli, 2015).

As the project's creators emphasize, it is not just about playing a digital game and interacting with a building's facade, but rather about encouraging the occupation of public spaces, drawing attention to urgent issues like sustainability and urban mobility (Venturelli, 2015). The experience of playing at the intersection between the real and virtual worlds feeds back and re-signifies the gaming moment, establishing a cohabitation while offering users the opportunity to experience public spaces from a new perspective – one of belonging, representation, and affection.

Public Spaces in Digital Games

A series of digital games relevant to the discussion of the interweaving of public spaces and games is the *SimCity* franchise itself, particularly for the current discussion, the first eponymous title released in 1989, which serves as a case study for this research and topic. According to Arnold et al. (2019), this game represents the most well-known and successful city simulation game, establishing city-building through resource management as a distinct genre within the spectrum of digital games.

Directly linked to the theme of urban planning, the franchise was developed by Will Wright in collaboration with the company Maxis. The game's premise, which has persisted across all subsequent titles in the franchise, is the possibility for players to create and modify their digital cities to reflect evolving construction strategies and urban spatial structures. Therefore, the player assumes the role of a persona/position as a represent-ative and leader of a city, who, through their choices, experiences phenomena such as environmental pollution, uncontrolled urban expansion, and other contexts triggered by socio-cultural issues.

For Arnold et al. (2019), this title was a development that changed the perspectives of individuals already familiar with the game industry, as well as those who had previously disregarded or shown little interest in this medium, inspiring the creation and reformulation of game genres. Terzano and Morckel (2016), for instance, explore the context in which players create residential, commercial, industrial, and other zones, adjusting tax rates to enable city expansion. A series of simulated elements then come into play as a result of the player's actions, calculating effects, consequences, or simply displaying an isometric view or top-down perspective of small pixels representing the population moving through the urban grid.

Despite the focus on construction in *SimCity*, there is also the option to destroy, as seen in nearly all the franchise titles. As a playful aspect of imagining and materializing digital consequences, there is a city destruction menu with earthquakes, fires, tornadoes, plane crashes, floods, and even a reptile-like monster strongly inspired, for many players, by the Japanese atomic terror icon, Godzilla.

However, despite these opportunities for active destruction, these events may also randomly occur in cities without direct activation, serving as crisis management dynamics for the player to consider in city planning. Yet, if the city were developed in a desert area, for example, there would be no possibility of a flood occurring naturally, unlike a city built along the banks of a major river (Terzano & Morckel, 2016). Therefore, having a macro perspective of the city's context is integral to the game's structuring mechanics.

An interesting aspect to explore is the fact that there is not necessarily a specific way to win or complete the games in the franchise. However, according to Arnold et al. (2019), the goal assigned by the developers was to nurture a sense of accomplishment or simple enjoyment from seeing the outcomes of decisions represented on screen. The feedback in the game is conveyed through the public opinion of the city's citizens and residents, approving or disapproving of the player's choices, such as the desire for a park or a shopping centre, as well as notifications and statistics regarding population growth or decline due to crime and other social issues. It was, clearly, a perspective of experimentation of the real world and its public spaces in a sandbox environment.

According to Justice (2021), *SimCity* broke through the conventional bubble upon its release, remaining referenced in newspapers and magazines for many years and being present in debates regarding its application in classrooms at various educational levels.

However, beyond the context directly and originally intended for education, *SimCity* also had relevance in political contexts. Notably, during a mayoral election in Providence, Rhode Island, in the United States, a prominent local newspaper, following a suggestion from a school-aged child, organized a contest in which five candidates created *SimCity* simulations of the city in Rhode Island to compare the results. While most candidates ended up destroying entire neighbourhoods and raising the crime rate to absurd levels in the game, Vincent "Buddy" Cianci was the only candidate who actually managed to create improvements, and was declared the winner of the challenge. According to Justice (2021), it is unlikely that the *SimCity* challenge was a decisive factor in the election outcome, but the truth is that Cianci won the election that year.

Considering these exemplifications, it is possible to infer that in many instances games are designed to mediate and provide sensory experiences for players through immersion. The transport caused by the human-machine relationship at this point leads people to assume that the impacts and other effects exchanged and shared by the game-player (environment-individual), or the feedback loop, allow for an array of infinite individual contours, varying and shaping differently for each experience of the fantastic universes offered by this communicational interface. After this sharing and feedback, where the individual transforms the digital game through their experience, and the digital game transforms the individual through its narrative, the game becomes capable of bridging the gap between real and virtual spaces, originating and retrieving configurations that can impact social processes of affective mobilization.

According to Gadamer (2013), playing allows people to inhabit the proposed universe, whether it is the real world with game elements crossing the virtual or reality frontier, or the other way around. From this relationship, it is possible to build experiential intimacy with the content played/lived. Moreover, through the reactions the game provokes in people, it brings the question of what the technological apparatus truly triggers in the player. In the sensitive experience, the game universe occurs in the performative effect of traversing it. Thus, a distinct field emerges where sensations gain affective meanings in a formative process. In this context, the software merely activates the territory through which emotion for formative process performs.

The Experience of Play as a Game-Player Feedback Loop

Dewey (2010) asserts in his propositions that everything one experiences is part of the human experience. Consequently, there is no distinction between processes that occur externally or internally, such as subjective experiences, in constituting what is considered an experience. In this context, it includes what people do and suffer, what they strive to achieve, love, believe, and endure, and also how they act and are acted upon, the ways in which they perform and suffer, desire and enjoy, see and believe, imagine (Dewey, 2012). From this perspective, experience is a living and authentic instance that perpetuates through the ongoing consequences of human life. Thus, what we conceive as past experience is also part of the future. It is, therefore, the knowledge employed to project new actions through the construction of hypotheses, as experimentation involves the very process of experiencing – past and future compose the flow of experience (Marcondes, 2017). This, in turn, is an enhancement of actions that constitute people as human beings, and also as Homo ludens (Huizinga, 2024; Bergson, 2019).

Alves and Pratschke (2015) affirm that designing in the field of architecture and urbanism is constituted as an interactive game of creating something based on a balance of lived experiences (Bergson, 2019). Architects/designers, in this context, play according to the rules of physics, society, economics, and other intersecting fields. Thus, designing is, by nature, a game with multiple players, in which many specialists need to work together to increase their chances of winning, just as Alves and Pratschke (2015) state. The feedback loop formulated by the experience between game and player, in this context of intertwining between public spaces and their digital representations as mentioned throughout the paper, becomes evident when digital games like those of the *SimCity* franchise end up expressing desires to influence, through planning, both politics and education, fuelling reflection on the nature of ideal cities (Lobo, 2007; Alves & Pratschke, 2015). *The Sims* franchise, by the same developer of *SimCity*, also highlights the use and occupation of spaces as a primary theme, whether public or private. For Flanagan (2007), users build their houses and can choose to remove existing structures, even using a literal bulldozer on lots (Alves & Pratschke, 2015). The graphics and the possibilities of approximating real life explore the influence of architecture and urbanism in virtual fields, in order to analyse aesthetic and experiential aspects (da Silva Nunes et al., 2018).

In this conjecture, the player and the game undergo subjectivations, projection-identifications, and immersive processes (Murray, 2017) that do not necessarily need to occur in the real or virtual world. In truth, they simply need to exist. Thus, the interactional perspective that holds with the public space or game establishes a dynamic of feedback in the experience of play, where the public space can recover its colours, effects, and intentions, just as Habermas (2023), Lynch (1960), Farr (2018), and Gehl and Svarre (2013) attest in their functions of accommodating and housing life, while allowing the fabric of human existence to be constituted by the experience of living and interacting (Dewey, 2010).

Discussion and Conclusion

Public spaces and their intertwining with digital games behave in the modern era as a projection of the user's experience, with their cultural, social, and aesthetic values represented by instances that transit between the real and virtual, even narrowing the ties between these two fields.

From the initiatives addressed throughout this paper, it is possible to observe that public spaces often occupy a privileged position, even if this is perhaps not the primary intention of developers or the objective of the players' own experiences. To inhabit and coexist with the ambiance of the digital game, whether in the real or virtual world, is to exercise a principle of citizenship, of occupation, and representativeness, the importance of which each user/player/consumer/developer needs to be aware so that the intertwining between the public spaces that is their right and the digital game becomes significant to ensure genuinely human experiences, where play transcends the virtual and the real, reaffirming the human condition as Homo ludens.

Although this is by no means the only way to ensure this type of experience, it is perceived that considering public spaces intertwined with the digital game, beyond being an ambience into which one can immerse oneself through an immersive trigger or narrative (Murray, 2017), may be through this awareness that it is possible to exercise citizen empowerment, a result of architectural dynamics.

Future research in game studies could further explore the multidimensional nature of this intersection, considering how public spaces within digital environments can foster citizen empowerment and engagement. By adopting multidisciplinary perspectives, researchers can deepen their understanding of how architectural dynamics, cultural contexts, and immersive narratives influence the gaming experience. Furthermore, this paper contributes to the ongoing discourse by highlighting the potential of digital games to serve as platforms for exploring and redefining public spaces, offering new opportunities for research that bridge the gap between digital environments and real-world implications. As the field of game studies continues to evolve, the insights presented can act as foundation for future explorations.

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How Chinese Esports Rose: The Structure of Chinese Esports Before 2011 and Sicong Wang's Esports Integration Practice

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ABSTRACT:

This paper seeks to interpret the big picture of Chinese eSports before 2011 and how it turned into the current model, contributing to its expansive development. Since the mid-2010s, China has become one of the most important players in the global eSports industry. However, before 2011, the Chinese eSports industry was chaotic. It began in 1998 and suffered from the industry's late start and unregulated environments, including the unstable foundation of the eSports industry, the market separatism of domestic game companies, the government's paradoxical control, and the stigmatization of eSports players. Game companies, investors, and eSports players struggled to think about the future, but little research ever went deep into these issues. This paper aims to fill the blank in the academic analysis of the Chinese eSports, it will consider the components that support Chinese eSports, the obstacles that hinder Chinese eSports' development, Sicong Wang's strategy of integrating Chinese eSports, and the significance of understanding Chinese eSports' rise.

KEY WORDS:

eSports, game companies, government, China, internet cafe, Sicong Wang, society, stigmatization.

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Introduction

At the begin of the 21st century, many Chinese game companies imported foreign games, establishing communication channels between the Chinese and global game industries. Internet cafes, the backbone of the Chinese game industry, were pivotal for Chinese players accessing these imported games (Lu, 2016). Internet cafes are public halls allowing customers to rent computers for gaming or internet use, offering access to a wide range of pre-installed games and software, food, and drinks (Hong & Huang, 2005). Due to their affordability and convenience, internet cafes became the foundation of the Chinese game industry during the 2000s. Despite relying on pirated games, they popularized imported titles and gave most Chinese players access to them, forming the basis of the Chinese eSports industry.

The development of Chinese eSports reflects the evolution of the Chinese game industry. Emerging in 1998, it faced challenges from the industry's late start and unregulated environment. Stakeholders, including game companies, investors, players, and society, struggled to shape its future. Sicong Wang is the son of Wanda Co. Ltd.'s president. His integration strategy for Chinese eSports in 2011 significantly reshaped the industry's value chain and improved its ecosystem. Zhao and Zhu (2020) interviewed many Chinese eSports practitioners and reported, "almost all interviewees referred to [S. Wang's business model on the integration of Chinese eSports in 2011] as it has completely shifted the entire value chain of the eSports industry and has improved the quality of the whole ecology" (pp. 493-494). This paper examines the development of Chinese eSports from 1998 to 2011, exploring key events and S. Wang's transformative influence. It also references the autobiography of Xiaofeng Li, China's most famous eSports player, as a supplemental timeline. Beginning with the origins of Chinese eSports, this study investigates its foundational components, obstacles to development, and S. Wang's integration strategy. It argues that S. Wang's influence stems from his ability to manage the three dominant threads of Chinese eSports culture: internet cafes and professional players, digital business companies, and Chinese social ideology.

Literature Review

This paper takes a literature analysis and data interpretation approach as its main focus to increase rigor. The cited materials are primarily the previous research on Chinese eSports and Internet cafes, and reports from Chinese public media. This paper will evaluate data accuracy and use multiple resources to provide a comprehensive interpretation of the historical facts.

Scholars have highlighted the importance of Internet cafes to the Chinese game industry. Hong and Huang (2005) detailed internet cafes' operating models and societal significance, including their rise in China and their role in fostering an information society and advancing democratization. Liu (2009), using cultural studies, examined the popularity of internet cafe culture, emphasizing how young people perceive these spaces as heterotopian third places to resist, navigate, and challenge authoritarianism and repression in contemporary China. Ernkvist and Ström (2008) noted, "the Internet cafés provided important infrastructure for the growth of online games in China by providing cheap access and an important social and cultural venue" (p. 101). However, these studies largely overlook the connection between internet cafes and Chinese eSports. Lu (2016) briefly mentioned their role in the Chinese game industry and eSports but focused on the development of computer games. Similarly, Yu (2018) provided only a cursory introduction to internet cafes in the context of Chinese eSports, which may lead readers to underestimate their significance and the challenges for eSports.

Research on professional Chinese eSports players and the industry structure also has limitations. Zhao and Zhu (2020) analysed the stigmatization of eSports, arguing that "the social norm of linking eSports with gaming addiction needs to be challenged, and eSports should be destigmatized" (p. 499). Lin and Zhao (2020) described Chinese eSports players' careers as uncertain, vulnerable, and insecure. However, their research focused on players' experiences without exploring the connection between professional players and internet cafes or analysing the dynamics of the eSports market.

Some scholars have investigated the Chinese eSports market. Yang (2018) generally covered the development of the entire Chinese eSports industry. Tai and Lu (2021) put their focus on the Chinese eSports market. Still, they only briefly used two paragraphs to summarize its development before 2013. Recktenwald and Du (2016) focused on developing the Chinese live-streaming industry and its connection to Chinese eSports. Zhao and Lin (2020) set Tencent as the case to analyze its business strategies in the Chinese eSports market, but they only focused on what Tencent did after 2010. Though these studies have investigated Chinese eSports, many focus on the connection between Chinese eSports and the live-streaming industry after the mid-2010s instead of the eSports industry in the 2000s.

Many researchers discussed Chinese social ideology and the government's methods Cao and He (2021) collected game reports and gaming discourse in China from 1981 to 2017, and analyzed public opinion changes about Chinese eSports. Tone et al. (2014) researched and analyzed the factors that caused *Internet addiction* in China. Both the papers of Lin and Zhao (2020) and Zhao and Zhu (2020) covered the social reasons why professional players suffer from stigmatization and insecure careers. Ernkvist and Ström (2008) directly analysed the Chinese government's policy and influence on the Chinese online game industry. This research partially covered Chinese social ideology and the Chinese government's approaches to Chinese eSports but did not systematically analyse them between 1998 and 2011.

Some scholars investigated the state of the Chinese eSports industry before the Chinese live-streaming industry appeared. However, very few researchers meticulously analysed the Chinese eSports industry between 1998-2011 or systematically interpreted how the overwhelming influence of S. Wang changed the industry since 2011. Dai (2019) wrote a chronicle of Chinese eSports and mentioned many events between 1998 and 2011, and Y. Wang (2018) used a broader view to write a chronicle of the Chinese game industry and list important events in this time range, but they did not interpret those events in detail. Many scholars mentioned S. Wang and the change he brought to Chinese eSports, but they did not investigate how and why S. Wang did it (Y. Wang, 2018; Zhao & Zhu, 2020; Lu, 2016; Yu, 2018). Hu (2017) simply mentioned the popularity of S. Wang's live-streaming company in Section 4.1.1 (Hu, 2017). Zheng (2018) briefly mentioned S. Wang s business model in a few paragraphs, but they did not analyze how S. Wang handled the three dominant threads of Chinese eSports culture.

Therefore, this paper aims to fill in the gaps in the Chinese eSports industry analysis between 1998 and 2011 and offer a detailed picture of S. Wang's overwhelming influence on integrating Chinese eSports, so it is important to know the historical background of this industry. In 1978, Chinese economic reform flowing from the Cultural Revolution transformed Chinese society into one with a market economy and allowed the Chinese game industry to develop. China started developing its digital game industry in the mid-1990s, and internet cafes were the primary platform for digital games due to China's low personal computer penetration. They have created an excellent foundation for various Chinese game subcultures, including Chinese eSports, by offering most Chinese people the chance to interact with computers and networks.

As Yu (2018) stated, "Internet cafés have functioned as incubators of casual gaming and competitive gaming" (p. 91). The Chinese eSports industry was founded under this background, and internet cafes were an important component that supported its development. Digital business companies such as Tencent and Alibaba also participate in the Chinese eSports market and invest in the industry (Zhao & Zhu, 2020; Yu, 2018). In the meantime, the Chinese government also supported the development of Chinese eSports and continued cooperating with digital business companies to develop the eSports culture. Tai and Lu (2021) state, "in April 2019, China's National Bureau of Statistics added eSports as a formal competitive sport category, similar to what is called the 'Three Balls' in China – professional basketball, volleyball, and soccer" (p. 211). In the 2010s, the Chinese live-streaming industry connected with Chinese eSports and built a new commercial model. Yang (2018) documented that:

in 2016, with strong online media publicity, especially the online live platforms, League of Legends Pro League [the largest national eSports event of *League of Legends* in China,] witnessed an astonishing 5 billion viewers. The number of audience of the League of Legends finals was 43 million, exceeding the Game 7 of the *NBA* Finals, which had 31 million viewers. (Yang, 2018, p. 11)

However, Chinese eSports did not develop into its current form until the mid-2010s. It faced many challenges and obstacles during its development between 1998 and 2011.

Professional players found it hard to choose eSports as their career and make a living. As Lin and Zhao (2020) say, "most players mentioned the term 'paohui' (literally 'cannon fodder') during the interviews, highlighting that 'one's success relies on thousands of deaths" (p. 10). The insufficient business regulation of the Chinese eSports industry made the Chinese eSports market chaotic. Y. Wang (2018) listed many examples of organizations and events that stole the funding and disappeared. The Chinese government used paradoxical attitudes to treat Chinese eSports, so it simultaneously supported and limited its development (Ernkvist & Ström, 2008; Tai & Lu, 2021; Cao & He, 2021). As Cao and He (2021) pointed out, "object of regulation' [digital games] frame also appeared frequently in the period, corresponding to that year's 'severest game ban' and 'special regulation operations' by governmental departments" (p. 456). Government ideology and traditional Chinese culture kept influencing Chinese people's cognition of eSports and creating prejudice, such as Internet addiction and E-Heroin. Lu (2016) pointed out that "the term 'electronic heroin' was invented to condemn the ever-expanding gaming industry, which was believed to have made students lose interest in studying and end up in addiction" (p. 2190). Dai (2019) also states, "From the perspective of traditional education that has been passed down for thousands of years, these 'world champions' were once defined as 'useless people'" (p. 226).

Chinese eSports was experiencing a dark age before 2011. To understand S. Wang's integration and its overwhelming influence on Chinese eSports, it is necessary to consider the important components of Chinese eSports between 1998 and 2011.

Development and Important Components of Chinese Esports

The rise of Chinese eSports relied on several indispensable factors. The popularity of internet cafes provided a foundation for their growth, while digital business companies' strategies and efforts to publicize games supported the eSports market. Government support also played a crucial role. Despite Chinese eSports achieving rapid progress and catching up with global eSports within 20 years, numerous obstacles impeded its rise, including the mistreatment of eSports players, an unregulated market, the government's paradoxical stance, and conflicts between the industry and society.

a) The roles, significances, and issues of internet cafes in Chinese eSports

According to the 2008 Chinese National Bureau of Statistics ("13-17 Personal computer", n.d.) report, China's personal computer penetration rate was 5.649% in 2006. Yet it had reached 80.328% in the US. Thus, 94% of Chinese did not own a personal computer in 2006, and internet cafes were their best choice to access computers, so those internet cafes offered most Chinese people a chance to access the game world at a low cost. When eSports became popular in China, internet cafes played three roles: organizers and executors of unofficial eSports events, the branch of official eSports events, and funders of professional players.

The first role of internet cafes was as organizers and executors of unofficial eSports. In the 2000s, when professional eSports careers were just beginning, players often participated in unofficial competitions hosted by internet cafes or small computer companies. For instance, X. Li competed in the 2002 西安省星际争霸大赛 [2002 Xi'an Province-level StarCraft Competition], organized by Xuemeier Internet Cafe. Many players were unable to register as contestants because the competition was limited to 128 participants though the winner's prize was only 59.74 USD (Li, 2012). Three features of internet cafes as unofficial eSports organizers emerge:

- First, low awards. The first prizes of the above competitions were lower than 50% of the average monthly income in China ("In 2002, the average", n.d.). The prize would barely cover living expenses, and those who lost would have no income. Therefore, it was hard for players to make a living by attending those unofficial competitions.
- Second, those competitions were highly accessible for both internet cafes and players. Because of the low financial reward, many internet cafes could afford competition. These competitions would increase the reputation of cafes and bring more potential customers. Additionally, any player could apply as a contestant, offering them opportunities to attend competitions and prove their ability. As Yu (2018) said, "Internet cafes have no doubt nurtured a vibrant gaming culture and pioneered the gaming industry through their role in organizing and sponsoring local and regional competitions" (p. 91).
- The third is the strong potential of Chinese eSports. Although these competitions were
 only unofficial and offered low awards, many amateur players wanted to participate.
 Lin and Zhao (2020) interpreted these players as Cannon Fodder, who knew there
 might be no chance of winning the prize, but still wanted to try. Traveling from other
 provinces to attend a small competition is a normal thing for most eSport players. To
 these players pursuing eSports as their career, the first step would be winning these
 'low' awards, though becoming a professional player seems to be a pricey gamble.

The second role of internet cafes was as branches of official eSports. Li (2012) noted attending qualifying World Cyber Games (WCG) 2002 competitions in Xi'an and Wuhan, held at Dream Internet Cafe and New Century Netizen Club, respectively. These large, organized internet cafes were crowded with players, fans, media reporters, and WCG staff.

Cooperation between internet cafes and eSports event hosts was a common practice for managing qualification competitions. Internet cafes could easily transform into professional competition venues, requiring only referees from the hosts to oversee events. Examples include the 2010 WCG CrossFire qualifiers and the Internet Cafe League hosted by Tencent (Liang, 2016; "CrossFire Hundred", n.d.). This approach reduced costs for event hosts, enhanced the reputation of internet cafes, and provided accessible venues for fans and media, creating a mutually beneficial arrangement.

The third role of internet cafes was as funders of professional players. In the early days of Chinese eSports, the industry lacked a structured pathway for amateur players to become professionals. Players needed to achieve high rankings and fame before joining large eSports clubs. Li (2012) explained that before gaining recognition in Henan Province, his only income came from awards at unofficial eSports events held by internet cafes, which were too low to sustain a living. This financial gap meant amateur players often struggled to survive before securing positions in professional clubs. However, some internet cafe owners helped bridge this gap, supporting players in achieving their goals. Zhao and Zhu (2020) mentioned an example:

If we were lucky and had an impressive competition record, we could be sponsored by the local internet café. They offered RMB 100 or 200 [(equivalent of 14-28 USD)] for us to take that kind of green train, no sleeping space, sitting or standing all night long from Chengdu to Beijing or Shanghai for more than twenty hours, eating only fast food... [And my mentors would] get only RMB 800 per month [(equivalent of 110 USD)], which is much lower than the basic salary in Chengdu. (Zhao & Zhu, 2020, p. 492) The methods used by internet cafes represent a rough prototype of eSports clubs. They offered professional players a place to stay, practice, and a salary to cover daily expenses. In return, as labourers, players were expected to meet the cafes' goals by honing their skills and preparing to win prizes in future competitions. This informal contract between 'clubs' and 'professional players' had functioned despite the absence of formal paperwork. As Lu (2016) states, "most of the professional teams were funded by Internet cafes in the beginning" (p. 2196). Li (2012) was later hired by Hunter Esports Club though it remained a side business of Hunter Internet Cafe. He then joined Yoliny Esports Club, where the practice area was still an internet cafe.

During the 2000s, the foundational pattern of Chinese eSports revolved around internet cafes. Acting as mini eSports clubs and funding professional players became a viable business strategy for cafes looking to expand. These cafes already possessed the essential components for basic eSports clubs: computers for practice and funds to hire players. When players won prizes, cafe owners often took a share of the awards and gained increased fame for their establishments. This mutually beneficial model supported professional players in pursuing their dreams and ensured that development continued despite the lack of a formal pathway from amateur to professional eSports. However, this informal ladder was precarious, leaving some players in such financial hardship that they had to borrow money for food (Dai & Zhang, 2014).

While official eSports events were typically organized by formal companies, unofficial events tied to internet cafes were fraught with risk. For example, X. Li participated in the GOC Warcraft III National Contest, hosted by the Shanghai Technology Exhibition Company, and won third place. However, the company absconded with 7 million RMB in funds, leaving players without their awards. Li (2012) was subsequently fired by Shenlan Internet Cafe for failing to return the promised prizes and recognition. Such incidents were common before 2004, with companies using eSports as a facade to collect funds from investors and attract players, only to vanish after events concluded ("The fandomisation", 2019). These scams defrauded investors, damaged the Chinese eSports industry, and severely impacted players' careers. Professional players funded by internet cafes had no recourse to protect themselves and bore the consequences alone.

At the start of the 2010s, sports stadiums and the live-streaming industry replaced internet cafes as platforms. Sponsors of eSports events "shifted from internet cafés and computer companies to IT companies, media companies, and e-commerce and social commerce platforms" (Yu, 2018, p. 95). Still, the above issues were not perfectly resolved.

b) The fight of digital business companies

The rise of global eSports was clear at the end of the 1990s, and some Chinese digital business companies predicted the potential of Chinese eSports' rise and would not let this opportunity pass. Between 1998 and 2005, AOMEI Electronic dominated the Chinese eSports market, but it lost its dominance in 2005 and went bankrupt in 2008. Then, between 2005 and 2011, Tencent, NetEase/China Communication, and Alibaba were three typical examples of different strategies for the Chinese eSports market when Aomei Electronic failed. Tencent developed its area in the eSports market; NetEase and China Communication took what Aomei Electronic already had, and Alibaba focused on commercializing eSports events in China.

In the late 1990s, AOMEI Electronic was among the largest gaming companies in China. On February 19, 2004, it announced that any eSports events related to *StarCraft* (Blizzard Entertainment, 1998), *Warcraft III: Reign of Chaos* (Blizzard Entertainment, 2002), and *Counter-Strike* (Valve Corporation, 2000) required authorization from Blizzard or Sierra Entertainment and approval from their local licensed companies

("Aomei Electronic", n.d.). As the licensed distributor of these games, AOMEI was the sole company legally hosting their official eSports competitions in China, granting it complete control over these events until 2004. Li (2012) notes that in 2002, AOMEI organized a six-month-long eSports event for *Warcraft III: Reign of Chaos*'s launch, using Blizzard's Battle.net server to track Chinese players' rankings on the Asian leaderboard. AOMEI made significant efforts to regulate Chinese eSports as an emerging industry. However, after 2005, AOMEI's influence waned, culminating in its bankruptcy in 2008 and the loss of its licensed games and associated eSports events. Despite its demise, AOMEI's contributions laid the groundwork for Chinese eSports' evolution, creating new opportunities for the industry's growth and diversification.

Tencent, founded in 1998 as a digital business company specializing in social media and live chat software, quickly moved into the licensed games market following AOMEI's bankruptcy in 2008. Its licensed game *CrossFire* (Smilegate Entertainment, 2007) reached 500,000 concurrent players shortly after its release on July 25, 2008 ("How did a miracle," 2010). In 2009, Tencent began licensing *League of Legends* (Riot Games, 2009), which, by 2010, became a key competitive title in the WCG. This swift action demonstrated Tencent's strategic preparation for the Chinese eSports market. Leveraging its robust social media and live chat software foundation, Tencent integrated user accounts with its imported games to promote them effectively, solidifying its position in the licensed game and eSports markets. As Ho (2021) stated, "in 2008, the firm [Tencent] starts investing heavily in the gaming industry and soon became the world's largest game vendor" (p. 39).

While Tencent focused on new licensed games and developing them into eSports, NetEase and China Communication targeted AOMEI's established eSports foundation. NetEase, founded in 1997, secured a licensing contract with Blizzard following AOMEI's bankruptcy in 2008. By July 2009, NetEase had licenses for *Warcraft III: Reign of Chaos, StarCraft II: Wings of Liberty* (Blizzard Entertainment, 2010), *World of Warcraft* (Blizzard Entertainment, 2004), and Blizzard's entire Battle.net platform ("NetEase's 2008", 2009). Controlling Battle.net effectively gave NetEase dominance over Chinese eSports related to Blizzard games. Meanwhile, China Communication held licenses for *Counter-Strike* and *StarCraft*. However, with the introduction of new versions like *Counter-Strike Online* (Nexon Corporation & Valve Corporation, 2008) and *StarCraft II: Wings of Liberty*, these titles declined in popularity and were phased out of the WCG by 2012.

Alibaba, founded in 1999, adopted a distinct approach by treating eSports purely as a commercial venture. Rather than focusing on specific games, Alibaba concentrated on eSports events as profit-generating opportunities. It invested in the World Esports Masters in 2006, pledged 150 million USD to the International E-Sports Federation, and created the World Electronic Sports Games to rival the WCG. Jason Fung, leader of AliSports eSports investments, explained, "whenever we have a large-scale event, such as the Global Grand Finals for China, we put [a whole city bidding model] up for bid so that different cities can show their interest in hosting the event" (Valentine, 2018, para. 4). For Alibaba, the type of games involved was irrelevant; its primary goal was to commercialize Chinese eSports as a profitable event-driven industry.

As these digital business companies focused on capturing market share, they demonstrated little concern for the foundation of the Chinese eSports industry, such as internet cafes and professional players. The approaches of Tencent, NetEase/China Communication, and Alibaba exemplify this neglect. Professional players faced uncertainty, vulnerability, and insecurity due to the lack of a regulated channel or ladder for success. The disconnect between the Chinese eSports market and its foundational level, including digital business companies, internet cafes, and professional players, resulted in an 'unreasonable industrial structure'. This distressing situation discouraged many

players from pursuing eSports careers, diminished confidence in the profession, and contributed to a lack of reserve talent. This structural imbalance persisted largely unchanged before 2011.

c) The Chinese government's methods

The Chinese government also played an essential role in the rise of Chinese eSports, but it also had conflicts with this industry. When China entered the 2000s, its economic development was accelerating. The shock caused by the Information Age pushed the Chinese government to face incoming challenges continuously, and the Chinese game industry's rise was a few decades later than the global game industry. Thus, eSports would undoubtedly attract the Chinese government as an emergent digital economic industry. It noticed eSports' potential in 2003 and recognized it as an official sport (Cao & He, 2021). The official announcement defining eSports as an official sport proved that the Chinese government had a positive attitude toward eSports.

The Chinese government had a clear goal: legitimizing eSports as a source of national pride and international communication. It supported the Chinese eSports industry by allowing it to develop and collaborate with digital business companies on eSports projects. For instance,

Alibaba has worked with local governments to make Hangzhou and Changzhou China's eSports capitals. Tencent is turning Wuhu (Anhui province) into an eSports town, featuring an eSports theme park, an eSports university, a cultural and creative park, and an animation industrial park. The social and mobile gaming giant is also building an eSports theme park in Chengdu (Sichuan Province), featuring its popular mobile fantasy role-playing game HoK (with two hundred million users in 2017). (Yu, 2018, p. 97)

By cooperating with digital companies and involving them in city planning, the Chinese government demonstrated its commitment to treating eSports as a valuable industry and creating a strong foundation for its rise.

However, the government simultaneously exhibited paradoxical attitudes toward eSports. While recognizing its value and supporting its development, the government also created conflicts that hindered its progress. For instance, as noted earlier, internet cafes were crucial in organizing local and regional FPS game competitions and funding professional teams. Yet, an official report from the Changsha government in Hunan revealed plans to reduce the number of internet cafes in the city from 1,689 to 796 between 2005 and 2010 (Chen, 2005). This policy significantly undermined eSports by disrupting its foundational support system. Additionally, in 2005, the government identified Internet addiction as a societal problem negatively impacting citizens' mental health, urging local governments and parents to address the issue. This stance reinforced negative perceptions of the gaming industry and internet cafes in public opinion, leading to the rise of so-called Internet addiction treatment experts. While claiming to cure minors of addiction and promote academic focus and obedience, many of these experts exploited the issue for personal profit.

Among these so-called experts, Hongkai Tao and Yongxin Yang stand out. In 2005, the Chinese government appointed Hongkai Tao as its official spokesperson for Internet addiction treatment (S. Li, 2005). Tao described Internet addiction as a critical emergency threatening China's well-being, necessitating urgent and decisive action. Yongxin Yang established an Internet addiction treatment camp where individuals sent by their families were subjected to electrical shock therapy. To some parents, these experts appeared to be saviours capable of rescuing their children from Internet addiction, regardless of the methods employed.

However, despite Tao being presented as a credible authority, there is no evidence verifying his educational qualifications. Searches of academic databases reveal that Tao has not published any scholarly work on Internet addiction treatment, casting doubt on his expertise. Similarly, Yongxin Yang's extreme methods highlight broader societal anxieties tied to Internet addiction. Yang opened several treatment centres aimed at 'curing' teenagers and improving their obedience through punitive measures like electrical shocks. Many parents send their children to these centres based solely on suspicions of addiction without concrete evidence, simply because they like playing digital games. Szablewicz (2020) argued that Internet addiction is rooted in a moral panic fuelled by the Chinese government and societal dynamics. This panic not only stigmatized eSports players but also obstructed the growth of Chinese eSports before 2011.

Sicong Wang and His Strategy for Integrating Chinese Esports

The involvement of S. Wang entirely changed the situation of Chinese eSports. In the late 2000s, Chinese eSports based on internet cafes gradually failed to catch up with global eSports because the eSports clubs built on internet cafes did not have a systematic structure to fit the popularity of global eSports. Many investors believed the Chinese eSports industry was going to fail, but S. Wang thought it was a great opportunity. S. Wang stated the reason in an interview with Dai (2015):

I think the players and clubs in this industry are not doing very well. I want to increase the players' income and make this industry a little benign. Otherwise, the players cannot make money, and the club cannot make money, and the industry can only slowly die. But no one wanted to be in this industry at the time, so I came. (Dai, 2015, para. 1-2)

In 2011, S. Wang posted his declaration "Strong entry, integration of e-sports" on Weibo, which marked his official participation in the Chinese eSports industry. "[He] has invested RMB 500 million, which is equivalent of US \$70.62 million, in Prometheus Capital to facilitate a strong entry into the field of eSports since 2011, thereby contributing to the eSports industry boom in China" (Zhao & Zhu, 2020, p. 493). S. Wang took many actions to prove his confidence in investing in the Chinese eSports industry:

- To improve professional players' situation, he spent 6 million USD on rebuilding the eSports team CCM into Invictus Gaming and planned to build it as a professional eSports team for global eSports events. "[Wang's club] has signed more than 20 professional players and pays the gamers a base salary of about 4,000-5,000 RMB per month (around US\$650-\$800) and covers their room and board" (Lu, 2016, p. 2198).
- To integrate a Chinese eSports business model, he invested in the game industry and promoted its connection with eSports events. He participated in organizing a Chinese mobile eSports event called Hero Pro League in 2015, which was one of the largest mobile eSports events in Asia, and League of Legends Pro League 2016.
- He also noticed the live-streaming industry's rise. He pushed his club players to cooperate with some live-streaming platforms for better popularity, such as Huya TV and Douyu TV. He even founded a live-streaming company called Panda TV, which

mainly focused on eSports events to offer his club players a stable live-streaming platform ("Wang Sicong established", 2015).

• To solve the problem of stigmatization, his club had a standard public relations team to increase its popularity and publicize positive images of professional players. It has almost 10 million fans in 2024. He also often participated in live-streaming and eSports competitions to promote Chinese eSports related to his clubs.

S. Wang's actions represented his eSports club which became a pure and professional Chinese eSports club focused on eSports events. He wanted to use his actions to encourage investors to participate in the Chinese eSports industry and lead it to a better future by regulating it. S. Wang used several methods to create a complete Chinese eSports operating structure model:

- 1. He showed features that a professional Chinese eSports club should have: Professionally trained players, generous treatment, a rigorous company structure, and sufficient commercial value. Sicong Wang expressed a desire to help other players and clubs improve their lives and conveyed the hope that the industry would eventually move toward a more positive and enlightened future (Zhao & Zhu, 2020).
- 2. He showed concern for professional players' careers and used his business power to correct the connection between digital business companies and professional players. He organized national eSports events and pushed his club to interact with eSports events and the live-streaming industry in order to secure the career ladder of professional players, instead of waiting for eSports events hosted by other companies.
- 3. He did not limit his focus only to the eSports industry. Instead, he noticed the emergent live-stream culture and connected it with the Chinese eSports industry and cultural promotion. Many scholars have proved the value of the live-streaming industry to Chinese eSports. Because eSports and related information are not legally allowed to be showcased on Chinese television, live-streaming platforms are the main approach for audiences to watch eSports. "Live-streaming is among the bottom streams of the esports value chain" (Zhao & Lin, 2020, p. 10). Wang used the live-stream industry to benefit both his live-stream company and his eSports club and created a new development direction for the Chinese eSports industry.
- 4. In the meantime, his promotion of Chinese eSports through live streaming and a public relations team gradually established positive images of Chinese eSports and professional players and decreased their stigmatization.

In general, S. Wang's business model allowed Chinese eSports to recover from its tough time and guided investors in developing the Chinese eSports industry. His actions also weakened the stereotypes surrounding digital games and internet addiction theory by proving that choosing eSports could also bring a bright future. As Zhao and Zhu (2020) state, "almost all interviewees referred to this remarkable event as it has completely shifted the entire value chain of the eSports industry and has improved the quality of the whole ecology" (pp. 493-494).

S. Wang's approach became a template for the Chinese eSports industry, encouraging other investors to adopt similar strategies, including the companies previously mentioned. Tencent starts its own eSports industrial chain, QQ Internet cafe, to organize small eSports events in cafes. It aimed to focus on small competitions between normal players and offer a reputational foundation for potential eSports players. For example, Tencent's 'umbrella platform' integrated the live-streaming industry with the QQ Internet Cafe eSports competition in 2018 through events like Penguin Esports (Zhao & Lin, 2020). NetEase started NetEase eSports NeXT in 2018 to develop players from its games. S. Wang's contributions significantly advanced Chinese eSports, which, in turn, influenced the broader gaming industry and Chinese society.

The rapid growth of Chinese eSports highlights the immense potential of the Chinese gaming industry. Despite its struggles in the 2000s, "in 2017 the Chinese eSports market size reached US\$1.26 billion (excluding revenue from gamers playing eSports games), with over two hundred million fans, the top-ranked competitors and teams, and the most advanced eSports infrastructure and venues" (Yu, 2018, p. 94). This rapid growth and economic impact signify that Chinese eSports has become a crucial part of the global gaming industry, with its potential continuing to rise as China develops. Consequently, more resources will flow into the Chinese gaming sector, boosting its value and social standing.

Besides, Chinese eSports' social value has changed Chinese society by attacking the internet addiction theory and weakening the poor stereotypes surrounding digital games. As mentioned earlier, in the 2000s, when internet addiction theory dominated, society struggled to differentiate between internet-addicted players and professional players, often unfairly pressuring those pursuing eSports careers to quit gaming to relieve their 'addiction'. Li's family, for instance, exemplified this predicament (Li, 2012). The success of Chinese eSports proved this stereotype was biased and gave Chinese society a powerful reason to support the Chinese game industry. Besides, the Chinese government has confirmed eSports as an official sport in China and set it as an undergraduate major. Esports players will have the same social position as other sports players when they receive prizes from international competitions.

Conclusion

S. Wang's eSports integration showed his unique view on the development of Chinese eSports. His strategies improved the bad situation professional players were facing; he secured the connection between professional players and eSports events and offered them a ladder to continue their careers by directly participating in them as a host; S. Wang also presented how to use other game-related industries, such as the live-streaming industry, to cooperate with Chinese eSports for a win-win. Together with his club's public relations team, he worked to dispel stereotypes like the E-Heroin label and demonstrated that pursuing eSports as a career could be a legitimate and promising choice, providing a valuable case for global game studies.

This paper has several limitations. It does not explore in detail the strategies of small computer companies on the Chinese eSports scene between 1998 and 2011, nor does it address the other investors who followed S. Wang into the industry in 2011. Fortunately, related research, such as analyses of Tencent's umbrella platform of Lin and Zhao (2020) and the Chinese live-streaming industry of Hu (2017), provides valuable insights into the evolution of Chinese eSports after live-streaming became its core support in 2011.

The Chinese government's stance on eSports remains paradoxical. On August 31, 2021, it announced that all online game companies must limit gameplay for players under 18 to no more than three hours per week ("Notice of the National Press", 2021). However, as noted by ESPN ("Average age", 2017), the peak age for eSports players is around 20, with many rising to fame before turning 18. This creates a contradiction: Chinese eSports players may miss out on crucial career opportunities if they are restricted to only three hours of gameplay per week. This policy raises confusion about the government's support for eSports and presents a new obstacle to the industry's development.

The changes in Chinese eSports were not only dependent on Sicong Wang himself. Precisely, he was a pathfinder who pointed out the direction Chinese eSports should take. Investors, game companies, professional players, and Chinese society followed his lead, continually improving the industry. Sadly, with Tencent's fully monopoly on the Chinese game industry by controlling many popular eSports games, S. Wang has gradually distanced himself from eSports since 2019. However, he was extremely successful in paving the way for the entire Chinese eSports industry, and the 'trend' he created is still ongoing ("How did Wang", 2021).

The development of Chinese eSports reflects the growth of the country's gaming industry. From its rusty beginnings twenty years ago, Chinese eSports has steadily improved. However, while internet cafes served as the foundation for Chinese eSports and the gaming industry, their role has diminished as more Chinese families became able to afford personal computers. Following the popularity of S. Wang's model, the live-streaming industry has replaced internet cafes as the primary platform for professional players. As Yu (2018) notes, "as Chinese eSports competitions moved from the internet cafés to sports stadiums and video live-streaming platforms, their sponsors have also shifted from internet cafés and computer companies to IT companies, media companies, and e-commerce and social commerce platforms" (p. 95). This shift suggests that S. Wang has deeply influenced the strategy of investors, and future research should focus on the connection between eSports and live-streaming. In the meantime, exploring solutions for internet cafes to adapt to the evolving eSports landscape or to consider how they might transform into new business models may be a good future.

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ACTA LUDOLOGICA

Game on, Think Deep, Level up: Engaging Higher Education Students in a Digital Game Analysis and Critique Curricular Unit

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ABSTRACT:

This paper explores the importance and challenges of teaching a digital game analysis and critique curricular unit to students on a digital game course. The central research question guiding this study is: How can educators effectively teach students to critically analyse digital games as cultural artifacts and forms of media expression? Digital games, as a medium of cultural significance, require an in-depth approach to teaching their analysis. The paper begins with an introduction to the importance of digital game analysis in contemporary education, discussing the role of digital games as a medium for expression and the need for critical perspectives in their study. It also highlights the existing approaches and research gaps that still need to be addressed. The methodology section outlines strategies for teaching while the results and findings sections discuss the outcomes of implementing these strategies in educational settings and considers the practical exercises used as case studies throughout the semester in the past five years (from 2019/2020 to 2023/2024). Finally, the paper concludes with insights on the effectiveness of discussing digital games in the classroom and recommendations for future research and practice.

KEY WORDS:

active learning, creative writing, critical thinking, critique, digital games, hands-on activities, peer learning, student engagement.

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Introduction

In today's digital age, digital games have become a pervasive form of entertainment and cultural expression. As such, there is a growing need to equip students with the skills to critically analyse and interpret these interactive media forms. Understanding digital games as cultural artifacts (Greenfield, 1994; Salen Tekinbas & Zimmerman, 2003; Henderson, 2005; Bogost, 2006; Rutter & Bryce, 2006) allows students to engage with complex narratives, themes, and the socio-cultural contexts embedded within them. This paper examines the significance of teaching digital game analysis and critique in educational settings and proposes effective strategies for engaging students.

For decades, educators have engaged in ongoing conversations about the diverse implications of incorporating computers into educational settings and the transformative possibilities offered by game-based instruction (Gentile & Gentile, 2008). Initially, much of the dialogue revolved around the purposeful integration of educational software (Williamson & Facer, 2004; Kebritchi & Hirumi, 2008), but over time, this discourse has evolved to encompass a broader spectrum of learning experiences derived from digital games (Watson & Fang, 2012).

In recent years, there has been a growing interest in integrating digital games into educational settings, recognizing their potential as powerful educational tools (Annetta et al., 2006; Mayer, 2019). However, amidst this enthusiasm, a significant gap persists in pedagogical approaches to teaching students how to critically analyse and critique digital games (Salen Tekinbas & Zimmerman, 2003; Gee, 2003; Koster, 2004; Bogost,

2015; Nieborg & Foxman, 2023). While previous research has highlighted the benefits of digital games in enhancing critical thinking skills, media literacy, and cultural awareness (Juul, 2005; Jones, 2008; Cicchino, 2015), there remains a lack of understanding of effective pedagogical methods for integrating digital game analysis into diverse educational contexts. Current scientific literature also reveals a growing but still emergent body of research on the pedagogical value of teaching digital game analysis (Nousiainen et al., 2018; Oliveira et al., 2019). Several studies have documented positive outcomes, such as increased student motivation, improved analytical skills, and deeper cultural awareness when games are treated as texts for critical inquiry (Beavis et al., 2014; Schrier, 2015; Koutsogiannis & Adampa, 2022; Pozo et al., 2022; Savić Tot et al., 2023). However, findings also emphasize the variability of results depending on instructional design, institutional context, and educator expertise, pointing to the need for more consistent frameworks and longitudinal studies in this field (Hainey et al., 2016; Barr, 2017; Hoffelner et al., 2025).

The challenges in teaching digital game analysis are multifaceted (Kenny & Gunter, 2011). Unlike traditional media forms, such as literature or film, digital games possess interactive elements that require unique analytical frameworks (Schrier, 2015). Moreover, the diverse range of digital game genres, platforms, and cultural contexts present in contemporary gaming culture adds complexity to the task. Traditional methods of textual analysis may not fully capture the interactive and multimodal nature of digital games, further complicating the teaching process (Sicart, 2013; Stufft & von Gillern, 2021).

Addressing these challenges requires a comprehensive approach integrating theory, practice, and critical reflection. Educators must draw upon theories from media studies, cultural studies, and game studies to develop robust analytical frameworks tailored to the unique characteristics of digital games (Squire, 2008; Kringiel, 2012). Furthermore, providing students with hands-on experience allows them to apply theoretical concepts and analytical tools in practical settings (Sheldon, 2011; Lunsford & Ruszkiewicz, 2021), fostering meaningful engagement with digital game analysis.

In conclusion, while there is significant interest in integrating digital games into education, a critical gap remains in pedagogical approaches to teaching students how to effectively analyse and critique these digital artifacts. By recognizing this gap and adopting innovative pedagogical strategies, educators can empower students to become informed and discerning consumers of digital game media.

Methodology

This study explores the question: How can educators effectively teach digital game analysis to promote increased engagement, enhance critical thinking skills, and foster a sense of community and peer learning among students? To address this question, a multifaceted approach was adopted, combining theoretical frameworks, practical exercises, and critical discussions tailored to the specific needs and interests of students. The approach emphasizes a collaborative and self-learning process (Lee & Hannafin, 2016; Loes & Pascarella, 2017; Rajaram, 2021). This methodology draws from a longitudinal reflective study over five years of teaching experience (2019/2020 to 2023/2024) in a university-level digital game analysis course and incorporates observations of student dynamics, reflective practice, experiential learning strategies, and performance across a range of analytical and collaborative exercises to investigate how game analysis can be taught effectively to enhance student engagement, critical thinking, and peer collaboration.
a) Research design and pedagogical approach

This longitudinal qualitative inquiry, grounded in reflective practice, was informed by constructivist pedagogy and reflective teaching, where learning is understood as a process of active construction. The course design integrated game studies, media theory, and cultural studies, offering students a comprehensive theoretical foundation for understanding digital games as cultural texts (Aarseth, 1997; Salen Tekinbas & Zimmerman, 2003; Koster, 2004; Fullerton, 2008; Zubek, 2020). This curriculum evolved each year based on student feedback and pedagogical reflections, ensuring the learning environment remained responsive to students' needs and interests.

The study follows a qualitative reflective approach, drawing on five years of teaching experience. While it does not conform strictly to the formal structures of a case study or action research, the research incorporates key elements of action research – specifically its iterative process, continuous adjustments based on student feedback, and critical reflection on teaching outcomes. The central focus is on how students engage with digital game analysis and critique through participatory and active learning strategies across multiple years.

The structure of the course aimed to foster increased engagement by combining theoretical concepts with hands-on activities. This included game analysis exercises, gameplay sessions, and collaborative projects, with students encouraged to apply analytical tools to games' narratives, mechanics, and cultural contexts (Consalvo & Dutton, 2006; Nieborg & Foxman, 2023). By integrating theoretical frameworks into practical exercises, students were better equipped to critically assess digital games, expanding their understanding beyond gameplay mechanics to consider broader themes such as identity, culture, and empathy (Gray & Leonard, 2018; Rutter & Bryce, 2006).

b) Participants

Over five academic years (2019/2020 to 2023/2024), 116 students enrolled on the course, averaging 23 per year. Each edition ran for 15 weeks, from September to February. Students came from varied academic and creative backgrounds – including art, design, programming, and writing – and had diverse relationships with games, ranging from casual to core players. The cohort included 97 male (83.6%) and 19 female (16.4%) students. Most were Portuguese (102, or 87.9%), while 14 (12.1%) were international, mainly Brazilian. This cultural mix enriched discussions and group work. Around 10-15% of students also worked alongside their studies, adding further diversity in experience and engagement.

c) Course structure and teaching practices

The pedagogical design of the course was multi-phased and took place over a 15-week semester (September to February), structured into three main segments:

- Theoretical foundations (weeks 1-4): In this phase, students began by exploring foundational theories of digital game analysis, including game theory, the narratology vs. ludology debate, and media theory (e.g. Aarseth, 1997; Salen Tekinbas & Zimmerman, 2003). Lectures and discussions introduced key frameworks for analysing games as complex media. Evaluation was mainly formative, involving reading responses, structured discussions, and in-class reflections. Instructors offered real-time feedback to ensure students grasped core concepts before progressing to practical analysis.
- Analytical practice (weeks 5-10): During this phase, students engaged in weekly gameplay sessions, and peer discussions to support individual critiques, followed by in-class presentations. They analysed specific games like *Journey*

(Thatgamecompany, 2012), *Papers, Please* (Lucas Pope, 2013), *The Last of Us* (Naughty Dog, 2013), applying theoretical frameworks to explore games as artistic and cultural objects. While written exercises were individual, peer exchanges reinforced collaborative learning. Evaluation combined formative and summative approaches: students gave graded oral presentations and submitted regular written critiques, assessed on theory application, clarity, and originality, with feedback from peers and instructors. This combination of feedback supported analytical growth throughout the course.

Creative application and reflection (weeks 11-15): During the final phase, students worked in small groups on a comprehensive final project – such as an analysis essay, video essay, or mini game design document – that combined theoretical insights with personal gameplay reflections. Each group submitted a written report and a video critique, showcasing their ability to apply analytical tools critically. This culminating project fostered collaboration and reflection on course learning. Assessment was multifaceted, and considered theoretical integration, originality, clarity, audiovisual quality (for videos), and depth of reflection. Peer evaluations promoted accountability and equal contribution. Additionally, students submitted individual reflection reports to assess their learning and personal growth.

The curricular unit structure and exercises evolved over five years (2019/2020 to 2023/2024) through ongoing reflective teaching. Annual adjustments were based on student engagement, outcomes, and final work. The same lecturer led the course each year, combining lectures, discussions, and practical exercises.

Students were graded from 0 to 20, based on their application of theory, clarity of analysis, and originality. Scores below 10 indicated underperformance; scores above 10 were positive, with higher marks reflecting stronger mastery. In-class discussions provided qualitative feedback on writing quality, clarity of ideas, and use of references. This mix of grading and feedback encouraged iterative improvement, engagement, and critical thinking.

d) Data collection

Data were collected over five years from student assignments and in-class presentations. Each year, students completed four individual and one group assignment, including presentations with debates. These served as the primary data, revealing students' engagement, critical thinking, and evolving views on digital games.

Instructor field notes captured classroom dynamics and evolving learning patterns. For example, students increasingly used terms like 'game loop', 'avatar', and 'game mechanics' during discussions, reflecting a growing fluency in game analysis terminology. Debates on ludonarrative themes revealed critical engagement with morality, cultural identity, and political representation in games.

In addition, thematic analysis of debates and discussions revealed recurring patterns in student engagement. Students moved beyond surface-level analysis to explore broader social, artistic, and theoretical aspects of digital games. Collaborative assignments fostered critical thinking, peer learning, and the negotiation of multiple perspectives, enriching the learning environment.

Importantly, several sessions included gameplay activities, where students played similar games and engaged in real-time discussions. These live interactions deepened analysis, as students compared perspectives, questioned design choices, and reflected on emotional and cognitive responses – broadening their understanding and reinforcing analytical tools introduced in class.

e) Ethical considerations

This study followed ethical guidelines by ensuring that all collected data were anonymized and contained no personal or sensitive information. It draws on five years of reflective teaching within a higher education curricular unit, relying solely on classroom activities and coursework. No formal interviews, surveys, or research interventions were conducted, and institutional ethical approval was not required. All examples are presented in anonymized or aggregate form. The study aligns with ethical standards for practitioner research, maintaining participant confidentiality while offering insights grounded in authentic pedagogical experience.

Strategies for Teaching Digital Game Analysis and Critique

Digital game analysis is increasingly recognized in education for its learning potential. As a semester-long unit within digital game studies, this course combines theory and practice over four hours per week. It encourages students to play, analyse, and critique games as cultural and artistic artifacts. Topics include genres, authorship, innovation, ratings, and platforms. The unit aims to highlight the role of critique in legitimizing games as an art form and supporting the industry's creative growth. In this section, we delve into the multifaceted outcomes observed when implementing strategies for teaching digital game analysis.

a) Enhanced critical thinking skills

The synergy between theoretical frameworks and practical exercises proved instrumental in enhancing critical thinking skills among students. Key observations regarding the development of critical thinking skills include:

- *Exploring theoretical concepts.* Students effectively applied key concepts from game studies, media theory, and cultural studies to their analyses. Foundational theories, such as narratology (Aarseth, 1997; Ryan, 2015), ludology (Salen Tekinbas & Zimmerman, 2003; Juul, 2005; Koster, 2004), and semiotics (Gee, 2003; Bogost, 2006; Galloway, 2006), enabled them to interpret the narrative, thematic, and aesthetic elements of digital games. This theoretical grounding provided a framework for understanding the complexities of digital game design and storytelling, fostering critical thinking skills essential for media analysis (Cicchino, 2015; Nieborg & Foxman, 2023).
- Importance of historical analysis. Understanding the historical context of digital games is key to recognizing their industry impact. Historical analysis may address a game's production, reception, or milestone status (Stanton, 2015), while also considering social, economic, and cultural contexts (Ivory, 2015; Nieborg & Foxman, 2023). Examining the historical innovations of digital games is also essential. Titles like *Pac-Man* (Namco, 1980; introducing the first protagonist), *Donkey Kong* (Nintendo R&D1, 1981; pioneering the platform genre), *The Legend of Zelda* (Nintendo R&D4, 1986; popularizing sandbox exploration), *Wolfenstein 3D* (id Software, 1992; ushering in the FPS perspective), *Doom* (id Software, 1993; revolutionizing multiplayer deathmatch), *Tomb Raider* (Core Design, 1996; emphasizing a female protagonist),

and *Grand Theft Auto III* (DMA Design, 2001; advancing the 3D sandbox) serve as exemplary cases. Exploring these games with students provides insight into their importance in shaping the history of the gaming industry.

- Evaluation of narrative and thematic elements. Through guided discussions and reflective assignments, students critically examined storytelling, character development, and narrative structures in digital games (Isbister, 2006; Tyndale & Ramsoomair, 2016; Sheldon, 2023). They explored how gameplay mechanics intersect with narrative design, deepening appreciation for the medium's artistic potential. Digital games such as *The Last of Us*, known for its compelling narrative and well-developed characters; *Bioshock Infinite* (Irrational Games, 2013), acclaimed for its thought-provoking themes and intricate storytelling; *Undertale* (Toby Fox, 2015), which subverts traditional RPG conventions with branching narratives based on player choices; *Life is Strange* (Dontnod Entertainment, 2015), an adventure game centred around a teenager with the ability to rewind time; and *Red Dead Redemption 2* (Rockstar Games, 2018), set in the late 1800s with a richly detailed narrative exploring themes of loyalty, redemption, and the decline of the Wild West, serve as exemplary cases for analysing themes, narrative innovation, and playing-driven storytelling (Parsayi & Soyoof, 2018).
- Deconstruction of socio-cultural implications. Through critical analysis, students examined socio-cultural themes in digital games, such as representation, identity, power, and ideology (McKernan, 2015; Gray & Leonard, 2018; Nieborg & Foxman, 2023). Titles like Assassin's Creed (Ubisoft et al., 2007-2025) offer insights into history and colonialism; Grand Theft Auto V (Rockstar North, 2013) satirizes crime and consumerism; Spec Ops: The Line (Yager Development, 2012) critiques the glorification of war and its psychological toll, fostering discussions on morality and military intervention; Gone Home (The Fullbright Company, 2013) explores family and LGBTQI+ themes, providing insights into 1990s American culture. This War of Mine (11 bit studios, 2014) foregounds civilian trauma; Papers, Please tackles bureaucracy and ethics; Life is Strange, Detroit: Become Human (Quantic Dream, 2018), and Hellblade: Senua's Sacrifice (Ninja Theory, 2017) address prejudice, identity, and mental health. These digital games fostered critical awareness of cultural narratives and encouraged advocacy for inclusivity (Richard, 2017; Shliakhovchuk & Muñoz García, 2020; Dumont & Bonenfant, 2023).
- Synthesis of multidisciplinary perspectives. The interdisciplinary nature of digital game analysis encourages a holistic understanding of games as cultural artifacts (Bogost, 2015), cultivating creativity, adaptability, and critical thinking (Drapeau, 2014; Lunsford & Ruszkiewicz, 2021). *Journey* combines art, music, and storytelling to evoke emotion; *Braid* (Number None, 2008) explores time and philosophical themes through innovative design; *The Witness* (Thekla, 2016) uses environmental storytelling and complex puzzles to engage interpretation and logic; *SimCity* (Maxis, 1989) merges urban planning and sociology. These examples showcase digital games analysis across disciplines, revealing artistic and cultural value. (Mäyrä, 2008; Deterding, 2016).
- Comparative analysis. Comparative analysis involves defining clear criteria such as mechanics, graphics, narrative, or themes – to build focused arguments (Pérez-Latorre, 2012). For example, *Dark Souls* (FromSoftware, 2011) and *Bloodborne* (FromSoftware, 2015) invite comparison through design, narrative and themes; *Overwatch* (Blizzard Entertainment, 2016) and *Team Fortress 2* (Valve, 2007) highlight differences in character design and community; *Call of Duty 4: Modern Warfare* (Infinity Ward, 2007) and *Battlefield V* (DICE, 2018) differ in war settings and gameplay; *Minecraft* (Mojang Studios, 2011) and *Terraria* (Re-Logic, 2011) contrast in

exploration, building and crafting mechanics; *Undertale* and *Deltarune* (Toby Fox, 2018) provide opportunities to analyse narrative structures, moral choices, and player interactions, reflecting Toby Fox's evolving design philosophy. Such comparisons deepen insights into game design (Salen Tekinbas & Zimmerman, 2003; Koster, 2004; Zubek, 2020) and player experience (Squire, 2006; Wiemeyer et al., 2016).

Overall, combining theory with practice effectively facilitated students' critical thinking (Cicchino, 2015). By analysing digital games through a critical lens, they learned to evaluate narrative, thematic, and aesthetic elements, while recognizing socio-cultural implications. This empowered them to approach digital games as meaningful cultural artifacts.

b) Enhanced creative writing skills

Students in digital game analysis courses develop creative writing skills by cultivating discipline through regular exercises, rather than relying solely on inspiration (Drapeau, 2014). They are encouraged to document ideas throughout the semester, creating a personal repository of inspiration. Exposure to diverse topics and genres broadens their horizons, and encourages experimentation, enhancing their expressive range and versatility as writers.

Effective writing strategies are emphasized to help students organize thoughts, outline projects, and communicate clearly (Mason et al., 2011; Graham et al., 2013). By starting with guiding questions – e.g. 'What defines the game?', or 'What insights does it offer?' – students cultivate critical analysis skills and develop a more nuanced understanding within academic discourse.

The teaching of digital game analysis fosters both critical thinking and creative writing (Cicchino, 2015). By exploring narrative techniques, character development, worldbuilding, and interactive narrative design, students expand their storytelling skills. They analyse character arcs and dialogue to craft compelling characters (Isbister, 2006; Sheldon, 2023), while dissecting narrative structure and environmental storytelling to enrich their understanding of effectiveness (Isbister, 2006; Bateman, 2021). Finally, studying branching narratives and player choices deepens students' understanding of interactive storytelling and its impact on player experiences and story outcomes.

c) Enhance community and peer learning

The integration of hands-on activities – such as gameplay sessions, collaborative analyses, and group discussions – was instrumental in fostering a strong sense of community and promoting peer learning (Han & Xu, 2020; Laal & Ghodsi, 2012). These experiences encouraged meaningful dialogue, the exchange of diverse insights, and constructive peer feedback, all of which enriched students' understanding of digital game analysis (Keerthirathne, 2020).

Through collaborative critiques and discussions, students deepened their grasp of course material while developing essential skills in teamwork, communication, and critical reflection (Rubin & Hebert, 1998; Nasir et al., 2015). Peer interactions not only enhanced academic understanding but also nurtured intellectual curiosity and open communication, hallmarks of peer-driven education (Keerthirathne, 2020).

By participating in group projects and feedback sessions, students gained valuable insights from different perspectives and refined their ideas through dialogue and reflection (Tullis & Goldstone, 2020; Marshall et al., 2021). These collaborative activities equipped students with transferable skills relevant to both academic and professional environments and contributed to a vibrant, supportive classroom culture (Laal & Ghodsi, 2012).

Practical Exercises as Case Studies

Over recent years, this curricular unit has included practical exercises and a final group project, which have led to positive learning outcomes. These activities offered immersive experiences in digital game analysis. Except for the first, each exercise provides a curated list of games aligned with the theme, from which students select one to analyse. The lists cover a range of genres, years, and platforms, and often include free or easily accessible titles, such as browser games:

- *Exercise 1: Favourite game.* This introductory exercise invites students to critically reflect on a game they know and value deeply, explaining why it stands as their favourite. By examining its mechanics, narrative, aesthetics, and personal impact, students begin to articulate what makes a game meaningful to them. This reflection not only fosters personal engagement but also lays the foundation for more structured analytical work in later exercises.
- *Exercise 2: Indie games.* This exercise focuses on indie games as distinct authorial works, encouraging students to link the creator's vision to the final product. By examining artistic choices and creative processes, students explore how these shape gameplay, narrative, and themes. The exercise highlights the role of artistic expression and innovation in indie game development, fostering a deeper understanding of the medium.
- *Exercise 3:* Underperforming games. This exercise asks students to critically assess digital games that failed to meet industry or player expectations. By analysing design flaws, weaknesses, or external factors, students explore why certain titles underperform. The activity sharpens their critical skills and encourages reflection on how games are received and discussed within the gaming community.
- *Exercise 4: National games.* In this exercise, students analyse games developed in their own country, examining how cultural, social, and historical contexts shape their design and reception. This allows them to explore local industry dynamics and the role of national identity in game development. Students also reflect on how these games contribute to cultural representation and their position within the global gaming landscape.
- *Final Project: Comprehensive analysis of a AAA digital game.* This final group project, ideally completed in teams of 2-3, challenges students to produce a comprehensive critique of a major AAA digital game. Their analysis covers narrative, mechanics, visual design, audio, and cultural relevance. Through collaboration, students engage critically with mainstream gaming culture and contribute to ongoing discussions around AAA game development and reception. As part of the project, they also create an original video critique that summarizes their findings.

For each exercises, students delivered 5-10-minute presentations, followed by a class discussion. These were supported by audiovisual materials that highlighted key points of their critiques. To motivate engagement, students were informed that the best critiques would be featured on an online blog dedicated to the curricular unit, with selected critiques included in a published book showcasing exemplary analysis. This recognition validated the quality of their work throughout the semester and set a high standard for future endeavours. The practical exercises not only enriched students' understanding of digital game analysis but also fostered critical thinking skills and creativity (Drapeau, 2014), preparing them for academic and professional endeavours in game studies.

d) Practical exercises as case studies: results and evolution

This section presents the average scores of individual exercises (1-4) and the final group project completed over the last 5 years (2019/2020 to 2023-2024). Of the 116 students who enrolled, only the 94 who passed (81%) were included in this analysis. The remaining 22 students (19%) were excluded due to factors such as non-submission of more than two assignments or withdrawal. The average scores (0-20) for each exercise are shown in Chart 1.



Average performance on practical exercises in the past

Based on the results, several pieces of evidence regarding the performance and evolution of students over the last five years can be highlighted:

- Consistency in performance. The average scores for individual exercises and the final group project demonstrate a consistent level of performance among students who passed the course unit. This consistency suggests that the course content and assessment criteria have remained stable over the years.
- Gradual improvement. There appears to be a slight upward trend in the average scores across the exercises, indicating a potential improvement in student performance over time. For example, Exercise 1 has the lowest average score, while the final project has the highest average score. This could imply that students become more adept at applying concepts and skills as they progress through the course.
- Stability in performance. Despite fluctuations in average scores from one exercise to another, there is overall stability in the performance of students across the exercises. This stability suggests that students can maintain a certain level of proficiency throughout the course.
- *Relative importance of assessments.* The higher average score on the final project suggests that students dedicate more time and effort to it, recognizing its weight in their overall assessment. It also indicates their ability to apply knowledge effectively in a collaborative setting.
- Engagement and commitment. The fact that only students who passed the course unit were included in the analysis indicates a certain level of commitment and engagement among students. Despite external challenges leading to the exclusion of some students, the majority demonstrated the dedication required to succeed in the course.

Chart 1: The average score for each practical exercise in the past five years Source: own processing

 Room for improvement. While overall performance is satisfactory, some areas need improvement. Exercise 1 would benefit from structured guidance, such as templates and samples, to improve analysis coherence. Exercise 3 could incorporate deeper exploration of industry trends and theories for richer evaluations. Encouraging peer reviews and diverse discussions would further enhance analyses. Additionally, workshops on collaboration and project management could improve final project quality by fostering teamwork. Addressing these areas will help students maximize learning and academic success.

Over the years, students progressively shifted from viewing games as mere entertainment to developing a more critical understanding of game design. The following synthesis is based on recurring themes found in written reports, reflective journals, and endof-course feedback. In Exercise 1, students began to recognize the design decisions behind their favourite games, noting how mechanics and structure shaped their emotional engagement. Exercise 2 often led to a reassessment of indie games, increasingly seen as platforms for artistic and political expression, especially when addressing social themes and unconventional narratives. In Exercise 3, students showed greater confidence in critique, identifying flaws such as pacing issues or narrative inconsistencies. Exercise 4 prompted connections between national games and cultural or historical contexts, with many reflecting on how these works conveyed aspects of national identity. Finally, the group-based final project allowed students to consolidate their learning. Many reported that applying critical frameworks to AAA games and working collaboratively deepened their understanding of both game design and cultural significance.

These outcomes, consistently documented across multiple course editions, highlight the course's effectiveness in fostering critical thinking, creativity, and a nuanced view of games as cultural artifacts.

Findings and Lessons Learned

Implemented teaching strategies for digital game analysis effectively increased student engagement and interest. Through hands-on activities, active discussions, and a newfound cultural appreciation for games, students were motivated to explore and critically engage with the medium in meaningful ways:

- Hands-on activities promoting active learning. Hands-on activities, such as gameplay sessions and collaborative analyses, encouraged active student participation. By directly engaging with digital games and applying analytical frameworks in real-time, students were more deeply immersed in the learning process (Hilliard & Kargbo, 2017; Dicheva & Hodge, 2018). This active involvement not only heightened their interest but also facilitated a more comprehensive understanding of the concepts being taught.
- Active participation in discussions. Students showed strong enthusiasm for learning by actively engaging in discussions on digital game analysis (Barr, 2018). These exchanges allowed them to share insights, interpretations, and critical reflections on various aspects of digital games, including narrative structure, character development, and thematic elements, fostering intellectual curiosity and collaborative learning with peers and instructors (Qureshi et al., 2021).

- Newfound appreciation for digital games as cultural artifacts. Many students reported experiencing a newfound appreciation for the depth and complexity of digital games as cultural artifacts (Bogost, 2006). Critical analysis enhanced their understanding of digital games' artistic, narrative, and cultural dimensions (Styhre et al., 2018), sparking curiosity and motivation to explore different genres, styles, and cultural contexts within the gaming medium.
- Motivation to explore different genres and styles. The heightened engagement and interest observed among students led to increased motivation to explore a diverse range of digital game genres and styles. Students expressed a desire to expand their gaming horizons beyond familiar titles, seeking out new experiences and perspectives. This exploration expanded their understanding of diverse cultural influences (Soyoof, 2018) and artistic expressions (Bopp et al., 2021) in digital games.
- Enhancing learning through practical exercises. The implementation of practical exercises in this curricular unit has significantly enhanced student learning (Marklund & Taylor, 2016). Spanning diverse themes and analytical approaches, these exercises have consistently captured students' interest and enthusiasm while fostering critical and creative thinking in game studies (Drapeau, 2014). By analysing favourite, indie, underperforming, and national games, students sharpen analytical skills and deepen their understanding of narrative and cultural dimensions in digital games. These exercises also improve writing, promote daily practice, and support collaborative learning and communication.
- Cultural and diversity insights through digital game analysis. Incorporating diverse perspectives in digital game discussions has highlighted students' cultural sensitivity and empathy (Shliakhovchuk & Muñoz García, 2020). By analysing games from various cultural contexts (Balela & Mundy, 2015), students have gained a deeper understanding of cultural diversity and broadened their awareness (Toscano, 2011; Wills, 2019). Critical discussions on representation and inclusivity explore identity, race, gender, and sexuality (Malkowski & Russworm, 2017; Murray, 2023; Lynch et al., 2024), fostering nuanced insights into socio-cultural dynamics in gaming culture and stressing diverse media representation (Shliakhovchuk, 2018; Süngü, 2020; Mustafaj & Dal Cin, 2023). Students have also developed empathy for marginalized communities, advocating for greater diversity and inclusivity (Williams et al., 2009; Anthropy, 2012). Educators play a crucial role by challenging biases, promoting equity, and empowering students through respectful and inclusive environments (Sengupta et al., 2019; Eden et al., 2024).
- Limited access to gaming resources and technological limitations. Despite positive outcomes in teaching digital game analysis, challenges included limited access to gaming resources and technical issues. Some students, especially from underprivileged backgrounds, lacked consoles, computers, or games, which limited their engagement in hands-on activities. Additionally, compatibility and hardware problems affected gameplay. Educators adapted by using alternative platforms, such as free and browser-based games, to accommodate students with varying technological capabilities and ensure inclusive participation.

Overall, while the implementation of digital game analysis education yielded positive outcomes, addressing challenges and limitations is crucial for ensuring equitable access and participation among all students (Beavis et al., 2014). By actively addressing issues such as limited access to resources, technological barriers, and cultural biases, educators can create a more inclusive and supportive learning environment for teaching digital game analysis.

Conclusion

The exploration of digital game analysis in this curricular unit revealed valuable insights into student engagement, critical thinking, and cultural awareness, as evidenced by the comprehensive examination of practical exercises, case study results, and lessons learned. The consistent performance and gradual improvement observed in student assessments underscore the effectiveness of the course content and assessment criteria in fostering student proficiency over time. Furthermore, the stability in performance across exercises highlights students' commitment and engagement throughout the course.

Strategies such as hands-on activities, active participation in discussions, and the exploration of diverse cultural perspectives have elicited increased engagement and interest among students. This newfound appreciation for digital games as cultural artifacts has not only broadened students' understanding of the medium but also fostered empathy and advocacy for diversity and inclusivity within gaming culture.

The practical exercises, including the case study, have played a pivotal role in enhancing student learning, promoting critical thinking, and fostering collaboration. By challenging students to question established norms and assumptions within gaming culture, these exercises have cultivated a culture of intellectual curiosity and innovation, preparing students for future academic and professional endeavours in gaming studies. This outcome is supported by data drawn from 94 students who successfully completed the course between 2019 and 2024, through a combination of written assignments, oral presentations, class discussions, and final group projects, providing a longitudinal basis for evaluating the course's impact.

Despite these positive outcomes, challenges such as limited access to gaming resources and technological constraints remain, underscoring the need for institutional support to ensure equitable access and participation. Addressing these barriers is crucial to creating a more inclusive and supportive learning environment.

In conclusion, the case study and broader course analysis demonstrate the transformative potential of teaching digital game analysis and critique. Continued reflective, evidence-based course design and innovative pedagogical strategies will be essential to further enhance student learning and advance the field of gaming studies.

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Environmental Engagement and the Ecodystopian Narrative: *The Last of Us* and Its Anthropocenic Echoes

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50 Game Studies

ABSTRACT:

This paper explores the representation of Nature in the digital game The Last of Us as subversive of established ecodystopian tropes, providing a strong critique of anthropocentrism through its depiction of a world in which humanity is no longer on top. The paper focuses on the first digital game in the duology, with intertextual analysis of the second instalment and the HBO adaptation to support the framing of key concepts. While ecodystopian fiction commonly depicts environmental decline and scarcity to show the consequences of unbridled anthropocentrism, The Last of Us instead presents a world with abundant Nature that has turned hostile to humanity. Through an analysis of Nature's characteristics within the digital game, through the scope of ecocriticism and Marxist literary theory, this paper argues that the narrative at hand makes complex environmental concerns tangible through an immersive, post-apocalyptic landscape wherein Nature has become both monstrous and sovereign. The paper furthermore posits that the mycomonstrous antagonist, the Infected, is Nature personified, reflecting ecological negligence, capitalist overreach and anthropocentric hubris. Through its interactive format, The Last of Us functions as a narrative-driven medium that critically provides echoes of anthropocentric capitalist actions and their consequences, refuting the end of Nature through humanity.

KEY WORDS:

anthropocene, capitalism, digital games, ecodystopian, environmentalism, post-apocalyptic, posthuman, *The Last of Us*.

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Introduction

The depiction of Nature¹ in works of ecodystopian fiction or cli-fi plays an integral role in the world-building process and the subsequent message that can be drawn from it. As a cataclysmic event and/or its consequences are of an ecological nature, one is to consider the way Nature remains, disappears, or mutates in the context of the story at large and its different actants. In the digital game *The Last of Us* (Naughty Dog, 2013), hereinafter referred to as TLoU, Nature has not only remained present in the post-apocalyptic United States that the protagonists, Joel and Ellie, explore, it has grown both in prevalence and, more importantly, power. Through the narrative digital game structure, TLoU allows the player to explore this vast ecoscape immersively, interacting with and observing the Nature-conquered urban cityscapes and newly emboldened wilds while also experiencing new manifestations of Nature through the hyperobject-esque antagonist, a parasitic mycological force embodied in the Infected and its mutations derived from the Cordyceps fungus. This new abundance of Nature and its interactions with the remaining humans

¹ Remark by the author: As the focus is largely ecological, the term Nature is capitalised to indicate the vastness of what it represents, namely the combination of ecologies, environments, flora, fauna and non-human Nature altogether. Furthermore, it is intended to convey the gravity of its newly dominant position within the narrative.

and residual civilisations, active and abandoned alike, is in contrast to the usual ecodystopian tropes of scarcity and ruin.

The ecodystopian genre first appeared, as explained by Buell (2003) as "Malthusian nightmare and then, under the influence of Rachel Carson, as ecological poisoning and breakdown" (p. 227). Accordingly, the ecodystopian tends to focus on the destruction, loss or poisoning of the environment, often at the hands of humanity's capital-industrial greed; humanity's habitat shrinks and along with it humanity's chances for continued survival. In doing so, the *anthropocene* that forms the basis of contemporary socio-politics is contrasted and confronted. The genre, and Nature's fate therein, transports contemporary ecological fears to the world of fiction to explore its potentialities. TLoU builds upon these classically applied ecodystopian tropes to explore a hypothetical future in which Nature responds to humanity's reckless anthropocentrism by growing dominant rather than shrinking into scarcity.

To analyse the manner in which TLoU subverts and reapplies these ecodystopian tropes, this paper utilises a combined lens of ecocritical and Marxist literary theory. These theoretical frameworks are used as the narrative's key features combine both environmental and socio-economic factors. These factors are furthermore intrinsically linked as the environmental degradation and subsequent rebellion against human dominance are anthropogenic in nature. The Marxist literary lens in particular is applied to highlight the extent to which the pre-apocalyptic socio-economic modus operandi reflects contemporary capitalist structures and their impact on Nature and humanity alike. In order to better frame these underlying concepts, this paper draws upon the HBO series *The Last of Us* (Mazin et al., 2023-present) by the same writer, but focuses on the digital game for canonicity. While as an adaptation it is not strictly canon to the digital game, this paper utilises it for intertextual analysis.

The in-game world represents Nature in a manner that highlights the hybrid entanglement of such tropes in order to reflect contemporary worries accordingly. The overabundance in TLoU presents a new fear altogether, namely that of the complete loss of dominion over Nature as historically held by humanity and the subsequent replacement of humanity as the commanding force on the planet. This displacement of humanity from the top of the resource and land hierarchy, alongside the diminishing of humanity's free and rampant access thereof with which to uphold the anthropocenic supremacy previously held, establishes Nature as the rightful ruler of the planet and reduces humanity to an oppressed species. This paper therefore analyses the manner in which TLoU manifests Nature in opposition to humanity, showcasing the anthropocenic qualities that Nature takes on to become the dominant force on the planet once more.

As such, this paper argues that Nature in the world of TLoU is posited as a confrontational echo of humanity's eco-destructive behaviours and provides the player with opportunities to reflect on the contemporary techno-industrial state of the world in order to allow for a strong engagement with environmental discourse.

Reaping What the Anthropocene Sowed

TLoU's representation of Nature builds upon the concept of hyperobjects, in particular those of an ecological and capitalist nature, and presents the player with the consequences thereof. The hyperobjects are made tangible and force an engagement that is meant to bring both the source of the hyperobjects and their real-life echoes, reflecting contemporary socio-politics, to the foreground. Morton (2013) explains hyperobjects as

things that are massively distributed in time and space relative to humans. A hyperobject could be [the biosphere,] the sum total of all nuclear materials on Earth ... the very long-lasting product of direct human manufacture [or] the sum of all the whirring machinery of capitalism. (Morton, 2013, p. 1)

TLoU's world thereby presents the player with hyperobjects of an ecological nature through the evolution of the landscapes they traverse, exploring the convergence of Nature, human-made nature, and human-built structures. Considering global warming as the epitome of ecological hyperobjects, TLoU makes this contemporary concern palpable through the pandemic-spawned antagonists, the aforementioned Infected, to which the subsequent ruin of civilisation is attributed by the in-game characters, although a critical reading will unearth the human source. In the HBO adaptation of the digital game, the opening scenes explore this underlying human source through a scientist on a talk show who, foreshadowing the events-to-come, explains:

Fungi cannot survive if its host's internal temperature is over 95 degrees. And currently, there are no reasons for fungi to evolve to be able to withstand higher temperatures. But what if that were to change? What if, for instance, the world were to get slightly warmer? Well, now there is a reason to evolve. (Druckmann & Mazin, 2023)

The digital game does not explicitly state what caused the cordyceps to gain the ability to take over human bodies, nor how precisely it spread across the world, but through a close reading of the narrative this paper argues that a direct link between industrialcapitalist anthropocentrism and the demise of humanity in TLoU can be established.

Nixon (2011) describes humanity's impact on the environment as "slow violence", meaning "a violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, and attritional violence that is typically not viewed as violence at all" (p. 2). As the HBO adaptation muses, the Cordyceps may have been subjected to climate change and other environmental factors that evoked a need to evolve, only to then reach a peak at which point they – representing Nature in opposition to humanity – turn on the human forces that presumably caused their change. Thereby, in the sudden chaos of the prologue that sees riots, fires, explosions, an airplane crash and military suppression of citizens, the game engages with a question posed by Nixon (2011), namely

how can we convert into image and narrative the disasters that are slow moving and long in the making, disasters that are anonymous and that star nobody, disasters that are attritional and of indifferent interest to the sensation-driven technologies of our image-world? (Nixon, 2011, p. 3)

The betrayal of Nature in the form of the Cordyceps and its conquest of human bodies, its sudden uprising against humanity and the subsequent breakdown of human structures, brings this slow violence to the foreground. The player is thereby forced to acknowledge the violence enacted on the environment and uncover humanity's role therein. The catalyst of the eco-apocalypse of TLoU stems from human influence and, accordingly, presents the extent to which hyperobjects are evolving at the hands of humanity, resulting in the shaping of a world averse to human life.

The environment is in and of itself already a hyperobject, boundless and timeless, but the Cordyceps imbue it with echoes of anthropocenic hyperobjects that highlight anthropogenic effects on the environment further. As hyperobjects are, by nature, difficult to grasp in terms of size or impact as they are often beyond the quotidian experience or lack the tangibility with which to understand the role they play, TLoU's world-building and digital game format allow for some of these hyperobjects to either come to the fore or become palpable. Mehnert (2015), in analysing how one is meant to internalise these matters, asks how one might "think about something as intangible and invisible as climate change, which does not affect our lives immediately, but rather possibly at some future time? And if we cannot notice the effects, why should we act on them?" (p. 344). TLoU, while being a digital experience, brings these matters to a more physical realm; thereby, it allows the player to interact with and be subjected to more directly-engaging forms of ecological concepts and witness the anthropogenic interplay therewith. Murray (2024), in analysing the potential of digital games in environmental literacy, describes the role of the visual in engaging with ecological impact, acknowledging that they are "often too large and gradual to grasp" (p. 154), while placing this within the context of contemporary capitalist life which "relies upon an enormous number of images to stimulate and maintain desire" (p. 154), thereby leaving a complex burden for the visual media.

Perhaps the most notable hyperobject reflection in TLoU is the concept of the infectious fungal spores; lingering in places for undetermined periods of time and widely prevalent in this new ecodystopian world, they are an ever-present invasive danger. These spores seem to reflect two separate, very human perils: microplastics and pesticides. Buller (2022) attests to the former, observing that "now [there is] more plastic in the oceans by mass than there were whales before whaling devastated their populations" (p. 228). The latter can be summed up succinctly by Carson (2000) as "the pollution of the total environment of mankind" (p. 32). As such, the spores are equally invasive, pervasive, and devastating, and contact therewith ensures a loss of the individual's senses in order to enlist in the mycomonstrous army against their will.² This paper argues, furthermore, that Carson's choice of words is particularly applicable here, namely that while the environment of mankind might be polluted, TLoU's mycological contender need not make its environment habitable for mankind. Accordingly, alongside the fungal networks that sprawl across cities, the effects of the Cordyceps are far-reaching and deeply impactful, mimicking the human impact on the planet and thereby limiting the survival of the selfsame human inspiration. As observed by Vogel (2011), "in the context of phenomena like global warming every spot on earth has already been changed by human action, ... and it does not seem so strange to say that that world is the product of human action" (pp. 196-197).

The tables have been turned and Nature has internalised anthropogenic behaviours to now sow the same seeds in reverse; humanity, its remnants few and far between, now suffers Nature's rebuttal all around, and little opportunity for survival remains. The hyper-objects that were initially too far removed from the lived experience and too large to grasp, suffering humanity's invisible slow violence in the recesses of modern living, are forcibly introduced into humanity's daily life, present, and future – threatening the end thereof – and accordingly demand a need for engagement and acknowledgement.

Nature to the Fore

The player, in exploring the traversable world of TLoU, immerses themself in a world overgrown and overtaken by Nature, bringing ecology to the foreground and drawing the role of humanity therein into question. The cityscapes show dilapidated skyscrapers overgrown with greenery, slanting or fallen altogether, with unchecked *rewilding* taking

² Remark by the author: The author hereby coins the term 'mycomonstrous', used to identify a subtype of monstrous that stems from fungus.

place within and without. The manner in which Nature is taking back land from civilisation is akin to the contemporary concept of rewilding, as promoted by radical environmentalists. Although it stems from an "eco-centrism [which] invokes temporalities beyond the human, [it also makes] human action accountable to times and spaces beyond immediate sensibility [, allowing] natural processes to resume" (Mitchell, 2020, p. 161). It is this reach beyond individual time and even that of humanity as a whole that once more interlaces hyperobjects and the relationship of humanity with Nature, furthermore allowing for the reintegration into Nature with which to combat *alienation*. In designing the world as such, TLoU presents a visual representation of Nature's newfound dominion over lands and structures once held by mankind. As such, the environment becomes a confrontation rather than a backdrop – through wayfinding puzzles, resource scavenging and the remnants of texts, graffitied and printed alike, the player does not fight *within* the locale, but rather fights the locale itself.

When compared to other recent eco-dystopian and post-apocalyptic digital games that present similar yet starkly different worlds, TLoU's unique approach becomes more apparent. Fallout 76 (Bethesda Game Studios, 2018), the latest instalment of the Fallout (Interplay Entertainment et al., 1997-2018) franchise which also saw a recent screen adaptation, presents a world ravaged by human war. While the environment mixes devastation and rewilding, it remains a passive backdrop, and its dangers remain largely human. The player can contract diseases, in part through radiated environments and enemies that are still processing the effects of nuclear fallout. Herein, the antagonistic force remains very directly anthropogenic, be it through human factions vying for control or the radiation leftover from direct human action. In contrast, the post-apocalyptic Death Stranding (Kojima Productions, 2019) shows an overwhelmingly lush natural environment with spells of decay-inducing rain wherein humanity keeps a technological upperhand. While Fallout 76 is action-heavy, Death Stranding presents a slower exploratory experience and retains the semblance of human dominance and excellence that drives anthropocenic advancement. TLoU distinctly stands apart from both, exploring a world of human remnants fallen to an ecological force and abandonment, the loss of anthropocenic superiority, and posing dangers that are the result of humanity's slow violence rather than its direct violence, thereby echoing the background goings-on and passive actions of contemporary humanity.

TLoU furthermore counters an observation made by Murray (2024) regarding the player's engagement with the land and its resources, stating that "as a player, one spends a great deal of time scanning spaces for food, tools, and supplies, scavenging them, modifying them, allocating or otherwise managing them [, which] encourages seeing the space through a mindset of exploitation" (p. 157). The circumvention of this feature so common in digital games is derived from the aforementioned fighting of the locale and, additionally, through a large portion of the scavenging being in formerly human dwellings to retrieve human-made items. In the former case, exploitation cannot be considered a viable option, as the environment cannot be subjugated in its current state. In the latter case, the scavenging of people's items in their former places of work or residence further cements the idea of humanity's temporaneous nature, shaking the foundations of the former confidence with which humanity did indeed exploit the natural world. Fallout 76 is loot-heavy and includes a monetary system through bottle caps, making scavenging part of a larger economic system, whereas Death Stranding presents findable materials that are recognisably human and in overall excellent state, once more cementing the anthropocenic superiority that persists even in this diminished version of mankind. TLoU's scavenging plunges the player down to the lower rungs of survival left to humans in the domineering *mycoscape*,³ all the while reminding the player of humanity's temporality and new place in the post-apocalyptic food chain.

Encroaching upon human dwellings, Nature displaces the inhabitants that staked their claims to the land at hand; the removal of humans from cityscapes and the abundant greenery contrast starkly with remnants of the pre-apocalyptic world, such as banners that proclaim the city to be 'all American'. Through TLoU's worldbuilding and the manner in which the player is able to engage with their surroundings, the player can immerse themself in a situation that reverses contemporary anthropogenic activity in favour of an ecocentric world hostile to their survival.

The manner in which Nature is present in TLoU evokes the concept of the pastoral through these aforementioned newly-formed untamed wilds. These newly green spaces force humanity back into the role of explorer and hunter-gatherer, demanding reflection on the source of their being while also considering their relationship to Nature. This con-frontation, as explained by Garrard (2012), is innate to the pastoral, going beyond a mere locale and instead serving as a "reflection of human predicaments" (p. 39). TLoU's immersive world-building, and the player's engagement within that locale, allows for Nature to take on that reflective role, acting as an echo of anthropocentric actions and the potential consequences thereof; accordingly, it provides a visual opposite to the techno-industrial actions so prevalent in contemporary society.

Although the world elevates the story to something fantastical through its mycomonstrous Infected, the environment is not reduced to a backdrop, playing as much of a role in its confrontational message and its story as the anthropomorphic enemies that lurk within. Within the world, both in its overgrown cityscapes and non-human environments, abandoned relics of humanity's prime are scattered about, be they abandoned vehicles, signs, infrastructure or others. These remnants pockmark the landscape that the player traverses, allowing them to witness the slow erasure of what was once a firmlyestablished dominant species and its culture. Showcasing these artefacts as such, TLoU brings a sense of temporality to the fore, removing the sense of immortality that humanity's environmentally-disregarding march embodies. This sense of an end to humanity, which in contemporary socio-politics seems unthinkable, becomes all the more real in light of the fungus' longevity, borne on the unimaginable expansiveness of its all-encapsulating being.

TLoU's digital game format allows for a more immersive and engaging experience with these *posthuman* visions of the future, which this paper argues fits Mehnert's (2015) idea of "new hybridised forms of the novel [which may emerge to be] the medium best suited to engage with this gradual, individual yet (at the same time) global phenomenon" (p. 342). The traversing of TLoU's ecodystopian world creates the immersive experience needed for the player to engage with the contemporary ecological discourse that aims to acknowledge anthropogenic influence and avoid its potentially eco-apocalyptic consequences. Aligning with Mehnert, Murray (2024) observes that "one way or another, and whether or not a game contains specific ecocritical themes, video games – almost all of them – work on our relationship with the environment" (p. 157). This paper argues that, through the strong presence and role played by Nature within the world of TLoU, it has brought the environment *out* of the environment, elevating it from mere parallax. Nature is presented centrestage, both as a land to traverse, an enemy to either fight or sneak past, and a consideration that cannot be omitted from plans to reinstate humanity as a continuous lifeforce on the planet.

³ Remark by the author: The author hereby coins the term 'mycoscape', used to denote a landscape distinctly overrun and controlled by mycological forces.

The Capitalist Catalyst

Hitherto, humanity has held steady influence over non-human Nature either directly or indirectly through anthropogenic activity brought about by industrial, technological and, overarchingly, capitalist expansion and progress. The supposed coverall of green capitalism, which aims to offset ecological destruction, has the potential to enact negative influence on the environment through the disruption of the delicate balance that Nature itself painstakingly reached. Buller (2022) analyses such human amendments to Nature, stating that the "Carolinian coast [, where] human-made changes to the landscape ... have left the land poorly protected from an advancing ocean whose intrusions routinely soak the earth with salt, choking the trees" (p. 227). Buller's anecdote exemplifies the quotidian anthropocenic influence that disrupts the environmental balance through supposedly insignificant changes which stack up to wreak more havoc than the initial move could have possibly predicted. Carson (2000) lays the groundwork for this balancing, explaining that "[while] our agriculture-based life depends on the soil, it is equally true, that soil depends on life, its very origins and the maintenance of its true nature being intimately related to living plants and animals" (p. 43).

The extent to which humanity is able to influence the environment is largely shortsighted, resulting in unexpected or disregarded consequences that topple the structures that keep environments functioning properly, if at all. In much the same way, humanity's activity in the world of TLoU is posited as having caused its eco-apocalyptic setting through dominoed actions stemming from anthropocenic capitalist, feeding a technoindustrialist hunger that shapes the world accordingly. The parasitic fungus, Cordyceps, may have found new opportunities, and new reasons, to evolve at the behest of environmental changes brought about by climate change. Herein lies the aforementioned reason to evolve, inducing evolution not through the natural trial-and-error of aeons past but kick-started through rapid change at the hands of human progress. Through this snowball effect, which ultimately plummets the humans of TLoU down the natural hierarchy, its ecodystopian world explores an extreme future of which the causes reflect contemporary capitalist practices observable in real-life, thereby echoing ecological fears and worries regarding the potentially fatal consequences of anthropocentrism gone unchecked. In respect to canonicity, the Cordyceps' need to evolve and subsequent development of the capacity to take over human bodies is explicitly stated in the HBO adaptation but does not see similar confirmation in the digital game. However, as will later be argued, while the exact cause of the Cordyceps' mutation is unclear, its facilitation and spread is rooted in anthropocentric capitalist's modes of production and networks of consumption. As such, this paper argues that adaptation's explanation of how the infection came to be can be speculatively applied to the game to better frame the events and their underlying causes.

Humanity's influence on the natural world as a talking point in contemporary sociopolitics has seen an increase in prevalence alongside its historical prevalence in popular fiction. The common takeaways from such fictions, however, remain largely anthropocentric, focussing on the off-setting of negative effects with unrelated eco-positive actions, while neglecting to address the anthropogenic causes and the need for their termination, in order to uphold human-favoured comforts. Buller discusses the manner in which governments attempt to right these wrongs through green capitalism, which is meant to allow for the continuation of capitalist activity, while covering the undesirable ecological impact in a shroud of actions that are meant to benefit Nature elsewhere. Ultimately, the continuation of capitalist activity is considered to be more important than the preservation of the environment. This paper contends that the extreme reduction thereof in TLoU, bringing techno-industrial practices to a practical standstill, forces humanity to forego this wrongful prioritising in favour of a reassessment of the human-nature dichotomy and the role techno-industrial progress might play therein.

In describing the aforementioned green capitalist actions, Buller (2022) refers to the impact on other countries through the "financialisation of ecological conservation [as] a pathway toward further neo-colonial control" (p. 263). This neo-colonial interpretation of the displacement of ecological impact posits rich countries as the decision-makers in a global chain of pollution-mongering at the hands of which poorer countries, overwhelmingly in the global south, suffer as they lack the means to refuse their wealth and influence. Continuing her point, Buller (2022) explains that "green capitalist solutions are predicated on the continuation of the destructive processes, systems and economic relations that have both delivered us into this state of crisis and severely delayed action to stymie it" (p. viii). As such, contemporary anthropocentric actions spearheaded by the capitalist status quo contribute to the existing crises of which the potential consequences are translated into *climate fiction*, or *cli-fi*, such as TLoU.

The HBO adaptation solidifies the innate link between capitalism in the global north, worsening conditions in the global south and the ecological consequences thereof. The series does so by providing the parasitic Cordyceps' in-world backstory, showing its roots in an Indonesian flour processing plant where the fungus invades its first human victim (see Mazin & Druckmann, 2023). The army gets a mycologist involved to better understand the situation, hoping to counter and contain it, only to realise the chances of success rely on great human sacrifice, namely the bombing of the whole city to realise the minute chance of eradicating the parasitic fungi before they are able to spread. Such bombing is present in the digital game, as the official art book similarly describes "the area immediately beyond [the guarantine zones] has been bombed to ruins in an effort to keep the infected at bay" (Edidin, 2013, p. 53). This is ultimately in vain as the fungus has long infiltrated the flour produced in the factory which was subsequently shipped globally for human consumption. The digital game does not provide an explicit backstory as such, but provides hints through the different textual artefacts that can be found throughout the game, one of the first of which providing a similar link between the Cordyceps and food export networks, namely in a newspaper in the prologue that reads:

ADMITTANCE SPIKES AT AREA HOSPITALS! 300% INCREASE DUE TO MYSTERIOUS INFECTION ... The Food and Drug Administration's investigation of crops potentially tainted with mold continues across the country. Initial lists distributed to vendors nationwide warned against crops imported from South America, but now the scope has extended to include Central America and Mexico. (Naughty Dog, 2013)

Accordingly, the post-apocalyptic world in which TLoU casts its humanity is a result of the networks of capitalism which both bred the fungal antagonist and facilitated its widespread coverage, exemplifying through its horrific, albeit fictional, consequences the very real ecological consequences that contemporary capitalist systems might ultimately cause. Therefore, the impact of the ecological well-being of the world is shown to be greatly interconnected and dependent on global capitalist activities, providing ecodystopian potentialities that occur when these actions proceed unopposed.

Cordyceps Militaris: Nature Militarised and the Darwinian Fray

Beyond being spawned by the capitalist and neo-colonial activities that echo the real world, the Cordyceps in TLoU seemingly mimic these self-same activities and behaviours, exhibiting qualities that reflect the capitalist modus operandi with which to exert its own posthuman control. The Cordyceps play the role of a colonial force in their own right, driving out local inhabitants and forcing them to acclimate to a new way of life. Through this fungal catalyst, Nature is able to usher in a posthuman world, building upon the fungus' inherent networking properties with which to expand and conquer. In doing so, the fungus decreases humanity's chances for survival and diminishes its chances for retaking the Darwinian throne. Sheldrake (2020) analysed fungal behaviours that this paper argues can be used to better understand the Cordyceps' innate affinity for such actions, including an experiment that showed how the fungus went from "exploratory mode, proliferating in all directions[, choosing] all possible routes at once [to then reinforcing] the links that connect it with the food [following which] it prunes back the links that don't lead anywhere" (p. 47). This strategic behaviour is akin to that of an invasive colonial force, finding worthwhile points of interest and establishing, then fortifying, supply lines with which to stake their claim. Sheldrake's (2020) conclusion fits neatly in the analysis of TLoU's fungal antagonist, as he states that "one can think of it in terms of natural selection" (p. 47), which, when applied to the forcibly evolved Cordyceps, brings Nature into the fray as part of the survival of the fittest environment humanity has established.

Aside from the underlying fungal networks, TLoU's Nature is furthermore made tangible in the Infected, mycologically zombified humans that personify Nature and hunt humans in order to turn them, further expanding the fungal network that has already firmly rooted itself into formerly human spaces. Taking the full scope of the Cordyceps' influence into consideration, in its new-found prevalence across human regions, it exhibits human properties that were once used to quell Nature. That is to say, Nature is forced to take on human gualities in order to confront humanity's disregard of the environment, thereby endeavouring to become the dominant force on the planet and usher in a posthuman world. This paper asserts that the world of TLoU thereby shows how humanity enables its own downfall, spelling the end of the anthropocene with an ironically anthropogenically mutated Cordyceps that empowers non-human Nature and the expansion thereof. Nature, thus, seizes or disrupts humanity's resources, its means of production, dwellings, modes of transportation, and communication networks, thereby bringing the rampant capitalist anthropocentrism to a standstill through a unified, global front; Nature divides and conquers. TLoU's fungal antagonist can, through this lens, be considered a posthuman colonial force par excellence, anthropomorphic in its behaviour, albeit lacking sentience per se, and reducing humanity to an oppressed 'lesser', subjected to the cruel whims of a stronger culture.

The need for a communal opposition is explored in the aforementioned post-apocalyptic digital game that deals with a semi-posthuman environment, *Death Stranding*. As explored by Navarro-Remesal and Torres (2024), *Death Stranding* provides the player with a "world where humans, society, the landscape, and even the climate ... are out of balance" (p. 225). While TLoU largely posits humans against each other in a multifaceted power struggle, *Death Stranding* tasks the player with "[linking remaining] human dwellings to the Chiral Network, a sort of metaphysical internet, [to allow] them to communicate and share 3D-printed resources with each other. Regeneration (of oneself, of society, of the land) is thus firmly linked to community" as such presenting as "an allegory of the need to be united in front of adversities to create a better world" (Navarro-Remesal & Torres, 2024, p. 225). Socio-political remnants from before the pandemic have not given way to such teamwork, leaving TLoU's humanity to struggle against the force of Nature that has taken control through its mycorrhizal network of subjugation and surveillance enforced by its personified army of Infected.

The Last of Whom

The quondam control over Nature held by humanity is borne on the alienation so prevalent in the contemporary capitalist state of existence, allowing for the needed distance that allows for the environmental disregard that keeps the status quo aloft. Paradoxically, however, the approach taken to Nature in ecological fiction is one of interconnectedness, as explained by Morton (2007):

Although ecological texts frequently strive to disconfirm the end of the world, their rhetoric of ecological apocalypticism revels in the idea that nature will be permanently "gone." We imagine our own death via nature. This has nothing to do with nature. To truly love nature would be to love what is nonidentical with us. (Morton, 2007, p. 185)

As this paper previously argued, TLoU steers clear from the common scarcity-narrative of ecodystopian fiction, as a result of which it allows for the closing of the distance between human and Nature. The player's agency within the world at hand, interacting with the environment and being affected by its ecomonstrous manifestations, brings Nature back into the realm of direct effect; the alienation normalised by capitalist modes of living is forcibly overwritten by plunging humanity back into the midst of an environment that demands engagement for the sake of survival. This estrangement is in and of itself a result of the capitalist disregard for the well-being of Nature, considering it solely for the harvesting of valuable resources. While living off the land for self-sufficiency is not inherently harmful, industrialised approaches that consider profits and guotas instead of meeting needs have led to the anthropogenic consequences contemporary society now faces. Buller (2022) describes this as "the accelerating commodification and financialisation of the environment as a site of accumulation, control and deepening inequity" (p. 230). This has been possible, in part, due to the existing pastoral misconception of Nature as a "stable, enduring counterpoint to the disruptive energy and change of human societies" (Garrard, 2012, p. 63). TLoU shows the fault in this observation by presenting Nature as, indeed, enduring not just beyond the disruptions caused by humanity, but enduring beyond humanity itself. The alienation at the foundation of humanity's abuse of Nature evolves into complete sundering, leaving humanity in the past as Nature marches on.

The protagonists in TLoU ultimately aim to end the ecodystopian state of being by eliminating the Infected and their fungal sources through a vaccine derived from Ellie's immunity, hopeful that such a vaccine would stop future infections from occurring and thereby allow humanity to once more band together; in other words, to re-establish their former dominance. The player is prompted, however, to consider whether or not a more harmonious alternative could exist, realising the *middle landscape* through a vision of that which is "neither wild nor [over-civilised], where the dream of harmony between humanity and nature might be attainable" (Marx, 1999, p. 377). A conception of such balanced

societies occurs when Joel is reunited with his brother Tommy, who, together with his wife Maria, leads a peaceful and self-sufficient commune, which the art book describes as "a balance between the harsh realities of survival and the hopeful look of a self-sufficient and self-sustaining town" (Edidin, 2013, p. 96).

Later on, nearing the end of the story and thus the aforementioned potential reversal of the ecodystopia at hand, the player is shown a similarly idyllic vision, as Joel and Ellie look upon an overgrown cityscape, lush with new greenery, as a journey of giraffes gently roam the clearing. Coming face-to-face with these gentle creatures, petting them, the player bridges the gap between the human world and the peaceful natural world, a connection that aims to bring the player to conceptualise a synergetic way forward. The giraffes serve as "a metaphor for Joel and Ellie as two creatures also sprung from their cages. They walk with loyalty and mutual respect now, side by side, hoping and expecting to find redemption" (Edidin, 2013, p. 114). Joel asks Ellie whether the outside world beyond the walls of her Quarantine Zone has lived up to her expectations, to which she aptly responds that while it has its ups and downs, the view cannot be denied. Herein lies an important consideration; is this harmonious vision indeed no more than a vision, a view to enjoy, which cannot be 'denied' as beautiful, but perhaps must needs be denied as a functional future? This paper hereby turns briefly to The Last of Us Part II (Naughty Dog, 2020), although outside of the scope of this writing, to answer this question, as it shows Joel and Ellie as productive members of the commune, flourishing and happy; a communal, harmonious middle landscape achieved while the fight against the mycomonstrous continues is shown to be possible. Exploring this harmonious potentiality would make for lucrative research in the field of ecodystopian studies and this paper argues in favour of it being picked up. This paper contends that this vision can be interpreted as a harmonious way forward in our contemporary world, which can be established while still fighting anthropogenically caused dangers in order to halt our contributions thereto and fight for the halting of the anthropocentric capitalist march.

Conclusion

TLoU presents Nature as a force that is on the brink of erasing humanity in full, combining and subverting established ecodystopian tropes. Through the reflections of anthropocenic behaviours, products and actions, TLoU's Nature demands the player's engagement with the underlying contemporary environmental discourse that confronts the anthropocene's inherent socio-political goings-on. Through its embodiment of anthropocenic qualities, Nature forewarns a posthuman future that strikingly replaces the anthropocene that caused it.

TLoU hybridises past manifestations of ecodystopian and posthuman fears to represent Nature in a form that effectively summarised current socio-cultural, -political and environmental discourse. TLoU confronts the player with a tangible, engageable and comprehensible potentiality with which to forewarn the dire consequences of anthropocentrism left unopposed. As such, this paper asserts that the manner in which Nature is depicted in TLoU allows for the player to envision humanity on the receiving end of its own eco-adverse actions and, through that, understand that the contemporary technocapitalist path forward will culminate in potentially catastrophic consequences.

As such, TLoU's Nature makes a clear case for ecological engagement while bringing deeply-entrenched behaviours and conceptions to the foreground. The narrative digital game format can prove to be effective in immersing the player into an environment that

evokes introspection and a deeper understanding of anthropocentrism and its potential consequences, exaggerated in form but real in effect. Further research into the digital game format measuring this understanding, learning and, potentially, engagement outside of games is a worthwhile endeavour to bring digital games into a sphere of greater influence. This paper could serve as a valuable contribution to further such research, while also demonstrating how narrative-driven digital games, TLoU prime among them, engage with ecological and socio-political themes. As such, real-world concerns could be addressed through TLoU, in part and in full, to increase ecocritical media literacy, especially with younger audiences.

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A Paper Ball: Play, Agency and Space in Dispute

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ABSTRACT:

This philosophical exploratory paper considers the ontology of play and toys, specifically balls, showing that play is an autotelic phenomenon that reorganizes time, space and material relations. Its objective will be to start developing a philosophical definition of 'play' that includes imaginative play but does not rest on the idea of imagination but instead on the materiality of playing, in order to make it coherent with more physical games. We start from the analysis of play in classical phenomenology, finding that its perspective fails on two counts: That it rests on the idea of 'imagination' in order to define play and on something akin to the Waltonian 'prop' as the archetype of toy and, relatedly, that choice does not seem to be able to account for more physical types of play. We will then try to explore games by placing the materiality of playing and the ball as a technical object at the centre of the analysis. This path will open the network of interactions that, following Latour, we can see actualized in the ludic, revealing its inherent political nature. We will conclude by recovering the Heideggerian and Finkean notions on autotelicity and the space-time articulating character of the game, but now on material grounds that allow a more comprehensive and nuanced characterization of games, toys, playing and player.

KEY WORDS:

ball games, balls, Bruno Latour, phenomenology, play, play space, postphenomenology, toys.

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Introduction: Do Not Play Ball

After a series of schoolyard accidents at the school where we work, ball games were banned. One day a group of four or five 13-year-olds came to us asking for some adhesive tape. We lent it to them, but we also went to find out what they were doing. They were wrapping a large wad of paper with tape. When we reminded them of the ban, they said: "This is not a ball."

We took the tape from them, but half amused by their quip, and half unwilling to uphold the rule, we did not confiscate the non-ball. It seemed the work was done. The children went out into the yard and stood in a circle. The circle was relatively closed and small, and within it they began to pass their relatively spherical, ontologically undefined body around.

The truth is that the situation was different from what would normally occur if they were playing with what we would customarily define as a *ball*. Our school playground is set up for P.E. activities and therefore has two soccer goals located at the ends of the playing area, which is defined by a series of white marks painted on the cement. In their usual play, depending on the ego of the children, they would occupy between half and the entire field. Perhaps they would be kicking penalties, or they would spread out to occupy the entire space, in the hope that others would join in.

Around the ball game, any ball game, a space is opened so that the ball can move, as much as it can do so. The rest of the people in the playground have to move, make space for the ball. This is the first reason – perhaps our 'rational excuse' – why we adults decided that ball games were off-limits. They appropriate a common space. They 'privatize' the playground, and those who do not participate in the game are relegated to the sides.

Of course, this problem becomes most evident when the game we are talking about is soccer. That particular type of ball game. The soccer ball has historically been developed to increase its range and manoeuvrability both on the ground and in the air, and the distance between players is therefore greater.

That, it is true, is not a problem that we were going to have with the paper ball. It does not bounce, nor does it move as much. Out of necessity, it is going to occupy a smaller space. That does not mean that the game stops being a ball game. It is not a problem either with the kids who play volleyball. First, because there are full courts inside the gymnasium, where they are supervised by P. E. teachers. Kids who play in the yard with volleyballs, in general, play passing games, in perhaps wider but still limited circles.

But the volleyball, like the soccer ball, rises. It bounces, it goes up over the rooves, inevitably it gets stuck. That is the second reason – more material – why we adults decided that the children could not play ball. They are not allowed to climb to high places, and teaching staff insurance would not cover falls from the roof, so retrieving the balls became the task of the janitorial staff, who would also have to retrieve and use a ladder in order to get it down.

Both the soccer ball and the volleyball are highly standardized technical products, with a technological tradition in which their capacity to gain altitude was sought and perfected with time. Both have the potential to go, with a poorly placed blow, beyond the reach of a hand. In turn, as industrial products, they have an economic cost for the – usually low-income – families of our students, which makes it necessary to try to recover them.

That is not a problem, again, that we are going to have with our wrapped bun. Firstly, because paper does not bounce and, furthermore, because it will not rise as high. On the other hand, it is disposable. If it gets stuck, nothing of considerable value has been lost.

But then, the order from the school administration arrives, bearing the force of the law. Both the children and we adults know that what they have *is* a ball, and that what they are playing *is* a ball game. If the adults who were supervising the situation had not stopped them yet, it was actually because we were not very willing to enforce that rule either. But what the kids were doing was testing its reach, the foundations of its authority.

School admins saw clearly that we were facing a slippery slope. If the small ball of paper and tape grew in paper and tape until it was the size of a soccer ball, was it still not a ball? What if it was a tennis ball? What happens – this happened to us some time later – with a rugby ball? Are they 'playing ball', even if that is not what the expression normally refers to in our country, Argentina? The problem was, ultimately, who owned the space of the playground.

Within the playing space established between the players and the ball, it is not the institutional rules that apply, but the rules of the game that is being played. In order for the rules of the game to align with the institutional rules, the institution must negotiate with the players, and it would not be surprising if a good part of the rules of soccer arose from the frustrations of adult teachers like us in the English public school system.

In a context in which an attempt was being made to assert institutional authority over the space of the schoolyard, consenting to a relaxation of the rule that – although fun and charming – was being tested in bad faith, was a mistake.

What would you do, reader, in this situation? Because the question, beyond the level of complicity or rigor with which you decide to apply the rule, is ontological. When, for what reason, does a wad of paper wrapped in adhesive tape become a ball? Because it is spherical? The rugby ball is not spherical, but it is a ball. Because it can roll? So, passing games should not be a problem. Because of bouncing? Then bocce balls would not be balls. At what turn of the tape does the transformation take place? Surely, at the one where the kids determined that they could use it to play a ball game.

But on the other hand, what would happen with an inflatable globe? Although it can obviously serve as one, it is not a ball in the geography classroom – although, obviously, that would have to be clarified repeatedly by whoever led the class. Clearly, it would be a ball as long as it was used to play a ball game. They and us know this. But what is, then, 'playing a ball game'?

If the definition must cover the entire spectrum – from bocce, to golf, to badminton – there is no other option than to say that it is a set of games that are played with balls. But we have just said that being a ball is defined by being part of them.¹ A spherical body, by itself, is not a ball if it is not part of a game. But what is, then, 'playing'?

The question about *play*, its nature and its role, has always been a concern of the humanities, but it can be said that it was from the end of the 19th century and the beginning of the 20th century that it was really thematized (Torres, 2002). Phenomenology was not alien to this concern, with the elaborations – which we will analyse throughout this paper, but mainly in the first section – of Heidegger (2024) and Fink (2016). In the opinion that we will develop here, even when they offer a series of fundamental central ideas, these positions make two mistakes: Firstly, they take as an archetype of play what we could identify as the game of 'make-believe' or Waltonian imitation (Walton, 1990), and as an archetype of toy, the doll. Along with – and perhaps because of – this, these perspectives suffer from what Ihde (2009) calls a "subjectivist style" that does not seem to be able to account for other types of play that seem to emerge contemporaneously with playing with dolls, such as ball games. It is difficult to accept a characterization of play in which we cannot include them, or in which we must make them unrecognizable to fit it into the framework.

Instead, in the second section, we will try to start exploring a definition of play that takes as a starting point its materiality. To do so, we will we resting heavily on Adams and Thompson's (2016) first and second heuristics for interviewing objects. In the same vein, we will be deeply influenced by Ihde's (2009) postphenomenology and Latour's (1994) analysis of actants' networks. This will allow us not only to approach a more inclusive concept of play, but also to throw new light on its inherent political nature.

In conclusion, we will try to show that *play is an autotelic, object-driven enactment that transforms ordinary space-time and even institutional orders.* These theoretical choices – particularly, the choice of a postphenomenological perspective – will require the author to adopt, at some moments, an auto-ethnographic style. Mainly, because the referred anecdote that constitutes the nucleus of the paper, involved him. But, while the experience itself may be purely subjective, the problems and ideas they inspire may be shared by the reader.

Also, though the objective of the paper is to begin to explore a material definition of play, it does not hope to reach it. Such a thing, if even possible from a philosophical standpoint, is open to future research by the author and, hopefully, by those who consider that something useful may be rescued from these reflections. The option for a material, post-phenomenological and ontological perspective, and the focus on the autotelicity of play, will also mean that, as much as possible, we will try to stay far from organized and spectator sports – with its own network of actants and interests – which would far surpass the reach of this paper. That question remains open for those who would wish to confront it.

¹ Remark by the author: Wikipedia defines "ball" as "...an object used in ball sports and other games" ("Pelota", n.d., para. 1), and "Deporte de pelota" as "...a game or sport in which its essential element is a ball" ("Deporte de pelota", n.d., para. 1).

Finally, it must be noted that this inquiry situates itself explicitly within the domain of philosophy – and more precisely, continental and postphenomenological thought. While play has been explored across diverse disciplines, this paper does not aim to provide a general theory of play, but a partial, ontological account rooted in the philosophical tradition. As such, the absence of engagement with psychological or anthropological theories is not an oversight, but a deliberate narrowing of scope.

Some Classical Phenomenological Definitions of Play

As Torres (2002) points out in his thesis, "at the beginning of the 20th century and in the following decades, multiple theories were proposed to explain the roots and motivation of play" (p. 1). He is being unfair, however (and especially, as he will seek to make a phenomenological reading of play), when he says that "Huizinga (1949) was one of the first academics to convincingly observe that play is not reducible to biological functions and that it is a complex and slippery phenomenon that resists reductionist analysis" (p. 3).

In addition, we say that it is unfair because, already in his philosophy lessons of 1928-1929, Heidegger (2024) developed in considerable depth a notion of play. Although this has as its purpose to be able to view "life, being-in-the-world, world itself as play" (p. 220), his description of it will not be simply a metaphor constructed to talk about something else, but instead will try not to "take this expression as nothing more than a saying, in which we, by way of interpretation, are now going to try to put something else. What is at stake is rather to clarify what is said in it" (pp. 323-324).

One of the characteristics of the idea of play that Heidegger (2024) points out will be largely shared by later literature on the concept: the idea that play is autotelic. We play for the sake of playing "the playing of play and the play of playing" (p. 220) itself. This establishes both the uniqueness of play as "an event that is in itself indivisible and inseparable" (p. 220), and its relative separation from the network of intentions and tools of everyday life. Huizinga (1949) will say that play is "interpolat[ed] itself as a temporary activity satisfying in itself and ending there" (p. 9). Fink (2016), for his part, will affirm that "play is conspicuously set apart from the whole futural character of life. Play does not allow itself to be incorporated without further ado into the complex architecture of purposes" and that "the activity of play has only internal purposes, not ones that transcend it" (p. 20).

In turn, the game is self-configuring. It always has rules, but the rules are made in the playing itself, and it does not need to have them in the beginning. The rule is "changeable in playing and through playing itself. Playing itself creates, so to speak, the space within which it can form itself, which also means: within which it can change itself" (Heidegger, 2001, pp. 324-325). This leads Heidegger (2001) to identify "play in this sense with being-in-the-world, with transcendence ... it is in this playing that the space begins to form, even in a real and literal sense, within which we find being" (p. 329).

The idea that play is given, founds its own space/time, will also be found in Huizinga, who will affirm that playing "develops' within certain limits of time and space. It has its own course and meaning." (Huizinga, 1949, p. 9). On the one hand, "it is rather a question of leaving 'real' life to enter a temporal sphere of activity with its own disposition"

(Huizinga, 1949, p. 8), and on the other, "every game moves and has its being within a playing field delimited in advance, whether materially or ideally, deliberately or as something natural ... They are all temporal worlds within the ordinary world, dedicated to the realization of a separate act" (Huizinga, 1949, p. 10). In these authors, though, this space of play is constructed in strong connection with the idea of "imagination":

In his Phänomenologische Interpretation von Kants Kritik der reinen Vernuft, Heidegger will say "The productive force of the imagination [die produktive Einbildungskraft] is, according to this, originally in its realization [Vollzug] [a] free giving [frei gebend], it is a free power of creation [Dichtungsvermögen]. ... The apprehension of the ontic as an entity in itself, that is, the link with the ontic, is only possible on the foundation of a space of play of creation free of temporal relations". (Heidegger, 1997, as cited in Bertorello, 2022, p. 46)

Fink (2016) will go along the same lines in the different texts in which he dedicated his attention to this dimension of experience. An initial note that he will insist on over time is the fact that "everyone is familiar with play; it is universally known as something that occurs in the human world" (p. 230) Play is an experience common to the species – curiously, but not without reason, both he and Heidegger (but not Huizinga) will peremptorily discard the idea of play in other animal species. Deeply supported by the Heideggerian perspective, Fink considers the game as

an ecstatic movement of man towards the world, since the human being, in the playful unreality, transcends the limits of his factual situation and projects himself towards a horizon that is in principle unlimited, since it is the player who determines the limits of that horizon and what can appear in it ... that world towards which man transcends in the exercise of the game, when he creates himself, also creates his own space and time ... The "unreal" world of the game is free from the burden of the past and the limitations that it entails. ... the game concomitantly creates its world and its space-time as an unfolding of the imaginary entities that appear in the unreality of the game. ... In it, the real world, time and space, in which the game as intramundane behavior effectively develops, are inevitably intermingled with the imaginary world, time and space of the game as the proper stage of a representation. (Garrido Maturano, 2023, pp. 6-7)

Within this framework, Fink (2016) introduces the idea that "to every game belongs a toy [Spielzeug]" (p. 23). The latter is immediately differentiated from the artifact. He says that "toys do not delimit an autonomous region of things, as do, for example, artificially produced things", which, inserted as they are in that aforementioned "architecture of purposes", belong to each other in such a way that "artificial things can be distinguished from natural things, but both are things within a common and comprehensive actuality" (Fink, 2016, p. 24). Now, "a toy may be an artificially produced thing; however, it does not have to be" (Fink, 2016, p. 24). Artefact, natural object and human being belong

to the same dimension of the actual. The toy is different. Seen, so to speak, from the outside, that is, observed from the perspective of someone who does not play, it is evidently a part, a thing of the simply real world. ... The doll is considered a product of the toy industry. It is a piece of cloth and wire or a mass of plastic ... But, seen from the perspective of a girl who plays, a doll is a child, and the girl is its mother. ... The toy character of the toy, that is, its essence, lies in its magical character: it is a thing within simple actuality and at the same time it has another mysterious 'reality'. (Fink, 2016, p. 24)

As we pointed out initially, it is remarkable how closely the notion of play aligns with Walton's characterization of make-believe games and of toys as their props, and of Fink's 'game world' with Walton's 'fictional world'. Walton (1978) says that

the participants in a cooking game may decide to recognize a principle to the effect that whenever there is a ball of clay in a given box of oranges, it is "true in the game of make-believe," that is, it is fictitious that there is a cake in the oven. This fictitious truth is a fantasy. The principles in force in a given make-believe game are, of course, precisely those principles that the participants in the game recognize or accept, or understand to be in force. (Walton, 1978, p. 11)

Fink (2016) claims that "the child at play lives in two dimensions" (p. 24). The girl who plays with a doll does not

really believe that the doll is a living child. She does not deceive herself about this. She does not mistake something on the basis of a deceptive appearance. Rather, she simultaneously knows the figure of the doll and its meaning in play. (Fink, 2016, p. 24).

Man can not only make artifacts, but he can also produce artificial things to which an aspect of the existing appearance also belongs. He projects imaginary worlds of play. By virtue of an imaginatively carried out production, the girl designates the material body of a doll as a "living child" and assumes the role of the "mother". Real things always belong to the world of play, but partly have the character of ontic appearance and partly are clothed in a subjective appearance that comes from the human soul. (Fink, 2016, pp. 29-30)

In his analysis of the rhetorics through which we understand play, folklorist Sutton-Smith (2009) would locate the discourse of classical phenomenology in the "Rhetorics of the imaginary":

In this rhetoric, proponents of play use metaphors for play (the play of the gods) and the play of metaphors (play as important, unimportant, serious, trivial, idle, or contentious), rather than empirical examples of some group of players, such as children, athletes, or a community. This rhetoric does not seem to be concerned so much with play as an intellectual contest, a competitive bout, or a parade; rather, play and games are presented as ways of thinking about culture or as texts to be interpreted. (Sutton-Smith, 2009, p. 128)

This has its consequences. As Sutton-Smith (2009) also points out:

Imaginary play is a rhetoric derived from the historical movement known as Romanticism. Its proponents and participants are often creative people with literary and artistic competence, or the interpreters of their works. Its forms of play are those used by writers and thinkers in their metaphorical and artistic endeavors. ... [T]heorists of this kind of mental play tend to use the term play more often metaphorically than as part of a very systematic explanation. Members of this group have a tendency to denigrate more physical kinds of play and to be perhaps too ready to regard themselves as mental players of very large dimensions. (Sutton-Smith, 2009, pp. 148-149)

Because, let us think about our ball again. In it, there is no 'magic character', no 'other mysterious reality' that is different from its actuality. If the ball-like character of the paper ball had been given simply by its role within the game, only within the framework of playing, then it would have been true that, at least not yet, it was not a ball. The children were not yet playing. But if building the device was not allowed, it was because only by its existing can the ball game be played. And if the simple paper ball was not yet a ball, it is because there is something in the material configuration of the object that would make it one by wrapping it with adhesive tape, insofar as it turns that set of leftover sheets into an instrument suitable for playing the game.

And this *aptitude* is not imaginative. There is no 'imaginary world' deployed on the football field, or in a golf course. In all cases, these games define spaces where the ball
can, should or should not go, based on the unquestionably actual characteristics that it possesses. Football is not played on golf courses, nor is bowling on tennis courts.

Are we to say then that the ball game is not a game, or that the ball is not a toy? Such a result would be absolutely counterintuitive. Supported as it is by transcendentalist language and the rhetoric of imagination, the position of classical phenomenology misplaces even the doll itself. Suppose a child is playing with a doll in their room. When called to do their homework, they lay the doll down on their bed. If, while doing their homework, they are asked where the doll is, the child will reply 'sleeping'. But would we say that they are still *playing* with the doll? Or do they simply *imagine* that it is sleeping? To neglect the actuality of the toy risks losing the particular commerce with the world involved in playing.

Taking Balls Seriously

Here, the author must make a confession. He has never been interested in any ball game. Perhaps it is because of his extremely lacking body-eye coordination, but he has never been able to get the ball to do what he wants.

Bushnell's Law says: "The best games are easy to learn, but hard to master. They should reward the first quarter and the hundredth",² and he never felt rewarded. He never liked those kinds of games, because he has never been able to get the ball, any ball, to go where he wants it to, nor to predict its movement.

The paper ball/bun does not bounce. It barely rises. It does not have the stability of an object industrially designed for play. And yet it works. It is enough for the kids to gather around, to manipulate it, to form a circle, to determine a playing space in the yard. Classical phenomenology would say that this space is founded by the playing act: that the game, in its autotelicity, transforms the ball into a ball and the playground into a court. According to Heidegger (2024), the player creates its own world, disconnected from everyday purposes. For Fink (2016), the ball would be a toy because, in the game, it acquires that 'other mysterious reality' that distinguishes it from a simple disposable object.

But this explanation does not convince us. Because it is not the imagination that makes the ball a ball; it is its materiality. If the ball did not have a certain weight, if it did not resist a few throws, it would not work. The adhesive tape is not a minor detail: it is what gives it cohesion, what transforms it into something suitable to be thrown, caught, passed. We are not talking about a symbolic act, but a technical one. The ball of paper and tape is not an idea; it is an artifact.

As an artifact, we establish a network of relationships with and through it. Following Ihde's model, at least as a frame of reference, we can see (the author, at least, from not being able to achieve it), that there is a relationship of incorporation when the player is in possession of the ball: Once the habit is acquired, with greater or lesser precision, and at a certain distance range, we can 'trace' with it a trajectory that extends the reach of our body.

When another player has control over the ball, on the other hand, the hermeneutic relationship prevails in the link. In the ball and its movements we read the intentions of another subject (or of other subjects in the case of team games). What is their strategy? How do they evaluate how the game is going? In the case of games like soccer or passing, are we the expected recipient of such messages?

² Remark by the author: Saying attributed to Nolan Bushnell, founder of Atari.

But also, and perhaps fundamentally, at a certain point where the ball 'detaches' itself from both us and other players, we establish a relationship of alterity with the ball. Beyond a certain boundary, the ball ceases to be our instrument or that of other players and, by virtue of its shape and composition, begins to act with relative autonomy. It rolls, it bounces unexpectedly, the wind deviates its trajectory. Ihde (2009) even highlights that "in [his] previous research he [has] resorted to examples of toys, objects that seem to be animated and with which one can play" (p. 67) in order to illustrate this type of relationship. The ball responds to us while resisting us. It must be *wooed*.

Let us be more precise when speaking of the relative autonomy of the ball. Let us think of playing *tejo* versus playing *bocce*.³ When throwing the tejo puck, it does not move significantly beyond its first point of contact with the ground. This has its counterpart in the composition of the court, which by regulation should be composed of sand. Wherever the puck lands, it will stay, unless it is moved by the blow of another puck.

Playing bocce is different. When a bocce ball hits the ground, its journey does not end there. It keeps rolling, moving beyond its initial point of impact, introducing a dynamic element into the game. Its shape and weight are designed so that it does not stop immediately, but continues to move, forcing players to anticipate its trajectory and calculate the strength and direction of their own throws. In turn, the playing space, the surface of which is designed to facilitate such movement, is surrounded by low walls that keep the ball within the defined area. Here, the bocce ball establishes a dialogue between the player and the ground: every small irregularity in the surface modifies its course, challenging the player's prediction abilities.

This continuous movement is what makes balls different from objects like pucks. As they roll across the ground, or move through the air, they establish a dynamic that forces the player to read their trajectory, interpreting how they interact with the surface and with the other players in the game. The player must interpret their trajectory and adjust to their resistance, establishing a dialogue that is not unilateral, but dynamic and situated. The balls do not just obey the player's initial intention; they also resist, negotiate, and define the rules of the game through their current movement and their invitations to action. And the skill of the player – from the juggler to the volleyball player – consists in their ability, built on habit, to perform these tasks from their bodily movements – perhaps with the addition of some other game element, such as a baseball bat or a tennis racket – so that the ball does what they want.

³ Remark by the author: As used here, tejo refers to what has been called Beach Tejo, in order to differentiate it from Colombian tejo. Created in Mar de Ajó, Argentina in 1960, it's an adaptation of the game of bocce, using pucks instead of balls since these -fittingly for the argument presented here- were found to be hard to control when the playing field was composed of sand (Redacción El Litoral, 2024). Played by two teams in a rectangular field surrounded by a rope and made of sand, they take turns throwing tejos (the aforementioned pucks), trying to position them nearer to the tejín (a neutral, smaller puck, thrown by one of the teams as selected by a raffle, at the beginning of the game) than the tejos of the opposing team. One team scores a point for each of its tejos that are nearer the tejín, than the nearest tejo of the opposing team, once all the tejos were played ("Reglamento oficial", n.d.). The game ends when one of the teams reaches either 12 or 15 points, depending if the reduced or the traditional variation is being played (Redacción El Litoral, 2024). In turn, according to Confederazione Boccistica Internazionale ("Regolamento tecnico", 2023), bocce is also played by two teams, but "on a flat and perfectly level surface subdivided into courts enclosed by wooden planks or other non-metallic sides" (p. 1), subdivided in eight sections. Instead of using discs, it uses bocce balls and a smaller pallino which "must be round and made of synthetic material without adding any foreign substance which might impair balance" (p. 4). As it stands for an older game, its rules of play (which we will not detail here) are more complex. As for what matters for our argument, the objective of the game is roughly the same (to get the own team's bocce balls nearer to the pallino than the balls of the opposing team), but with the added difficulty of limiting the impacting and displacement of previously thrown balls or the pallino itself to a maximum of 70 cm, except in special circumstances - raffa or volo throws - until a team reaches 12 points. "Balls that hit the sides or headboard before hitting another item are [normally] void" (p. 7).

We can then depoeticise this idea of *wooing* that we presented. Talking about wooing to describe the relationship between the player and the ball is not a gratuitous romantic metaphor; it is a way of highlighting the relational, bodily and temporal dimension of this interaction. Wooing involves a process of mutual adjustment, where the player does not simply impose his intention on the ball, but also learns to interpret its behaviour, to adapt to its resistance and to anticipate its response. The ball is not a passive object that simply executes the player's wishes; it is a partner in this relationship, an actant that influences the development of the game.

Wooing, as a process, requires time and practice. The skill that allows the player to "make the ball do what they want" does not arise from absolute control, but from a familiarity cultivated through habituality. This bodily habit allows the player to move with the ball, to interpret its trajectories and to anticipate its responses, generating a continuous flow in which the action seems almost natural. But this naturalness is the result of a long process of learning and negotiation, where the player and the ball develop a kind of technical complicity.

But it is true that, in the case of our boys, we are not talking about a ball with which they are familiar, but a new, hand-made one; it demands a renegotiation of that relationship. Although it shares some properties with its family – it can be thrown, caught, rolled in certain cases – it also introduces unique challenges due to its materiality: its weight, its irregular texture, its limited capacity to bounce. It is not simply a ball; it is *that* ball, with its own invitations and resistances.

To woo it, the player must start from a general familiarity built with other balls but will quickly discover that they cannot depend entirely on that prior knowledge. The ball of tape and paper demands to be discovered. Each pass, each throw, is an exploration that allows the player to understand its possibilities of action: how far can they throw it without it losing stability? How precise can its trajectory be? How does its fragility affect the rhythm of the game?

This process is what transforms wooing into an act of creative adaptation. The player must not only adjust their body to the ball, but also modify their expectations and strategies based on what this new ball can and cannot do. At the same time, this adaptation will modify the possible playing space. Here, wooing becomes an experimental dialogue: an exchange where the ball responds and resists, where the player learns to read its limits and potentialities in real time, and where the playing space pulsates (expands and compresses).

In this sense, wooing is not only an act of mastery, but also of listening. The player must constantly read the invitations to movement offered by the ball based on its materiality, its displacement, and the conditions of the environment. This active listening, this continuous dialogue, is what transforms the interaction with the ball into a situated, dynamic, and constantly evolving relationship.

Let us finally return to Bushnell's Law: It is from the construction of this courtship as a challenge that the rules of the game are established, by putting it at risk in order to explore its limits. The rules of the ball game allow those who manage to make the ball 'respond' to them to play, and rewards those who manage to make the ball 'respond' more.

Let us observe a curious consequence of this idea: Latour defines, in principle, the concept of translation as "the transformation of a greater effort into a lesser effort" (Latour, 1994, p. 154). The ball, however, "rewards the first quarter and the hundredth"; it enables a 'sufficient' level of effort, but greater than that strictly necessary – ultimately, one could always not play – close and distant enough. The ball transforms a lesser effort into a greater one, it is – or is used in ways – relatively inefficient for its manipulation.

If someone wanted to pass the soccer ball to some other person, why not take it with their hands and give it to them? Why must they do it – e.g. in soccer or in our schoolyard passing game – with their foot? Why, in soccer digital games, where the movement of the ball is algorithmically defined, is it intentionally sought that this pass is not infallible? Latour (1994) says that "a non-human door closer without skills presupposes a skilled human user. It is always an exchange. With Madeleine's Akrich paper (Akrich 1992), I will call the conduct imposed on humans by non-human delegates prescription" (p. 157). The ball and the organization of the ball game imply, by design, that there will never be a perfectly skilled human user to do the task completely efficiently, although it can always be more efficient. The game prescribes to the player the need for a constant adaptation of their skills to play the game.

So far the toy, the non-human actor with whom a game is played, is at the centre. It prescribes for the players, with its materiality, certain manipulations that are relatively easy to grasp, but impossible to fully incorporate. However, the ball of paper was not enough to be a ball: it needed the tape. The children wanted to play a passing game with their body without using their hands and, without it, the ball would have fallen apart by itself in a short time.

This type of game is known to the children from their early childhood. It is derived from soccer without being soccer. It remains with it in a Wittgensteinian family bond. And playing it requires certain characteristics from the ball. It is – due to the different prescriptions of each one – similar in the use of space and the organization of the players to the game that could have been played with a tennis ball, although different in the application of force and direction. At the same time, if they had gotten more paper and the ball had been bigger, they could have improvised a game closer to soccer, or a hand-passing game in the style of volleyball. "No scene is prepared without a preconceived idea of what kind of actors will end up occupying the prescribed positions" (Latour, 1994, p. 159).

Yet, also, a bigger ball would have meant a larger attachment to it, since it was more *costly* in resources. It would also have required a larger area for play, which in turn would have meant that the game would be more noticeable and ran the risk of attracting more players than the reduced group of students that were building it. As much as the players woo the ball, the ball also woos players to play with it. In its movement, in its displacement through space, in its meeting the bodies of others, it invites them to actualize a repertoire of skills that they themselves may possess.

Soccer, as a formalized and institutionally stabilized game, offers an advanced case of wooing: the soccer ball has been engineered to optimize a responsive yet challenging interaction, standardizing its movement to allow skill to develop through fine-grained bodily habituation. In contrast, the handmade paper ball presents a raw, open-ended situation – a wooing that is incipient and improvisational. While both require players to attune themselves to the ball's resistance, the soccer ball inscribes a historically sedimented program of action; the paper ball must generate one from scratch.

Why did they want to play a passing game? To avoid what, in the end, ended up happening. The passing game is played in a small circle. In the schoolyard scene, it blends into the crowd and, they believe, can go unnoticed by adults. What really happens, for those of us who have to take care of the playground, is that – once it is happening – we *decide* not to see it because it does not disrupt coexistence. Of course, the school management knows that we are pretending to be blind, but it does not say anything either because, ultimately, it does not lead problems to them. As long as the playing circle is small enough to excuse our blindness, the space they claim is safe.

The ball supposes a game, which at the same time supposes an available space. A space that is disputed with/negotiated with the institution. When we said that the playing

space 'pulses', it is because it is always in this relationship of otherness with other spaces. And we can enter such a relationship through any of its components. In this case, this ball game is to be played in the playground, which is already an institutionally regulated playing space, which prescribes areas, times and types of play that are viable in the school environment. As the game must take place in a small space, it cannot be the game that they would really like to play – which is soccer. The closest thing available is to play passing the ball. Playing with a soccer ball would be too conspicuous because of its size, and besides, the soccer ball is designed to travel farther with less momentum, which would push the circumference of the circle too far. They therefore need a ball with little bounce and range, light enough to be manipulated comfortably with the body. A juggling ball would work, for example – although these are usually brightly coloured precisely so that the juggler can spot them in the air. But they do not have one either, they have to inscribe this action program on a new object. And this is where our tape-wrapped paper bun comes in.

We described this type of ball earlier as *artisanal*. There is a temptation to call it 'improvised', but it is not. It has probably existed as long as there have been school notebooks, adhesive tape, and playgrounds. And it has existed as long as there has been the game of passing a ball without using your hands. We began by asking ourselves when a wad of paper wrapped in adhesive tape becomes a ball. We answer: when it is sufficient for a ball game. It is evaluated by trial and error, manipulating it, testing its weight and range, and balancing tape and paper based on the available resources. Its transformation occurs when the game becomes possible.

However, any object can be inscribed with a game that can be played with it. Ultimately, play remains autotelic; its meaning emerges from the very act of playing. It is this autotelic character that allows any object – a ball, a doll, a stick, or even a wad of paper – to become the centre of a playing system. What unites these practices is the capacity of play to reorganize immediate time and space, inscribing in an object a plan of action that closes in on itself. We practice mastering the ball, in order to master the ball better and better – or to compete with others regarding who masters it better. And the ball is the object that, in turn, enables this particular mastery.

Conclusions

We can now recover the Heideggerian notion of play as "this playing in the game in which this playing consists" (Heidegger, 2001, p. 325), and perhaps something of the world-founding character he gives to play, from a more material perspective. In "The question about technology", Heidegger (1994) asks himself: "What has the essence of technology to do with revealing?" and answers:

everything. For every bringing-forth is grounded in revealing. Bringing-forth, indeed, gathers within itself the four modes of occasioning-causality-and rules them throughout. Within its domain belong end and means, belongs instrumentality. Instrumentality is considered to be the fundamental characteristic of technology. If we inquire, step by step, into what technology, represented as means, actually is, then we shall arrive at revealing. (Heidegger, 1994, p. 16)

But as we have seen, what is revealed in play is the playing itself, the "free configuration, a free forming, which has its own internal concordance, insofar as this forming gives itself this internal concordance in the play itself" (Heidegger, 2001, p. 329). Running the risk of sacrificing precision for poetics, we could say that the essence of technique is in play. But we have moved away from Finke's idea of the 'magical reality' of the toy, or from Heidegger's (2001) transcendentalist assertion that "play is therefore never a behavior about an object" (p. 329). Because what is revealed in play is not another world, but the world itself as given to us by objects and spaces.

We had said that any object can be inscribed with a game that can be played with it. In Ihde's (2009) terms, we could say that *what is revealed in play is the multistability inherent to every object and space*. With Latour (1994), we could say that *play uncovers their always-potential inscribability and re-inscribability*. And this applies equally to playing with a ball and to playing with dolls. Whether as a support for hermeneutic and alterity relations as in imaginative play, or as mobile agents and mediators of the construction of a space as in more physical games, objects as toys reveal themselves to us – and rebel? – as always offering to connect with us in a different way.

And as we saw when reflecting on the dispute with institutional space, the inherently political character of play consists in this openness. Because playing is the Latourian anti-program in its purest form, the irreducible anti-program. No matter what the engineer wants, no matter how much effort they make, everything can always be a toy.

If, as we have argued, play reorganizes space and time through the material configuration of objects, then it necessarily enters into conflict or negotiation with pre-existing distributions of space, authority, and institutional order. The paper ball was not only a toy – it was a claim. It challenged the boundaries of the permitted, forced a renegotiation of surveillance, and carved out a temporary zone of autonomy in an otherwise regulated environment. In this sense, play does not merely take place within the world – it contests the world as given, revealing its contingencies and openings. To play, then, is not just to imagine otherwise, but to act otherwise, and to do so materially. This is what makes play irreducibly political – not because it always resists power, but because it redistributes it, however fleetingly.

But it is precisely in recovering its material dimension that we can give expression to this agonistic character of play. Because in order to play ball, the sheets of paper must come out of the folder where they were to be copied, teachers must have less adhesive tape for their pedagogical activities, the yard must become a court, and Waltonian mud cakes must stop being dirt and become pastries. The established organization of the world must give way and place to play, and that world resists. More or less regulated, in every game there is both a threat to the established order and the possibility of building it.

What happened, then, with our prohibition of playing ball? As many times before and after, it ended up being diluted in a new provisional balance between our institutional needs and the desire of the children to play. Without being officially repealed, the prescription was forgotten, while the children rediscovered the fragilely optimal space of their relationship with the ball, moving with the incessant tide of the game, of the permanent and contested courtship with the things themselves.

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From Play to Belonging: Board Game Cafes as Mediators for Social Wellness and Community Building in Japan

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Acta Ludologica



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ACTA LUDOLOGICA

ABSTRACT:

This study examines board game cafes as spaces of sociability and community building in urban Japan, analysing how the concepts of third place and ibasho manifest within these establishments. The research employed a three-stage ethnographic methodology in nine Tokyo board game cafes, comprising participant observation, online surveys, and interviews. The investigation focused on space design, user profiles, business models, sociability, game selection, and alignment with third place and ibasho frameworks. Findings reveal two primary strategies employed by board game cafes to cultivate an ibasho environment: the play-centred experience, encompassing ludic culture and gaming practices that promote social interaction through collaborative and party games, and the socializationcentred experience, including customer retention initiatives such as food and beverage offerings and social media engagement. Results indicate that board game cafes function beyond traditional third places, emerging as ibasho spaces that address contemporary Japanese social challenges such as isolation, loneliness, and technological dependence. This study provides comprehensive insights into how board game cafes foster community building, social inclusion, and personal growth through their operational frameworks and social initiatives, contributing to the understanding of modern urban social spaces in Japan.

KEY WORDS:

board game cafes, consumption studies, ibasho, loneliness, social isolation, third place.

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Introduction

Among the studies examining the challenges of Japanese society, particularly concerning the younger population, two critical issues stand out. These challenges fall under the umbrella of mental health: loneliness, social isolation, and technology dependence and addiction.

Loneliness and social isolation are considered by the United Nation and governments around the world as a global epidemic, worsened by the Covid-19 pandemic. This has led scientists to use the term *lonely societies* (Silva, 2021). However, this phenomenon is particularly intense in Japan, which has one of the highest rates of this problem in comparison with the United Kingdom and the United States, for example, as shown by DiJulio et al. (2018):

- One in ten young adults (9%) in Japan say they often or always feel lonely, feel that they lack companionship, feel left out, or feel isolated from others.
- In Japan, more than a third (35%) of those who self-identify as lonely say they have felt isolated or lonely for more than 10 years.

Japan is both one of the lowest relational mobility societies in the world (Thomson et al. 2018), and also is a country with among the highest population-averaged loneliness scores among developed democracies by global loneliness ranking (DiJulio et al., 2018).

A nationwide survey showed that 4,8% of respondents indicated that they "often/always" feel lonely, 14,8% said "sometimes", 19,7% said "occasionally", and approximately 80% stated that they felt some degree of loneliness although there was a variance in the degree they felt. Looked at by age group, those responding that they "often or always feel a sense of loneliness" and whose sense of loneliness score was 10 to 12 was mainly those in their twenties to fifties ("Priority plan", 2024). This concerning situation prompted the Japanese government to establish the Council for the Promotion of Measures for Loneliness and Isolation in 2021. One of the key strategies for addressing loneliness and isolation is to foster the development of communities where individuals can feel connected to one another. This involves creating spaces that facilitate interaction, mutual support, and a sense of belonging (Noda, 2021).

Smartphone dependence and digital gaming addiction are contemporary global problems, increased by the Covid-19 pandemic. The widespread adoption of digital technologies has further intensified these issues, as evidenced by the Communication usage trend survey of 2023 ("Results of the 2023", 2024). Smartphone ownership in Japan has reached 90.6%, continuing its upward trajectory, while the use of other information and communication devices has declined. The persistence of telework – adopted by nearly 50% of businesses – has reshaped social interactions, decreasing in-person socialization opportunities. Additionally, as digital connectivity increases, so does user apprehension; around 70% of Internet users report experiencing anxiety, particularly due to the prevalence of misinformation and harmful content.

The first survey in Japan on gaming addiction conducted by the National Hospital Organization Kurihama Medical and Addiction Center in Kanagawa Prefecture with support from the Ministry of Health, Labor, and Welfare, found that 18,3% of young people aged between 10 and 29 play digital games for an average of 3 or more hours a day. While 21,9% of those who play for less than an hour a day said that they often cannot stop when they should, this percentage shot up to 45,5% for those who play 6 hours or more. Around 30% of the heavy gamers in the latter group also said that their playing has noticeably diminished their interest in important activities like sports, hobbies, and spending time with friends and family members ("Concern over gaming", 2019).

Studies show that the growth of Internet gaming disorder has doubled - and in some segments of the young Japanese population tripled in recent years (Mihara & Higuchi, 2017). The Ministry of Health, Labor and Welfare in Japan estimated that 1 in 7 elementary and high school students – or some 930,000 children aged roughly 12 to 18 – were suspected of being internet addicts (internet gaming disorder). That was almost twice the total from the previous survey, and the condition may also be spreading in younger age groups (Kim & Ogawa, 2019).

A study on the youth internet environment conducted by the Cabinet Office of Japan in 2018 revealed a high prevalence of smartphone ownership among students, with nearly all senior high school students (95.9%), more than half of junior high school students (58.1%), and 30% of elementary school students possessing their own devices. On average, junior and senior high school students spend over four hours daily on their smartphones, and between 10% and 20% of high school students in Japan already exhibit signs of internet gaming disorder (Imataka et al., 2022).

Faced with this problematic situation, the World Health Organization (WHO) officially recognized internet addiction and internet game addiction as psychological disorders. In Japan, the national health system has increased the number of treatment centres for those addicted to internet disorder and internet gaming disorder, with the pioneer on this front being the Kurihama Medical and Addiction Center in Kanagawa. Several research articles point to some of the factors present in many people who suffer from loneliness and social isolation as being dependence on technology, especially the use of smartphones, browsing social networks and internet gaming.

Internet Gaming Disorder is a behavioural addiction that appeals to the younger generation, with a high risk to promote sedentary behaviour, irregular eating patterns, and other unhealthy lifestyle choices in children, increasing the chances to lead into loneliness and social isolation (Yamada et al., 2023). People experiencing loneliness or social isolation in Japan are more likely than others to say technology has made it harder to spend time with family and friends and more likely to affirm that their ability to connect with others in a meaningful way is weakened by technology, especially social media (DiJulio et al., 2018). In this way, it is understood that loneliness/social isolation and technology dependence/gaming addiction are: phenomena that are growing among young people; a cause for concern for international organizations, governments, universities and research centres; present in a considerable part of the Japanese youth population.

These two problems are also directly or indirectly related to two major challenges facing Japanese society: (1) the high number of suicides, even among young people (Dhungel et al., 2019; Dhungel et al., 2022); and (2) hikikomori syndrome, in which teenagers and young adults remain isolated in one room at home with limited contact with the outside world, perhaps via the internet, and with little or no communication with family members, in a condition that can last for many months or even years (Furlong, 2008).

Each year, the Minister of State for Measures for Loneliness and Isolation publishes initiatives aimed at addressing these issues. The 2024 edition ("Initiatives for measures to address", 2024) calls on various industry sectors to take coordinated action and promote social connections. Private commercial establishments, alongside community centres, healthcare organizations, and educational institutions, are recognized as bridges for fostering interpersonal relationships. Cafes, nominally, are regarded by the Ministry as strategic spaces for combating loneliness and social isolation.

In this context of combating loneliness, isolation, and technological dependence, *board game cafes* (hereinafter referred to as BGCs) are gaining importance. BGCs, also known as game cafes or ludic cafes, are commercial establishments that combine elements of gastronomy with leisure activities centred on board games. These spaces offer patrons the opportunity to enjoy food and beverages while engaging in playful experiences facilitated by a wide variety of games available to use on-site, and even to rent or buy. These spaces reflect a growing interest in entertainment forms that promote face-to-face social interactions in relaxed environments (Kviat, 2023, 2024). Additionally, Woods (2012) emphasizes that these cafes respond to a contemporary cultural demand for analogue playful experiences, countering the prevalence of digital entertainment.

This study examines BGCs as spaces of sociability and community building in Japanese urban contexts, analysing how the concepts of *third place* (Oldenburg, 1989) and *ibasho* (Tanaka, 2021) intersect with these establishments. While digital games dominate academic research in ludology (Mäyrä, 2008), BGCs represent spaces that privilege face-to-face interactions in an increasingly virtual world (Woods, 2012). In Japan, where social isolation, *hikikomori* phenomena, and technological dependence are documented issues (Teo et al., 2014; Kato et al., 2020), BGCs offer potential environments for social connection and community development (Henriksen & Tjora, 2013; Oldenburg, 1989). Through this theoretical framework, we investigate how these commercial spaces can be reframed as catalysts for social interaction and community formation in urban settings.

Theoretical Framework: Third Place, Ibasho, and Their Relevance to Board Game Cafes

The third place concept, popularized by sociologist Oldenburg (1989), refers to social environments distinct from home (first place) and work (second place), where individuals come together regularly to engage in informal, relaxed social interactions. These spaces, such as cafes, parks, or community centres, foster a sense of community, belonging, and social cohesion beyond familial and professional realms. They play a crucial role in societal well-being by providing opportunities for casual conversation, relationship-building, and the exchange of ideas (Oldenburg, 1989).

Ibasho is the second central concept for our research. It is a Japanese term that conveys the idea of a place where one feels a sense of belonging, comfort, and purpose. It goes beyond physical location to encompass emotional and psychological dimensions, reflecting the importance of finding one's social niche and community connections for personal well-being and identity. Tanaka (2021) defines ibasho through three dimensions:

- temporal perspective a place related to future perspectives and individual growth. A place where satisfaction of self-realization needs and hope for the future are essential;
- spatial element a "comfortable place" where individuals feel at home. A space where there are no threats to their existence;
- *human relationships* a space that emphasizes the importance of positive interactions and a sense of belonging.

While the concepts of third place and ibasho both emphasize the significance of spaces that foster social connections and a sense of belonging, they diverge in focus and cultural nuance. Third places, as introduced by Oldenburg (1989), are predominantly public environments that encourage informal, relaxed interactions, serving as neutral grounds for building social capital and enhancing community cohesion. In contrast, ibasho, rooted in Japanese cultural and psychological frameworks, extends beyond physical spaces to encompass emotional and relational dimensions, emphasizing individual comfort, safety, and personal growth (Tanaka, 2021). A convergence between the two lies in their shared role as spaces where individuals can escape the demands of home and work to nurture interpersonal relationships and well-being. However, ibasho places a stronger focus on fulfilling deeper emotional needs, such as recognition and self-realization, while third places prioritize social inclusion and collective interactions. Together, these concepts underline the multifaceted importance of spaces in fostering human connection and identity, both physical and emotional.

This led us to develop the following research problem: How do BGCs in contemporary Japan embody the characteristics of third places and ibasho, and which factors contribute to their role as social hubs?

The general objective is to explore how board game cafes in Tokyo (Japan) embody the qualities of third places and ibasho, and to identify the factors that contribute to their function as centres of social interaction. Our specific objectives are: to assess consumer perceptions of BGCs as third places and ibasho in Japanese urban settings; to examine how the business models and operational characteristics of BGCs contribute to fostering social wellness and community building.

Methodological Foundation: Consumer Studies as a Lens

This research draws on the interdisciplinary framework of consumer studies, which understands consumption as a socio-cultural phenomenon in which the appropriation and use of goods takes place. In this context, consumption is understood not merely as the acquisition of goods or services but as well the experiences offered to consumers in concrete or virtual environments.

As a multifaceted phenomenon, consumption is considered to be a system of signs through which communication is established between subjects (Baudrillard, 1970). As a language, it is capable of expressing and being understood. Therefore, it is also a classification system. As pointed by Douglas and Isherwood (1979), consumption builds bridges (and walls) between individuals. Also consumption facilitates social interactions, identity construction, and cultural expression (McCracken, 1988).

This study positions BGCs as environments where the complex experience of consumption takes place. While service consumption occurs by the ordering of beverages, drinks, snacks and meals, tangible goods can be purchased, like board and card games. However the focus relays on offering an immersive entertainment experience, including on-site gaming, tournaments, and various other ludic and artistic activities.

Grounded in this perspective, this article will talk about "board game cafe consumption" rather than "consumption in board game cafes". This grammatical choice emphasizes the investigation of the act of consuming the place itself and the diverse consumption practices it affords: the consumption of material goods, services, and experiences. Finally, we point out that the theoretical framework allows us to posit that the consumption of a BGC transcends the utilitarian function (buying, drinking, playing) and acquires a symbolic value, the characteristics of which will be recognized by the empirical research we present below.

a) Protocol

An ethnography of consumption was conducted in BGCs in Tokyo, Japan, between February and March 2024. The empirical objects analysed were the *place*, the *people*, and the *activities*.

The term 'place' in this study refers to the analysis of the characteristics and distinctive attributes of the business which include the surroundings, business model, interior design, menu, and game collection (game titles and genres). By 'people', we refer to consumers, staff, and owners of BGCs. From the users we gathered basic demographic profiles (gender, age, occupation, education, residence, and religious beliefs), behavioural profiles (their motivation and habits regarding BGC consumption). From the staff and owners we collected their perceptions about the social uses of the BGC they work at or own. The 'activities' category allowed us to observe behaviours such as eating, drinking, playing, selling, working, and socializing. This description is illustrated in Table 1.

We applied a multi-methodological strategy for data collection, comprising structured observation, participant observation, field diaries, an online survey with a structured script, and in-depth interviews with a semi-structured script. Table 2 presents the techniques chosen for each empirical object and their corresponding objectives.

Table 1: Empirical objects

1. Place	2. People	3. Activities
Surroundings	Gender	To eat
Business model	Age	To drink
Spatial design	Occupation	To play
Menu	Education	To exchange/sell games
Board Game collection	Residence	To work
	Religious beliefs	To socialize

Source: own processing

Technique	Empirical object	Objective
Structured observation	Place	To identify the characteristics and distinctive attributes of the business.
Participant observation	Activities	To map the multiple activities car- ried out in a BGC.
Field diary	Activities	To document the findings and insights from comparing observa- tions to research objectives.
Semi-structured in-depth inter- view	People and Activities	Trace the demographic and be- havioural profile of users
Structured interview	People	Understand the motivations for using BGC and the social prac- tices that take place there.

Source: own processing

b) Data collection

The names of the BGCs visited are presented below, and additional information (addresses, dates of data collection, and photos from our personal archive) is provided in Appendix A. Data collection was concluded upon reaching empirical saturation. According to Pires (2018), empirical saturation occurs when the researcher determines that subsequent interviews no longer yield new or significant information to justify further expansion of the empirical material. Consequently, we conducted 10 observation sessions into nine BGCs in Tokyo: Dear Spiele, Dyce, Jelly Jelly (Shibuya 2nd store), Jelly Jelly (Shinjuku), Korokoro dou, Little Cave, U Cafe, 10 Billion Point (2 visits), Gotta2Cafe.

As mentioned earlier, in addition to structured and participant observation methods, we conducted various types of interviews to enrich the corpus and gain a more nuanced understanding of the phenomenon of BGC consumption. A total of 36 interviews were conducted: 24 structured interviews (surveys) with consumers, three semi-structured interviews (in-depth) with consumers, nine semi-structured interviews (in-depth) with owners and staff.

The data collection instruments were applied in English and Japanese, depending on the participants' preferences. The interviews were conducted at times and locations chosen by the interviewees. Consequently, two in-depth interviews were conducted via video call, and 10 were held in person, in public spaces such as parks or in BGCs. This research employed a qualitative approach, prioritizing depth of understanding over statistical representation in examining BGC experiences. Through ethnographic observation, surveys, and interviews, we identified key factors facilitating socialization, community building, personal development, and sense of belonging among participants. This methodological protocol enabled recognition of elements aligned with both Oldenburg's (1989) third place concept and the Japanese notion of ibasho (Tanaka, 2021), supporting our theoretical framework while maintaining scientific rigor in data collection and analysis.

Analysis

a) People: Patrons profile

The analysis begins with a description of the findings from data collection. This exercise combines the interpretation of what was explicitly stated by participants, as well as implicit meanings derived from their behaviours and interactions. Additionally, observations made during fieldwork are integrated to provide a holistic understanding of the phenomena studied. This approach ensures that both spoken narratives and observed practices are considered, offering a nuanced perspective on the dynamics of BGCs.

Before presenting the findings about BGC practices and their alignment with third place and *ibasho* concepts, we examine the demographic profile of survey participants to establish context. This data provides insights into the current user base of BGCs in Tokyo and informs our understanding of their social dynamics.

The structured interviews included 24 participants, predominantly male (83%) and of Japanese nationality (79%). The age distribution showed a concentration in the 26-30 years range (33%), with notably lower participation from younger users. Most respondents (58%) held higher education degrees. Regarding religious affiliation, 54.2% reported no religious beliefs, with the remainder primarily identifying with Shintoism or Buddhism.

While geographical proximity to residence did not emerge as a decisive factor in BGC selection, participants emphasized other criteria such as environment quality, staff rapport, and access to public transportation. These preferences suggest that BGCs' appeal relies more on their social atmosphere and convenience than location alone.

The demographic data reveals a predominantly male, educated, young adult Japanese user base, aligning with observations made during field research. The gender disparity in both survey responses and observational data (17-20% female participation) indicates that BGCs remain predominantly male-oriented spaces, highlighting potential opportunities for increased inclusivity.

BGC users exhibit diverse gaming profiles and motivations. Some visit specifically for language exchange opportunities, particularly at establishments like *Dyce* which emphasizes international interactions. Gaming expertise varies significantly: hardcore gamers frequent venues like Dear Spiele for their extensive board game collections, while casual players prefer locations like Jelly Jelly Shibuya that specialize in party games. Social patterns also differ – while some BGCs like Jelly Jelly Cafe Akihabara attract predominantly solo visitors seeking to play with strangers, others like Korokoro dou serve mainly preformed groups. Some establishments, such as U Cafe and Dyce, combine gaming with bar atmospheres, attracting users seeking a more social nightlife experience. These varied user profiles demonstrate how BGCs adapt their offerings to serve different segments of the gaming community.

In terms of behavioural profile, the informants confirmed that the primary motivation for visiting a BGC after playing games is to make friends. We observed that games serve as instruments for connecting people – a pretext for forming friendships and bridging the gap between individuals and groups. It was confirmed that connections within a BGC extend beyond a shared love for board games. This ability to bring people together is amplified in BGCs, especially when compared to other cafes, because the diverse universe of games facilitates interactions between both familiar and unfamiliar individuals.

Various game genres and dynamics allow patrons to express interests in diverse themes and activities (history, arts, sciences, botany). Field research has revealed that when common interests are identified, breaks for food and drink become opportunities to resume and deepen conversations. Even the journey to the subway provides a chance to exchange ideas. Regularly frequenting the same establishment allows consumers to become part of the community of patrons, leading to encounters with other regulars and enhancing connections. As a result of these interactions, we have observed consumers forming friendships and engaging in activities beyond BGCs – such as fishing trips or helping a friend to move into a new home.

During our data collection, we also documented the story of a couple who met at a board game cafe, and whose relationship culminated in marriage. The cafe owner, along with other regular patrons who had become friends, was invited to the wedding.

b) Place: Location and pricing

The BGCs observed in this study were typically located in commercial areas with medium to high pedestrian traffic. The main access is by metro. Usually, these establishments are situated near complementary locations, such as universities, shopping malls, commercial galleries, and companies, which helps attract their target demographic of students and young adults. The pricing structure at these BGCs is based on time spent, with entry fees for 1-hour, 3-hour, or 5-hour sessions, averaging 470 yen per hour. The lowest rates are applied on weekdays in the afternoon, while the highest rates are charged on weekends in the evening, when demand is highest. This pricing approach caters to both casual visitors and those looking for longer gaming experiences, balancing accessibility with profitability during peak times.

c) Activities: Services and attractions

The BGCs observed in this study offered a wide range of services beyond the use of their game collections, each designed to enhance the overall experience for visitors. One of the key differentiators in these spaces was the role of the staff, referred to, in this study, as hosts rather than traditional waiters. In addition to basic tasks such as setting up tables, taking orders, serving food and drinks, and processing payments, hosts actively engage with customers by recommending games, explaining the rules, and, in some cases, playing alongside patrons. This unique service model fostered a more interactive and welcoming environment. In some instances, hosts were also involved in food preparation, blurring the lines between service and entertainment roles.¹

In terms of beverages, some cafes included a non-alcoholic drink with the entry fee, as observed at Little Cave, while others, such as Dyce, required customers to purchase a drink separately. All observed cafes offered alcoholic beverages, adding variety and appeal to a broader audience. The food offerings ranged from snacks and appetizers to light

¹ Remark by the authors: This blending of roles often led to an overburdening of staff, as they were required to juggle multiple responsibilities simultaneously. The excessive overlap of tasks, particularly between service and gaming facilitation, could potentially result in decreased efficiency or fatigue for employees, suggesting the need for a more balanced distribution of responsibilities within the BGCs.

meals, main dishes, and desserts, though none of the establishments specifically catered to dietary restrictions, such as vegetarian, vegan, or ethnic dietary preferences.

Many cafes also hosted cultural programming, expanding the scope of activities beyond gaming. These included stand-up shows, live performances by instrumentalists and vocalists, and even immersive maid-cafe experiences, which served to attract diverse audiences and create a multi-faceted cultural space.

Game-focused events were a prominent feature at these BGCs, with cafes organizing tournaments and special programs that enriched the gaming experience. These events, primarily promoted through the cafes' social media platforms, encouraged interaction and community-building among patrons. For example, Dyce hosted Catan-themed evenings on Tuesdays, while Little Cave dedicated Thursdays to *Dungeons & Dragons* sessions. These events further emphasized the role of BGCs as venues for socializing and engaging in shared interests.

Additionally, many cafes operated retail sections where visitors could purchase board games, further integrating the experience of game exploration and consumption. Basic amenities, such as free access to restrooms, were standard across all observed BGCs. Free Wi-Fi was also provided, enhancing the connectivity experience for patrons who shared their experiences on social media. However, none of the cafes were found to specifically cater to families with young children or offer dedicated kid-friendly spaces.

To encourage repeat visits and foster customer loyalty, several BGCs offered loyalty programs, subscription plans, and other benefits, helping cultivate a sense of belonging and regular patronage among customers. These diverse services, ranging from interactive customer engagement to cultural programming, contributed to the unique appeal of board game cafes in Tokyo, creating dynamic social spaces where gaming, entertainment, and community intersect.

d) The owners perspective

Shifting to the interviews with BGC owners, an entrepreneurial pattern emerges. These proprietors, primarily young adults between 30-40 years old, had transitioned from corporate careers to establish businesses aligned with their passion for board games. Their primary motivation stemmed from gaming enthusiasm rather than profit potential, reflecting a blend of personal interest and professional aspiration. Several owners are also game designers who leverage their establishments for playtesting and distributing their creations, demonstrating how BGCs serve dual roles as commercial spaces and creative hubs for game development. This integration of personal passion and business acumen contributes to the authentic community atmosphere that characterizes successful third places and ibasho spaces.

Results

This section presents a systematisation of the strategies employed by BGCs in Tokyo to align with the theoretical frameworks of the third place (Oldenburg, 1989) and ibasho (Tanaka, 2021). Findings are categorized into two core dimensions: *play-centred experience* – emphasizing ludic practices and their role in fostering social interactions; *socialization-centred experience* – highlighting communication strategies and cultural elements that promote community building and personal connections.

The findings emphasize that these establishments not only offer recreational opportunities but also function as essential urban spaces fostering connection, growth, and a sense of belonging. Table 3 summarizes the strategies employed by BGCs to embody the essence of third places and ibasho spaces, further contributing to their role as social hubs.

Table 3: Strategies employed by BGCs

Play-centred experience	Socialization-centred experience
Waiters as hosts	Design for sociability
Diverse game collection	Food and beverage offerings
Game sales and playtesting	Loyalty programs and social media engagement
Special events	Facilitating interaction
	Skills development and personal growth

Source: own processing

a) Play-centred experience

The play-centred experience focuses on the ludic culture and gaming practices observed in BGCs that encourage interaction, collaboration, and social inclusion. Key strategies include:

- *Waiter as hosts*. In addition to serving food and beverages, staff at BGCs facilitate gaming experiences through their knowledge of game rules, ability to make recommendations, and organizational role in forming groups for gameplay sessions. While Oldenburg's (1989) concept of regulars in third places primarily refers to patrons who frequently visit and shape the social dynamics of a space, staff members in BGCs often embody this role as well. Beyond their professional duties, they cultivate familiarity and rapport with patrons, strengthening the social fabric of these spaces. Staff members act as hosts, connecting solo visitors with other players a vital function, as 44% of interviewees reported visiting these establishments unaccompanied. In some cases, staff even join gameplay sessions when required, further enhancing the sense of inclusion and community central to both third place and ibasho frameworks.
- Diverse game collection. BGCs curate diverse game collections spanning genres, themes, and game mechanics from party games to strategy-based games. This variety serves multiple functions: it accommodates different player preferences, facilitates social interaction among strangers, and creates opportunities for shared experiences. Drawing on Douglas and Isherwood's (1979) conception of consumption as a classification system, the game selection acts as a social bridge while enabling personal expression through gaming preferences. At the start of gaming sessions, some hosts tend to recommend cooperative games, over competitive ones, to create an inclusive environment where teamwork and mutual support foster the ibasho qualities of comfort and belonging.
- Game sales and playtesting. BGCs dedicate space to selling board games, including popular titles and lesser-known works by local designers. This research showed that most BGC owners are board game enthusiasts and sometimes amateur designers, often hosting playtesting sessions. This practice aligns with Tanaka's (2021) temporal dimension of ibasho, where spaces facilitate individual growth and future development. Through playtesting, visitors transform from consumers to active participants in game development, gaining expertise in analysing game structure, playability, design, and storytelling. This progression from player to evaluator exemplifies how BGCs support self-realization and skill development – key aspects of ibasho's temporal perspective focused on personal growth and future possibilities.

 Special events. Special events at BGCs – including competitions, immersive theatre, and themed events – extend beyond basic gaming experiences to create distinctive social environments. These initiatives align with both theoretical frameworks: as third places, they foster the regular, informal gatherings Oldenburg (1989) identifies as crucial for community building; as ibasho spaces, they fulfil Tanaka's (2021) three dimensions. The temporal aspect manifests through skill development in competitions, the spatial element emerges in the creation of comfortable themed environments, and human relationships develop through shared experiences. Field observations revealed these special programs consistently attract diverse groups and encourage repeat visits. For example, at Dear Spiele, monthly tournaments create opportunities for competitive play while strengthening social bonds, while Dyce's themed nights combine gaming with cultural exchange. These events create micro-communities within the broader patron base, enhancing the sense of belonging and shared interests. Through these activities, BGCs transform from mere gaming venues into spaces that support both community formation (third place) and personal growth (ibasho).

b) Socialization-centred experience

The socialization-centred experience explores how BGCs craft their physical spaces and practices to promote interpersonal connections, social wellness and community building. Through intentional design and atmosphere, these establishments create welcoming environments where people feel comfortable engaging socially:

- Design for sociability. The interior design of BGCs reflects a deliberate effort to create hubs for sociability. Communal tables serve as focal points for group interactions, while diverse seating options ranging from cozy couches to poufs encourage different forms of engagement. The lighting in these spaces is also carefully planned, with neutral and warm tones used to create a cozy atmosphere. In some establishments, there were multiple areas: tables specifically designed for board games, counters with high stools for enjoying a drink while playing card games, and lounge areas intended solely for conversation. This strategic arrangement not only accommodates various group sizes but also fosters a sense of inclusion and comfort. The interplay between physical design and the relaxed atmosphere transforms BGCs into social spaces, aligning with third place principles and supporting the creation of an ibasho where visitors feel a sense of belonging.
- Food and beverage offerings. The provision of snacks, meals, and beverages creates opportunities for conversation that deepen interpersonal connections. Shared meals and extended discussions over food integrate the ludic and social dimensions of BGCs, resonating with ibasho as spaces that foster comfort and community. These moments also serve as natural pauses to resume conversations sparked during games. Patrons often describe how shared food experiences become opportunities to discover common interests, building stronger interpersonal bonds that sometimes extend beyond the cafe setting.
- Loyalty programs and social media engagement. BGCs employ strategies to cultivate what Oldenburg (1989) terms the regular core community members who help establish the social character of third places. Loyalty programs offering discounts or exclusive benefits encourage repeated visits, while social media platforms (Instagram, Line) extend community engagement beyond physical spaces. For example, Dyce's social media features regular players' achievements and upcoming events, fostering both individual recognition and community anticipation. This hybrid approach to community building reflects how BGCs adapt traditional third place characteristics to contemporary social practices.

- Facilitating interaction. In a cultural context where public social norms often inhibit spontaneity, BGCs stand out as spaces that actively encourage unscripted and organic interactions. Their relaxed atmosphere, according to our observation, welcomes louder conversations, laughter, and closer physical proximity, deviating from the reserved behaviour typical of urban Japanese settings. These features resonate with Oldenburg's (1989) concept of third places as *neutral grounds*, where individuals can step outside conventional roles and form authentic connections with others.
- Skills development and personal growth. The BGC environment facilitates development of competencies, aligning with Tanaka's (2021) temporal dimension of ibasho as a space for personal growth. Interview data revealed three key areas of development: a) personal skills – BGC participation requires managing social interactions, competition, and collaboration. Users report experiencing both success (victory, social connection) and challenge (defeat, rivalry), developing resilience and risk management capabilities. These experiences align with ibasho's emphasis on safe spaces for personal development; b) social competencies - participants actively use BGCs to enhance communication skills through party games, deduction games, and RPGs. Collaborative games foster teamwork abilities, while competitive play develops emotional regulation and social awareness. This social learning aspect fulfils both Oldenburg's (1989) conception of third places as social levellers and Tanaka's (2021) human relationship dimension of ibasho; c) learning competencies - the BGC environment promotes self-directed and peer learning through game rule interpretation, strategy development, and knowledge sharing between experienced and novice players. Host interactions provide structured learning support, creating what Oldenburg (1989) describes as an informal grassroots university atmosphere.

Conclusion

In Japan, rising rates of social isolation (Silva, 2021; "Priority plan", 2024) and technological dependence among young adults present significant societal challenges (Mihara & Higuchi, 2017; DiJulio et al., 2018). This study examined how board game cafes (BGCs) in Tokyo function as third places (Oldenburg, 1989) and ibasho spaces (Tanaka, 2021), investigating their potential to address these social issues. Through ethnographic research at nine BGCs, including observations and 36 interviews, we analysed how these establishments create environments fostering face-to-face interaction and community building.

Our findings, grounded in consumer studies theory (Baudrillard, 1970; Douglas & Isherwood, 1979; McCracken, 1988), revealed that BGCs combine play-centred and socialization-centred experiences to create spaces that encourage personal growth and social connection.

Play-centred experiences, including host-facilitated gaming sessions and diverse game collections, create structured opportunities for social interaction while accommodating various player preferences and skill levels. Socialization-centred experiences extend beyond gaming through carefully designed spaces, shared meals, and community events that foster ongoing relationships. The development of personal skills emerged as a significant outcome, with participants reporting improvements in communication, emotional regulation, and strategic thinking. BGCs embody third place characteristics (Oldenburg, 1989) through informal gatherings and regular patronage, while fulfilling ibasho dimensions (Tanaka, 2021) via temporal (skill development), spatial (comfortable environment), and relational (community building) elements. These spaces seem to

counter technological dependency by offering analogue gaming experiences and address social isolation through environments designed for progressive social engagement. By integrating these functions, BGCs emerge as urban spaces that actively address contemporary Japanese social challenges, demonstrating their potential for fostering social wellness and community building among young adults.

Overall, the BGCs examined in this study demonstrated effectiveness in mitigating feelings of loneliness and fostering social well-being among their users. Nevertheless, certain limitations were also observed. Despite the considerable potential inherent in BGCs, our findings indicate that their current impact is uneven across different demographic groups, particularly regarding gender inclusion, as evidenced by the predominance of male users. Moreover, questions arise concerning the accessibility of these establishments to individuals from diverse socio-economic backgrounds, given that, in some venues, consumption beyond the entrance fee is mandatory. Although BGCs promote immediate social interactions, future research could benefit from the implementation of longitudinal studies to assess the sustainability of relationships formed in these spaces and their long-term effects on social isolation and mental health.

Additionally, the multi-methodological and ethnographic approach employed – encompassing structured observations, participant observations, and both structured and semi-structured interviews – proved effective in capturing the nuances of consumption, sociability, and community-building dynamics within BGCs. Based on the findings of this research, it is possible to recommend the application of this methodological protocol to studies extending beyond the context of board game cafes, including other ludic environments such as hobby stores, comic book cafes, e-sports lounges, and themed bars, both within and beyond Japan.

These analogue social spaces, much like BGCs, appear increasingly vital in an era marked by digital overconnectivity and the emerging epidemic of loneliness. Investigating their roles across diverse cultural contexts could contribute to a broader understanding of how leisure, play, and physical spaces foster belonging, social resilience, and community formation in contemporary societies. Thus, this study not only offers insights into the specific phenomenon of board game cafes but also opens avenues for deeper exploration into the evolving landscapes of urban social spaces worldwide.

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Appendix A: A List of Visited Board Game Cafes

1. Jelly Jelly Cafe 新宿店 Date: February 29, 2024

Address: Japão, 〒151-0051 Tokyo, Shibuya City, Sendagaya, 5 Chome-33-1, Coopinfield, 1 F



2. Little Cave

Date: February 19, 2024 Address: Japão, 〒166-0003 Tokyo, Suginami City, Koenjiminami, 4 Chome-26-16 芦野ビル 2階



3. Dear Spiele Date: February 20, 2024

Address: Japão, 〒164-0003 Tokyo, Nakano City, Higashinakano, 4 Chome-9-1 第一元太 ビル 4-A 第 一元太ビル



4. U Cafe

Date: February 22, 2024

Address: Japão, 〒110-0005 Tokyo, Taito City, Ueno, 1 Chome-2-6 長谷川ビル 2F



5. Korokoro dou Date: February 22, 2024 Address: Japão, 〒110-0005 Tokyo, Taito City, Ueno, 1 Chome-9-3 日向ビル 1階



6. Gotta2Cafe Date: February 25, 2024

Address: Japão, 〒169-0051 Tokyo, Shinjuku City, Nishiwaseda, 2 Chome-16-17 NKビル 2F



7.10 billion point

Date: February 25, 2024

Address: Japão, 〒162-0808 Tokyo, Shinjuku City, Tenjincho, 68-3 橋本ビル 2F



8. DyCE Global Board Game Cafe Date: February 29, 2024 Address: Japão, 〒150-0002 Tokyo, Shibuya City, Shibuya, 1-chōme-6-4 The Neat 青山 5 階



9. Jelly Jelly Cafe Shibuya 2 Goten

Date: February 29, 2024

Address: Japão, 〒150-0002 Tokyo, Shibuya City, Shibuya, 1 Chome-13-5, Daikyo Shibuya Bldg., 11階



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Every-body at Play: Fostering Understanding of the Somatic to Enrich Play Experiences

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ABSTRACT:

This article aims to describe a new framework to think about the feelings of having a body in the context of digital games. By understanding how abstract thoughts stem from embodied experiences through phenomenology, the importance of the aesthetic experience of the body is highlighted as a source of meaning-making. From there, a delve into somaesthetics regarding the experience of being a specific body (or hexis) is used as a focal point both for thinking about existing games and to picture new types of interactions, in an effort to express more diverse and detailed somatic experiences. Subsequently, a brief analysis of two existing games: the virtual reality title *Broken Edge*, as well as *Hand Simulator*. Finally, we conclude with an explanation of our own design process, by demonstrating how the somaesthetics framework was used first analytically and how its insight informed practical applications in the context of our research-creation process.

KEY WORDS:

body, digital games, embodiment, estheme, somaesthemes, somaesthetics.

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Introduction: Learning How to Walk

What would it feel like to inhabit another's body? When experiencing digital game play, we take on a new cyborgian embodiment (Keogh, 2018), we transiently take on a new form. We are thus redefining ourselves and the game by the specific way it is actualized. Often, this is done for entertainment purposes as we embody a combatant, a vehicle or an animal, but what if we reframed this focus to be able to better understand another person's embodied experience? From a phenomenological standpoint, all knowledge comes first from embodied feelings, which then gets abstracted into more complex thoughts (Johnson, 2007). When one's body encounters new ways of relating to (time and) space – such as through digital game play – one alters the foundation upon which all other meaning emerges. From the junction between the player's consciousness and the game's rules and representation comes forth a new being-in-the-world, enabling a new realm of symbols with which to understand reality. The thesis highlighted in the present article is that digital games possess a unique way of enabling the experience of new modes of embodiment. That lens¹ has not yet been theorized thoroughly, yet it holds interesting potential both for analysis and design.

Discussions surrounding digital game aesthetics have been centred on visual representation, either its style or pleasantness (Kirkpatrick, 2011; Niedenthal, 2009). Furthermore, as Keogh (2018) notes there remains a tendency to think of digital games as "digitalized nondigital games" (p. 117), as though the medium is inextricably defined primarily through its *gameness* rather than its embodiment. While embodiment in

¹ Remark by the author: To reuse Schell's (2008) metaphor of looking at games through different lenses.

digital games has been written about (cf. Gee, 2008; Gregersen & Grodal, 2009; Perron, 2009; Lankoski, 2016; Beaufils & Berland, 2022; Mills et al., 2022; Klevjer, 2022) and the aesthetic viewpoint is gradually expanding in game studies (cf. Bopp, 2020; Mitchell & van Vught, 2023; Noël, 2021; Possler & Klimmt, 2023; Jacquet, 2024), there has yet to be a cohesive framework to analyse the interconnectedness of body, mind, aesthetic, embodiment, and digital games. We do have good foundations on which to understand how the player's body and the game relate in a broader sense. However, we lack precise tools to dissect and qualify the bodily sensations that arise from gameplay so as to better analyse and recreate them.

Positioning the incarnate flesh of the body as fundamental to conceptual thinking (Grodal, 2009), we propose that a better understanding of the *sensations related to embodied experience* can foster the creation of thought-provoking mechanics, interesting themes, and otherwise polished *game feel* (Swink, 2008). Let's recall that Swink (2008) defines game feel as "the tactile, kinaesthetic sense of manipulating a virtual object. It's the sensation of control in a game" (p. xiii). In order for a game to have *game feel* it requires real-time controls, a simulated space and polish. The discussion herein relates mostly to games that meet this criterion and not, per se, turn-based games. This also fits the approach of Gregersen and Grodal (2009) when they highlight that digital games are "most fundamentally distinguished from ... other similarly cerebral games ... by the necessity of *player action*, *movement* [emphasis added], and habituated patterns of stimulus and response" (p. 53).

We will first establish some phenomenological concepts in relation to embodiment (Johnson, 2007). Then we will explore how Shusterman's (2008) conceptual framework of *somaesthetics* has been applied in game studies (Guerin et al., 2020; Mayer, 2024; Nielsen, 2010; O'Brien, 2018) in order to frame how digital games create meaning in embodiment. Then we will dive into aesthetics, notably by extrapolating our concept of *estheme* (Noël, 2021) to specifically address the feelings related to having a body, or *somaesthemes*. Using Bourdieu's (1980) concept of the embodied part of the habitus, the *hexis*, we will reflect on how digital games could be designed to communicate both varied and detailed embodied experiences. A brief analysis of the digital games, 2017) will serve to demonstrate the existing examples of somatic reflections in games. Finally, we will extrapolate how the developed framework could be applied in game design as well as exemplify how it was used in our own doctoral research-creation project.

The Feeling of Having a Body

When trying to describe our everyday human embodied experiences, we are often confronted with the ineffable.² In his phenomenological work, Johnson (2007) explains that "our bodies hide themselves from us in their very acts of making meaning and experience possible" (pp. 4-5). Core to our argument is Johnson's (2007) thesis for his book, as summarized here:

what we call "mind" and what we call "body" are not two things, but rather aspects of one organic process, so that all our meaning, thought, and language *emerge from*

² Remark by the author: As both Damasio's (1999) *The feeling of what happens* and Dourish's (2001) *Where the action is* book titles demonstrate.

the aesthetic dimensions of this embodied activity [emphasis added]. Chief amongst those aesthetic dimensions are qualities, images, patterns of sensorimotor processes, and emotions... Change your brain, your body or your environments in nontrivial ways, and you will change how you experience your world, what things are meaningful to you, and even who you are. (Johnson, 2007, p. 1)

In parallel, in an article about how digital games can amplify consciousness, Preston (2017) highlights how the perceptual apparatus employed in digital games allows for a type of sensemaking (or semiosis) that emulates closely enough the phenomenology of our everyday embodiment. The author also explains that skills developed in gameplay can extend into reality and even into dreams, hinting at a transformation that goes beyond the boundaries of the gameplay.

Amongst the studies relating to embodiment and digital games mentioned in the introduction, Perron's (2009) foray into horror is the closest to the body. From cognitive sciences and film studies, he establishes the importance of the kinaesthetic as the basis of self-conception, in reality and hence in the game. He also describes how the gamer will fill the missing parts of the avatar's bodily experience back into their own body. So that both sensation and readiness to action are transferred from the game to the player's carnal body. Other studies in embodiment also approach it in broad terms or from a certain distance, such as when Lankoski's (2016) writes:

The embodiment is used to denote the sense that something is a part of one's body. The embodiment is characterized by the sense of ownership and the agency (agency in the meaning that one has a sense of being able to control one's own body). (Lankoski, 2016, p. 1)

While this definition might fit some uses, it paints an incomplete picture: one would not feel the same embodiment of one's arm if one was able to control it freely while being unable to sense touch, warmth or pain in that arm. Perron (2009) and Lankoski (2016) exemplify the trend in game studies about embodiment: while they provide valuable insights into the relation between the avatar's and the player's body and the importance of that relationship, they do not quite go deeply into the specific *sensations* felt by either body. Still, Gregersen and Grodal (2009) highlight some fundamental mechanisms of transference between the virtual and the carnal body:

Thus, modulations in our embodied experiences may come in several interacting streams from the body (somatosensory and proprioceptive) and (audio)visual information related to motor pattern stimuli from outside that activates mirror neuron ... One allows us to feel our own body extending into the virtual environment through a kind of virtual tool-use, the other activates our own motor system as a response to observed motor patterns. (Gregersen & Grodal, 2009, p. 69)

However insightful, their approach otherwise remains mainly about control mapping, motor action and the distinction between the player's actions (which they brand 'primitive action') and the avatar's own 'virtual action'. Their inquiry does not extend so much into sensations other than those related to movement, action and agency (Gregersen & Grodal, 2009).

Before going further, it seems necessary to state some limits to what we are hereby proposing. As such, we would like to emphasize a pitfall noted by Dor (2015) that identity and body in digital games are not necessarily related to an avatar or the player-character. The body of the player-character is not analogous to the body of the player, nor from a mimetic standpoint (the body does not make the same movements), and not even in the player's imagination (pp. 67-68).

Dor points out an *avatarocentrist* tendency in game studies that tends to lose sight of the distinction between player and avatar, especially when it comes to games in which a

player can embody many different characters such as those in the multiplayer online battle arenas (MOBA) genre. Thus, we wanted to put forward that our proposition does not solely aim to seek immersion so as to erase boundaries. It aims just as much to highlight the tensions and frictions between the player's and the avatar's bodies. This also means that the framework we are presenting will be better applicable to certain genres of digital games focused on singular, embodied experiences such as those found in first-person shooters or walking simulators while perhaps not being as pertinent for strategy games.

While Johnson's (2007) work enables a better understanding of how meaning arises from the body, it does not elaborate on what if *feels like* to have, to be a body. This is where Shusterman's (2008) concept of "somaesthetic" comes into play. He defines it as "the critical meliorative study of one's experience and use of one's body as a locus of sensory aesthetic appreciation" (p. 19). Saito (2017) highlights the importance of this endeavour as "the aesthetic relevance of proximal senses and bodily engagement ... [which] has traditionally been excluded from the reach of aesthetic investigation" (2017, p. 3). Somaesthetics invites us – amongst other things – to consider which bodily sensations arise when faced with a particular emotion and how to better recognize the former in order to enhance our aesthetic appreciation (of our body, our lives, and art), what emotions different parts of our body evoke, as well as how these feelings coalesce through our self-fashioning to sculpt our sense of self (Shusterman, 2008).

The use of the concept of somaesthetics in human-computer interaction research is increasing (Guerin et al., 2020), and it has been used a handful of times in game studies. O'Brien (2018) coined the term *somaster* to designate the "mastery of the body in story-based computer games" (p. 142). Guerin et al. (2020) have used the idea to think about the use of mirrors in augmented reality games. Recently, Mayer (2024) points to the potential of somaesthetics, hinting at hardware devices as well as the choice of lighting and furniture in the play space to enhance one's somatic sensibility. And although he coined the term *somaplay*, he does not yet define the term. As a neologism, it compares to gameplay, here with the prefix 'soma' meaning 'body'. Hence, somaplay (or somatic-centred play) could be used to distinguish this specific part of the experience where one engages with one's body (carnal or virtual).³

Undoubtedly, the most in-depth use of somaesthetics in game studies comes from Nielsen (2012) in his book on the subject wherein he describes "playing computer games [as] an essentially somatic practice" (p. 94) in parts because one needs to cultivate a mastery of the controls and must embody different characters. He also distinguishes between the *somatic experience* (the pre-reflective, visceral and direct experience of the body and its sensation) and the *experience of the somatic* (the reflective, hermeneutic, and interpreted part of the experience) (Nielsen, 2012). Nielsen (2012) points out that one's experience of digital games is a "continuous flux, a transformation of immediate experience and awareness of [one's] experience" (p. 29).⁴ The choice of word is intentional, as the author places quite the importance on the transformative nature of both somaesthetic and games: "being-in-the-game is simultaneously something the subject intentionally undergoes and savours for its transformational characteristics" (2012, p. 41).⁵ He further

³ Remark by the author: After all, English already has a plethora of words ending with 'play' such as cosplay (costume), gunplay and swordplay. One could extrapolate that out of gameplay, there is somaplay, storyplay, ruleplay or systemplay, puzzleplay or cognitiveplay, agonplay, to name only those wordplay.

⁴ Remark by the author: Nielsen (2012) points out in his footnote the definition of transformation as relating to a changing of shape.

⁵ Remark by the author: While it not this study's purpose to delve quite as deeply into phenomenology as Nielsen (2012), we find this derivation of being-in-the-world to be noteworthy: "Being-in-the-game is characterized by a transformation or *displacement* where technology naturalizes and decouples, amplifies and reduces our experience of the world (gameworld) as well as our experience of our somatic selves" (p. 40).

explains that the player engages in digital games voluntarily and "makes a somatic effort to master and adapt to its challenges, effectively pushing buttons, handle a perspective, and so forth, dynamically exploring somatic conditions and possibilities in-the-game" (Nielsen, 2012, p. 85).

Before turning our attention to how somaesthetic theory can help us describe transformations occurring to the player during gameplay, let us briefly put forth a last piece of vocabulary. In our research on the aesthetics of violent digital games, we introduced the term *estheme* to describe the constitutive element of an aesthetic experience (Noël, 2021). The term is on par with similar terms using an atomist approach such as Lévi-Strauss's (1958) *mytheme*, Propp's (1971) *narratheme*, *kineme* by Adshead et al. (1988), Cousins (2005) and Koster's (2005) *ludeme*, and more recently Sionnière's (2019) *diegeme* (as constitutive of the diegesis). An estheme arises at the conjunction of stimulus, sensation, emotion and appreciation (valence). It stands at the boundary between raw physiological input and fully formed conception, intellectualization and awareness of an encompassing aesthetic experience. As Nielsen (2012) points out:

an important task of a bodily paradigm within game research consists of continuously developing and enriching a vocabulary that is able to discuss the transforming nature of experience – somatic experience should not be explained or reduced, but rather described, discussed and used as an analytical perspective. (Nielsen, 2012, p. 39)

The terms we propose fill a lexical gap for dissecting the aesthetic (of having a body) into finer parts that can be more closely assessed, analysed and eventually recombined when designing a game. To exemplify, we have identified violence's principal esthemes: action, speed, brutality, power, control, subjectivity, intentionality, agency, suffering, as well as uncertain, corporal and painful confrontation (Noël, 2021). In turn, this concept can be adapted to pinpoint specific feelings relating to the body, thus somaesthemes.⁶ Bodily sensations are noted in aesthetic research as constitutive of the (som)aesthetic experience, while also not being reducible to them (Nielsen, 2012; Saito, 2017). Saito (2017) notes for instance "sweaty skin, breathlessness, thirst and the increasingly heavyweight of the backpack" (p. 44) as constitutive elements of the aesthetic experience of climbing, while Nielsen (2012) notes "the adrenaline rush and increased heart rate caused by a first-person shooter ... or the aches that the sharp-edged, rectangular NES controller caused my fingers as a child" (p. 205).

In isolation, these physical sensations are just that but taken in their broader context they take on a different meaning and affect: one's raised heartbeat during sport or arising from erotic arousal certainly does not feel the same. In essence, the term estheme is meant to express a specific, smaller part of a more global aesthetic experience; this part taking on a slightly different meaning because of the context of the whole experience, while also not being inextricable from it. Such that the aesthetic experiences of downhill skiing and sports racing both are constituted in essence by an estheme of speed. This hence avoids the confusion of saying something like "the aesthetic experience of sports racing includes the aesthetic experience of speed". The term enables a hierarchization of the aesthetic whole, from a unit that's closer to sensation, to a more global experience the meaning of which is inseparably defined by its context. Now let's explore how these sensations can be arranged into a meaningful whole.

⁶ Remark by the author: Nielsen (2012) hints to what could be described as somaesthemes: "Holding a wriggling earthworm in my hand might send shivers down my spine, making my soma turn away in disgust, or the ticklish sensation might focus and gather my soma in a curious attention around the creature in my hand" (p. 166).

Some-Body Else's Shoes

Before getting to the core of our exemplification, we need a final piece of the puzzle, which comes from sociology. Amongst Bourdieu's (1980) concepts, the habitus is fairly known, serving to describe how the different spheres such as class, religion, ethnicity, and gender overlap into a form of determinism in individuals. Bourdieu (1980) names the embodied manifestation of the habitus hexis. It serves to designate how cosmology, ethics, metaphysics and politics are embodied in individuals and groups into a durable way of standing (posture), talking, walking and hence of feeling and thinking. In other terms, this concept brings forward the notion that, for example, a young white male American atheist soldier would not stand, talk, walk, and thus feel or think in the same way as an older black female Nigerian Muslim nurse. Incidentally, through a somaesthetic approach, we can surmise that the sensation of embodying either of these bodies are equally different. In addition, Shusterman (2008) hints at a bidirectional, reciprocal relationship between somatic manifestation of the hexis and the psychological underpinnings in the broader habitus. For instance, for him "entire ideologies of domination can thus be covertly materialized and preserved by encoding them in somatic social norms that, as bodily habits, are typically taken for granted and so escape critical consciousness [emphasis added]" (p. 22). Such as, for example, women being taught to cross their legs or to speak in a softer voice, soldiers marching in unison or pupils being ordered in single file (cf. Foucault, 2004).

To summarize, we have presented that embodiment theory (Johnson, 2007) enables us to understand how meaning emerges through the non-duality between body and mind, and how changes to the body can deeply affect one's mind and sense of self. In turn, Shusterman's (2008) somaesthetics gives us tools to pinpoint more precisely the specific feelings and sensations arising from the body, and hence in what unique ways it could shape one's mind. Finally, Bourdieu's (1980) hexis comes out as an articulation of a peculiar way of being a body(-and-mind) and the idiosyncratic sensations of that particular human embodiment, or incarnation. Thus, we put forward that if changes in the body can affect the mind and the self to such an extent, then a digital game design focusing on specific somaesthemes could induce a strong sense of embodiment, whether as a form of realism, immersion, thrill or for other creative purposes. Furthermore, by designing with specific somaesthemes in mind, a game could convey an approximation of a specific hexis. Since speaking directly to one's body as one's essence of being-in-the-world often escapes critical thinking at first, this design strategy has the potential to strike at the heart of gamers' selves. Phenomenology tells us that the objects we use to perceive and act in the world become integrated to our bodies (Svanæs, 2000). Such as Merleau-Ponty's (1962) example of how a blind man's cane becomes his way to perceive the shape of his direct surroundings and does not feel external to him anymore. Similarly, the extension of the body's perception and actions within the digital game world shifts the player's identity into the game (Klevjer, 2006; Swink, 2008). Having come all this way, we can circle back to Keogh's (2018) statement that "the player's sense of self is caught up in and mediated by a circuit of organic, physical, and audiovisual actors and materialities, and the body through which the player perceives videogame play is reconstituted [emphasis added] within the circuit" (p. 41). We only need to target in what ways that body can be reshaped and to what ends.

Known Transmutations

Let us now examine some games that invite the player to rethink their soma. The first example is Montréal studio Trébuchet Entartainment's virtual reality (VR) game Broken Edge from 2022. In this game, the player is invited to embody one of several archetypal warriors: Knight, Duellist, Barbarian, Samurai, Persian, Tyrant, Viking, Pirate and Ronin (for video examples, see VR Fight Nights, 2022, 2023). Being a VR game, in some ways the player's actual body is symbiotically (see Calleja, 2011) mapped unto the character's virtual one. This usual mapping for VR is the one used when hitting opponents with the warrior's melee weapons. However, for other actions the mapping in Broken Edge makes the player perform a series of somewhat abstract poses that evoke each warrior's ethos through their unique hexis to activate the three different powers available to them. These powers are "edge breaker" (more damage), "second wind" (recuperate lost vitality) and "ward" (protect against a hit). Furthermore, each warrior must adopt a particular stance to empower their blade. For instance, to awaken its one-handed rapier the Duellist must point it towards their opponent and lightly flourish it; while the Barbarian must slowly wave their two-handed sword in slow, wide arcs. This correlation of finer, precise, and quick movements for the Duellist and the broader, cruder, more aggressive ones for the Barbarian is also reflected in their other abilities - which we will not detail here for brevity's sake. Additionally, each warrior has a choice of a few weapons that are mapped on its body (hip, chest, back, the Pirate even has a knife in their mouth). So, while each warrior has the common three basic abilities, there is a steep learning curve to know which poses will activate them, what is the basic stance to empower the main weapon as well as where the secondary weapons are mapped on the body. Through this somatic experience of shaping their bodies into these specific somaesthemes (poses and move sets), the player has an experience of the somatic. They temporarily adopt the archetypical warrior's martial hexis: they must move and thus feel their body in accordance with that character's own embodiment.

The second example is that of HFM Games' Hand Simulator from 2017. In this game, one must control a pair of hands solely using their keyboard and mouse, in order to manipulate mundane objects. The control mapping uses the four lined-up keys ASDF as well as the space bar for clenching each of the five fingers. The mouse's two axes are analogously mapped to the virtual hand's horizontal axes, its vertical one being controlled by the mouse wheel scrolling, and rotation of the hand is done by holding the right-click and moving the mouse. To make it all work, the player only controls one hand at a time. While we are used to digital games' desire for immediacy (erasure of the media, its transparency) where complex actions become subsumed into simpler gestures for the player, the game's awkward controls impose a hypermediacy (overabundance of the media, making itself known as media). Something taken for granted in other games - such as reloading a firearm – becomes the sole, gruelling task.⁷ The game rightfully opens with this warning: "The game can lead to uncontrollable outbursts of anger. Be careful" (HFM Games, 2017). As the simplest tasks become harrowingly difficult, the player is forced to rethink their own embodiment through this unnecessarily added complexity of their soma by the game's interface. Unconscious everyday use of their hands is transformed into what feels like a drunk claw machine, creating a frustratingly complex experience. This new being-in-the-game experience of somaplay forces the player to relearn how to

⁷ Remark by the author: For a deeper examination of immediacy and hypermediacy see Therrien (2011).

use these appendages, perhaps similarly to having a limb fall asleep or having a psychedelic experience.⁸

Both these examples focus on the control mappings. *Broken Edge* presents a somaesthetic twist on the immediacy of symbiotic VR controls enabling the embodiment of another's hexis, while *Hand Simulator* puts into perspective the player's relationship to their own body through the hypermediacy of its tortuous controls. By focusing on these, we are not examining in details other games and approaches that could be explored through the same lens of somaesthetic. Such as: body-related mechanics from simple life points abstracting the body's vitality, to full-on systems of balance and weight such as *Death Stranding* (Kojima Productions, 2019); novel types of controls such as the use of a camera to detect blinking as a main mechanic in *Before Your Eyes* (GoodbyeWorld Games, 2021); using the avatar's body as a privileged way of communicating game-relevant information, such as a limping animation to signify the loss of health points; embodiment and identification to a body whose representation differs from ours in VR, such as across gender or race; body-related thematic, such as suffering multiple diegetic deaths in *Returnal* (Housemarque, 2021) or its role in distorting perception in *Hellblade: Senua's Sacrifice* (Ninja Theory, 2017), to name only a few possibilities for exploration.

Short of endowing the player with actual appendages (see Höök et al., 2018), digital games can change the player's body in the cyborgian sense. Navarro (2012) puts forward that "the avatar has a dual role as a set of mechanics and a protagonist character, thus providing dual embodiment that results in a relation of identification" (p. 63). We argue that if a game considers specific somaesthemes to convey to players, they could leverage the body's unconscious to formulate a being-in-the-game to generate novel, exciting and detailed somatic experiences. By focusing design efforts on targeted feelings related to the body, one could convey never-before-seen (felt?) ways of being a body.

Formless Potential

As stated previously, game studies have yet to explore as deeply embodiment as it did rules and systems. To that end, let us consider two more ideas. First, Bogost's (2007) procedural rhetoric, that he defines as "the art of persuasion through rule-based representations and interactions" (p. ix). Second, Nguyen's (2020) conceptualization of games as "the art of agency" (p. 17), by means of which he elaborates that games can be used to communicate ways of being an agent, as a way to collaboratively develop our agency and autonomy. Correspondingly, games could also be used to *communicate ways of being a body* and in so doing formulate a *somaesthetic rhetoric*.⁹ By that, we mean a form of persuasion (or the very least, expression) through somaesthemes, by ways of moving and feeling one's body, as brought about by the game's mapping and interface. Properly speaking, from the aesthetic of the soma as articulated in the videoludic medium, a poietic of the soma would emerge, and – when communicate with a persuasive intention – could become a rhetoric of the soma, or a *somarhetoric* if you will. The saying, "Walk a mile in

⁸ Remark by the author: Noting the etymology of psychedelic, composed of *delos* for seeing or made visible, and psyche as the *mind* (thus: making the mind visible), we would propose that the experience proposed by some of these games are in some way *somadelic* as in they make the body visible, they bring it to attention and force us to reconsider it in meaningful ways.

⁹ Remark by the author: In a similar fashion, Foucault (2004) mentions that a soldier's body posture and vitality reveal a corporal rhetoric of honour. To differentiate, in our understanding a corporal rhetoric would be a rhetoric expressed by a body about something else and as observed outwardly; whilst a somaesthetic rhetoric would be one felt inwardly by a body, as to express an idea either about a body or something else.
someone else's shoes", is used in that way, to convey that to fully understand another person we should experience what they do. We argue that in order to do so, we need to also feel the same sensations, adopt the same posture, gestures, movements as well as abilities and constraints that their body has. If designed with such an intent, digital games could convey just that. It is in the hands of people with different hexis, bodies and experiences to express them by inscribing these forms in the videoludic medium.

For instance, as someone who grew up in a dense boreal forest, we are well acquainted with the experience of trying to find the clearest path through thick vegetation and needing to constantly watch for a clear spot to place our foot. All the while being careful not to stab ourselves in the eye with a protruding or broken branch. On the flip side, we have never experienced hot and humid climates with steep cliff sides and strong winds daily, nor the endless maze of concrete in sprawling cities inhabited by millions. More than the direct actions performed by limbs, the very space, and the way it must be navigated offers up tremendous diversity in the embodied experience in a broader sense. On that aspect, Schaeffer (2015) reflects upon how a palace inscribes the structure of power in the bodies which inhabit it by blocking or enabling certain paths. While much has been said about the importance of space (see Jenkins, 2004; von Borries et al., 2007; Aroni, 2022), its role in shaping embodiment has yet to be explored in depth. One such exploration comes from Jenkins' (2007) concepts of narrative spaces, especially what he calls spatial stories: "stories that respond to alternative aesthetic principles, privileging spatial exploration over plot development" (p. 58). The terrain's geography shapes the player-character's trajectory and otherwise defines a rhythm through the gamespace (Jenkins, 2007). In relation to the affordances available to the player, the spatial story can become a defining feature of a digital game: Spider-Man games would not be the same if one could not swing around skyscrapers, as the character's embodiment is intrinsically defined by this somatic experience. On the flip side, Perron (2009) mentions that when presented with a protagonist described as a soldier with combat training: "I did not feel I was given any more fighting capabilities with this soldier who was returning to his hometown than I had in the previous games of the Silent Hill series, on the contrary" (p. 134). As Gee (2008) points out, games present affordances at the junction between the avatar's body's abilities, its goals and the virtual world. So that for instance, in a game like Thief (Eidos-Montréal, 2014), Garrett, the player's character, "is good at hiding and sneaking, and the virtual world (environment) of the game is good at being hidden and snuck in, so to speak" (Gee, 2008, p. 258). In short, there needs to be an adequation between the essence of what the character is, their abilities, and the possibilities offered by the game to actualize these abilities so that the player can properly feel what it is like to embody that character's body.

In a flurry, here are a couple of interesting somaesthetic experiences one could try to design for: walking on ice, in snow, on slippery rocks, in sand or in a thick forest; being quite short or tall, large or thin, heavy or light; experiencing a handicap or disability, whether physical or neurological, or on the flip side finding ways for someone with a handicap to experience an able body; having extra, fewer or different limbs and body parts; having to repeat tedious tasks such as farming labour or assembly line work; having to speak a different language, getting used to the shapes of new sounds in one's mouth; the sensation of an unusual texture or way of eating a type of food, such as eating a small, live octopus; finding one's way and traversing a city, jungle, desert, canyon or swamp, just to name a few.

Besides specific actions and spaces shaping one's embodiment, there are myriads of ways in which the context changes its nature. For instance, as many of our contemporaries in the Western world, we have not experienced any test of our physical might (whether fighting, fleeing, or carrying precious cargo such as food or water) where our *survival* was at stake. The closest such experience we have had was within the context of a digital game where our avatars' bodily integrity was constantly in peril. Our analysis of such an aesthetic of violence highlights its inexorable relationship with the body (Noël, 2021). Such a cognitive exhaustion related to both virtual physicality (positioning, navigating the environment) and actual bodily prowess (expert manipulation of mouse/ keyboard, hand-eye coordination) relates to O'Brien's (2018) concept of somaster fiction. It can also be considered a type of *striving play*, defined by Nguyen (2020) as the pleasure of the struggle itself. In other words, when the player's imagination is stimulated in a fictitious context of survival, as suggested by the mechanics of preserving hit points or 'dying', a form gameplay focusing on immediate motor actions will give rise to unique somaesthemes intrinsic to the somaesthetic experience of violence. Such as a form of tiredness, physical exhaustion, tenseness and fast beating heart, that will exhaust the body outside of its comfort zone: a pain that might start to feel like an aggression.

Finally, let's reflect on Mayer's (2024) suggestion that the actual playing space (i.e. a living room) could influence the experience of play. From Shusterman's (2008) theory, we find that an interesting potential lies within what a player might be wearing during play, especially in the context where their full body is called to move as the interface (such as with VR). What if one tried to replicate some of the somaesthemes implied in the game by wearing apparel on one's actual body, such as wearing a heavy backpack, military boots and attire, or whatever one's avatar might be wearing in *VR Chat*? On the flip side, the game could bring the player's attention to the avatar's sensation of their own clothing, which is already apparent in sound design, where one can hear fabric rustling as the avatar sprints in many first-person shooters. Some games also take into account the weight of equipment in relation to speed and stamina.

The challenge for designers lies both in finding interesting, worthy somaesthemes to convey and the proper means to do so. Somaesthetics, as a discipline focusing on being aware of one's body, brings only the first step in that equation. We need to find a common way to bridge thinking about one's actual embodied experiences (such as those enumerated above), and the fictitious embodiment games are trying to convey: how can one's everyday life inform somaesthemes? Or, on the flip side: how can a digital game's somaesthemes inform one's everyday life, make them rethink their relationship to their body, or consider another way of being a body? This in turn can be framed with some type of somatic rhetoric or goal: how can a specific somaesthetic experience shape someone's mood or emotions towards a group of people, culture, or ideology? We can convey for entertainment value what it is like to be a nimble and stealthy elf jumping between branches or an eight feet tall transhuman in exoskeleton armour with superhuman reflexes. But we should also be asking what it is like to be a twelve-year-old boy running after his dog in a boreal forest through melting snow or a 60-year-old woman carrying a jar of water on her head walking on sand for miles; what is the embodied experience of putting makeup, cutting up a moose into its parts. These experiences might seem boring if we only consider them for their systems as we have known them to be in other existing games. But they have the potential to be quite exciting if thought through the lens of somaesthetics. By walking a mile in each other's shoes, we could learn a bit more about every-body. For that matter, the game Dys4ia (Anthropy, 2012) by Anna Anthropy has that goal of conveying (a part of) the experience of transness and presents it through a series of spatial metaphors and mini games. Several of those mini games portray somaesthemes such as the one where the player has to navigate an abstract representation of breasts as to avoid their nipples touching pointy objects, with the caption "My nipples are incredibly sensitive" (Anthropy, 2012). While the interaction is simple – use the arrows to prevent the blinking nipples hitting the spike balls - the combination of the representation, context and controls do evoke the struggle of having sensitive nipples.

Incarnating Theory in the Game's Body

So far, we have detailed how two games make use of input methods and themes to convey interactions related to the body. Now, we would like to go over in more detail both what somaesthemes (or feelings of the body) could be inscribed in the videoludic medium and how to go about it. Before that, let's first acknowledge a contribution in cinema that relates closely to what we are doing here, which is Sobchack's (1992) concept of the *film's body*. She mentions the term used empirically, not metaphorically, and describes it as follows:

First, [the film's body] will be considered in its existence as enabling the filmmaker's and spectator's perception and expression, as the instrumental mediation necessary to cinematic communication between filmmaker and spectator. However, the film's body will also be considered as the film's means of perceptually engaging and expressing a world not only for us but also for itself. Thus, the film's body will be considered as a direct means of having and expressing a world – given to us as a technologically mediated consciousness of experience, but given to itself, through the praxis of its existentially functional body, as the immediate experience of consciousness. (Sobchack, 1992, p. 168)

Recalling Keogh's (2018) mention of the cyborgian relationship between the game and player, we can rephrase Sobchack's (1992) formulation as follows: the game's body is the instrumental mediation necessary for videoludic communication between game designer and player. The game's body is the *material* one the player's *carnal* body interacts with, to form a sense of the avatar's *virtual* body. It is influenced by the physical medium it is being perceived from (screens and speakers) and acted upon (controllers). However, the game's body is also largely dependent upon the junction between audiovisual representation and mechanics which define its shapes. That is to say, the game's body largely constitutes what we are referring to when speaking about a digital game's feel or the aesthetic experience it evokes in a broader sense.

Otherwise, a single game can enable the players to inhabit a multitude of bodies.¹⁰ Overwatch 2 (Blizzard Entertainment, 2022) has a wide choice of characters (and thus, bodies) each with their own height for the point of view in-game, speed, movement abilities, health and weapons. But it does not end there: the way they move is also inscribed into the point of view of the player. Players might have become used to head sway, this light movement of the camera in subjective view as the avatar moves, but Overwatch 2 gets into the specifics of characters. For instance, since Zenyatta is floating above the ground, it is natural that he has no audible footsteps, but he also has no head sway. On another level, Torbjörn has the player's view defined by the character's equally short height. Similarly, in the survival shooter Warhammer 40,000: Darktide (Fatshark, 2022), players can choose to play the Ogryn character, which is taller and larger than a normal human. Thus, when fighting (human) zombie waves, the player quite literally has to look (aim) down in order to hit them with their melee weapon. It also means that there are some places where they have to crouch, while other characters can simply go through. Cover also simply is not as effective for them since they are such a big and tall target. Finally, while their melee hits and firearms hit hard and punch through bigger masses of enemies, their swings

¹⁰ Remark by the author: Dor (2015) also discusses the embodiment of multiple characters, notably in the context of MOBAs. He explains how the embodied character actually belongs to the community, and how its body and abilities become defined by the dominant strategy at use (the *meta-game*).

and weapon swapping speed are correspondingly slower. Thus, when playing this character, one's sense of one's body becomes altered in meaningful ways as the player must take into account the avatar's capabilities and limitations in order to properly interact through the game's body.

There are other types of feedback we have become accustomed to as players in regard to physical damage to the virtual body: heartbeats, blood on the screen (or simply a diffuse redness around the edges) to signify low health, heavy breathing for low stamina, camera shakes for giving or taking hits. While virtual bodies are often augmented with intradiegetic magic or technology¹¹ to give them new action or perception abilities, few are the moments where the actual body of the avatar is the source of these. A notable example of somatic cues for gameplay is used in Far Cry Instincts (Ubisoft Montréal, 2005) where enemies can be tracked by the visible trail of scent they leave behind. A similar process is employed for the Veteran class in Warhammer 40,000: Darktide whereupon activating their special ability, priority targets (elite enemies) become highlighted in yellow. Since the videoludic medium cannot properly transmit either scent or a skilled soldier's tacit sense of what a priority target is, it must rely on a synaesthetic transsemiotisation (cf. Therrien, 2011): a change of signal across senses, here from smell to sight. Short of inventing new peripherals, designers are somewhat limited by commonly available devices. They must find creative ways to convey to the player's body the perceptions, abilities and limitations of the avatar's body.

It then goes without saying that a lot of what's going on during gameplay is left out of the player's perception. Since mainly video/sight, audio/sound and haptics/movement in some capacity are available for expression, it leaves out a plethora of other bodily senses. To name a few: nociception (pain), thermoception (temperature), most of the subtleties of mechanoreception are left out (touch, pressure), proprioception is only really present in VR, and, of course, taste and smell are not present either. This means that vital parts of the aesthetic experience of what the avatar's body would be experiencing in the diegesis are not passed on to the player. Sensations like the smell and warmth of fresh blood, of burning tires and burnt gunpowder; the material and weight of clothes and equipment; the wetness (sweat) and warmth of bodily exhaustion; the feeling of one's heart thumping; shortness of breath; the sense of one's own strength, balance, agility and dexterity (or lack thereof); butterflies in the stomach or cold sweats. It is precisely in identifying those sensations that somaesthetics becomes relevant as a tool to further embodiment in digital games. We might also consider more cognitive abilities. These include the ease or difficulty of processing what's going on in their environment that we can convey by highlighting targets or pathways to the player; understanding a language; the understanding and muscle memory of operating a complex vehicle. Another example of said ability would be slow motion effects: the underlying assumption is that the avatar is able to process information (or move) at a much higher pace than the player and hence is presented to the latter as slowed in time. This leads us to the listening mode in The Last of Us (Naughty Dog, 2013-2024) series. At the press of a button, the player can have their avatar listen more closely to their surroundings, slowing their movement and displaying visually the enemies that are close by, through walls and obstacles. Again, this is a case of synaesthetic transsemiotisation, where the avatar's ability to correctly identify the place a sound is coming from in space (hearing, cognition) is transmitted to the player through the much clearer channel of sight.

¹¹ Remark by the author: Like for instance a low-light or thermal vision capability using specialised optics.

There is a plethora of actions the avatar's body might perform that a player may not be able to, such as swimming, using firearms or piloting a tank. But these are usually made explicit by animations and interactions that are abstracted and simplified to be accessible to the player. For instance, piloting a helicopter usually only necessitates a few buttons on a controller and a few minutes to master rather than thousands of hours of training to operate its myriads of switches, buttons and panels.¹² Control mapping is fairly documented (cf. Calleja, 2011; Therrien, 2011), and we do not want to stray too much in that direction. Rather, we are asking: what are some real-life interactions that would be interesting to make concrete and complex (rather than abstract and simple) in digital games? While Hand Simulator is a good example of our point, it also makes for a frustrating experience. But we can ask: what about the steps required to reload a firearm?¹³ What about walking?¹⁴ If we dig deeper, what would a game where you must *manually breathe* or beat your own heart look like, or rather, feel like? The line of inquiry guided by somaesthetics as applied to digital games is thus: what are some interesting things the body does and feels that would make for great mechanics, controls, mapping, or themes in digital games? Concretely for designers, this becomes: how can we convey (transsemiotise) the perceptions, abilities and feelings (somaesthemes) of the avatar's virtual body to the player's carnal body, through the game's material body? While it greatly surpasses our expertise and the depth of this communication, one could also ask what new peripherals could be created to convey these feelings.¹⁵

We are currently using this somaesthemes framework in our doctoral research-creation project. We are creating a first-person shooter digital game with the goal of better understanding the aesthetic experience of violent digital games. Specifically, we are trying to better understand the sensations of the carnal body that arise from a fictionally violent exchange between virtual bodies. With that stated goal in mind, we first devised the related esthemes of violence: action, brutality, confrontation, control, corporality, hyperexcitation, intentionality, power, speed, suffering, subjectivity and urgency. From these, we extrapolated somaesthemes we thought we could give rise to in the game: blood pumping, exhausted breathing (deep and fast), the sense of the body being hit, pain, sprinting, physical prowess, the weight of the weapon, the clarity (or obstruction) of vision, senses overload and being covered in blood. To try and better understand the impact of these different elements on both the sense of having a body and violence, we made two different versions of the same game. Version A is a more classical military and realistic shooter. Version B is more akin to an over-the-top boomer shooter. We will now detail the ways we have implemented some of these somaesthemes.

In version A, the avatar's body is fully visible and animated (from the neck down). The player can vault and climb over obstacles, crouch for cover, aim down the sights of their weapon as well as sprint at the hold of a button. All these movements are fully animated and will hence move the camera which is tied to the head of the character. Using movement skills will eventually exhaust the virtual body, triggering deep and fast breathing

¹² Remark by the author: Unless the game is more akin to a simulation and the whole point is to play with that complexity.

¹³ Remark by the author: *Receiver* (Wolfire Games, 2012) is one such game that has controls for inserting munitions in a magazine, insert one in the chamber, cock the hammer and so on.

¹⁴ Remark by the author: For instance, see games *Death Stranding* and *Baby Steps* (Cuzzillo et al., 2025).

¹⁵ Remark by the author: Or even what new ways of using the already common peripherals available to most. Such as using a controller upside down, facing towards the screen; transposing the arrows of WASD for movement to a sideways configuration to D (forward). W (left), S (backward) and X (right); or using a controller in the left hand and a mouse in the right hand to use the advantages of both the analogue nature of a joystick for movement and the precision of aiming with a mouse. Some peripherals like the SplitFish FragFx (essentially, half a controller) or the Razer Tartarus Gaming Keypad (part of a keyboard with a joystick and scrolling wheel) do offer some of the possibilities discussed but are an additional purchase.

that will oscillate the camera accordingly and thus also impede aiming. The avatar's and the enemies' bodies have simulated physical reactions when hit: their arms and torso will flinch and fling, following the hit's direction. While these impede a sense of reactivity and control, they further the somaesthemes of bodily weight and exhaustion. The player's screen will also be splashed with some blood when they are hit and have a red border at low health. The arms holding the weapon are dissociated from the camera (head) and will follow with a delay, as well as taking more time to aim down sights when the avatar was just sprinting. Enemies will take cover, their bullets hit harder and cannot quite be dodged, so the player has to take their time to carefully approach a situation. Overall, this version tries to convey a fairly typical realism, in lighting, shading, animation and systems. It also tries to implement the somaesthemes related to having a body.

In contrast, for version B, the avatar's body is only constituted of arms holding a weapon (nothing from the neck down) and are directly constrained to the camera (no delay), furthering a sense of direct control. In this version, the player cannot sprint, crouch, vault, climb nor aim down sights. They can however dash quickly in one direction, double jump and their movement speed when walking is faster than version A's sprinting. Combined with the variable field of view when moving, this helps foster the somaesthemes of physical prowess and speed. When at low health, the borders of the screen similarly become red, but the camera's field of view will also pulse along with an audible heartbeat. Instead of the screen being splashed in blood when hit, it pixelates heavily, applies a chromatic aberration and a loud glitchy sound can be heard, conveying the information in a more aggressive format for the senses. When killing an enemy, there's a chance that the game will have a slight freeze frame, flashing the screen in white and black, marking a moment of intensity. In order to convey urgency, we made it so that at the later stages the player's health is always draining a bit, on top of the damage they receive. Furthermore, their only way of regaining health is by being close enough to an enemy when damaging them to get covered in their blood. Doing so covers most of the screen with an animated texture of dripping blood, giving the player a slight immediate health boost and activating a passive slow health regeneration. This version also implements technomimetic mapping, where the player must perform primitive actions (to use Gregersen and Grodal's [2009] terminology) more closely matched to the virtual action performed by the avatar. Such as when inserting a blade into an enemy, they must hold the mouse button and slide the mouse forward, much like the movement of said blade. Otherwise, enemies are faster, but their bullets are slow enough that one can dash out of their way. Thus the player is encouraged to take risks and get close for the kill, enabling them to see the facial expression of pain of their victims. This version does not try to strive for realism and instead focuses on implementing somaesthemes related to violence.

Both versions have an 'intensity' meter, that basically gets higher when the player deals damage and kills enemies and gets lower when they receive damage or have not gained some intensity for a while. In return, this drives a plethora of other variables. Such as the sound file played when enemies receive damage or die, as well as their volume, so that the screams of pain and death get more desperate and intense; the quantity, scale, opacity and colour of blood (from colourful to less saturated, closer to reality); as well as the intensity of camera shakes, sway, rotation lag, general field of view, to name a few. We have yet to do the playtests and ensuing semi-structured interviews to gather qualitative data about the aesthetic experience arising from these two versions. As such, the effectiveness of the theoretical framework of (soma)esthemes for creating the desired results in players is yet to be validated. What we can assess as of now is the ease it provided us in the design and implementation process for our own project.

Conclusion: Full Bodied

The main idea behind this article was to demonstrate how focusing the design of a game on the body (the game's, the player's or the avatar's) as a site of meaning-making can foster the development of more diverse and detailed somatic experiences. By tying together phenomenological considerations through a somaesthetic lens, we formulated the neologism somaestheme to address specific physical sensations. In turn, this concept helped articulate how to convey a specific hexis to the player, or otherwise to create interesting opportunities for expressing (in the design) and in turn experiencing (through the gameplay) bodily sensations. From existing titles, we extrapolated what somaesthemes could be explored in digital games as a medium.

The conceptual framework developed herein builds on previous work about embodiment in digital games that focused on agency, ownership, movement and action. By developing a vocabulary around bodily sensations and exposing the concrete ways it can be used in design, we have paved the way for filling that gap in the conception of the body in digital games. The concept of (soma)esthemes hence highlights that when conveying embodied meaning by ways of movements, forms, shapes and spaces, digital games could induce a new way of thinking about one's body, environment and any other abstract ideas. As such, digital games can be thought as a medium within which we can inscribe a specific somaesthetic experience as conveyed by either thematic, narrative, audiovisual representation, or mechanics and control mapping.

Since there are no existing frameworks on designing for a specific somaesthetic experience, this exploration is but a small contribution of what needs to be done to be functionally used in game design. However, we believe this line of research holds the potential to foster an understanding of bodily sensations and how they are combined in different lived experiences. It could also facilitate their proper identification, articulation in a coherent design and implementation in actual games. In doing so, it would make for games where the presence and importance of the avatar's body could be felt, instead of it being relegated to simply a tool to be used for gameplay by the player. If employed with the proper care, it could foster empathy towards all kinds of different embodied experiences arising from a range of genders, ages, races, cultures, (dis)abilities, professions and climates to name a few. As such, it could be used to foster diversity, equity and inclusion efforts by going beyond audiovisual representation and narrative and instead going into the felt experience of another body, where every-body could be at play.

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Transformations in the Visual Presentation of Czech Games: The Evolution of Game Box Art from 1989 to 2010

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ABSTRACT:

This study investigates the evolution of game box art graphic design in the Czech context between 1989 and 2010. It examines how visual communication mediated by box art transformed in response to technological, market, and cultural influences. Game box art is defined as a multimodal medium with protective, aesthetic, communicative, and marketing functions, pivotal in shaping player expectations and decision-making. The research charts a historical progression, identifying three main stages: an amateur period (1989-1995) characterized by variability and often handmade designs; commercial standardization (1996-2000) featuring more sophisticated illustrations and emerging marketing strategies; and a period of professionalization and visual sophistication (2001-2010) reflecting international standards and advanced digital techniques. This study situates these Czech developments within global trends and the transformative shift towards digital distribution, particularly after 2010, aiming to delineate the chronological adaptation of visual approaches.

KEY WORDS:

Czech gaming industry, digital distribution, digital games, game box art, game marketing, graphic design, history, paratexts, visual communication, visual semiotics.

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Introduction

Box art can be understood in various ways, but primarily, we can perceive it as a protective cover for a product (Kotler & Keller, 2016). We view it more as a multimodal medium that combines protective, aesthetic, communicative, and marketing functions. This is because the box art is often the very first contact between the player and the game itself. And it is precisely this 'initial' visual communication that influences players' expectations and their decision-making processes, thereby becoming a rather key element in the gaming industry. Therefore, the importance of box art graphic design in the field of digital games cannot be underestimated or trivialized. Wyeth et al. (2012), for instance, show that visual stimuli related to a game directly influence players' emotions and their overall experience of interacting with the game media themselves. Similarly, Hamari and Lehdonvirta (2010) examine the influence of visual presentation on the market value of digital products, concluding that the graphical attractiveness of a product directly correlates with its perceived value and marketability.

Although game box art is occasionally studied in international contexts today, its role in the Czech gaming environment has not yet been sufficiently reflected. The main goal of this study is to determine the developmental stages via which communication between the player and the game in the Czech environment changed through game box art in the period from 1989 to 2010. The basis of this is to capture the chronological development – how these visual approaches evolved over time in response to changes in the gaming industry, technological innovations, and changing consumer preferences. This research includes a historical overview, from the first game box art to current trends, cultural and marketinfluences – local cultural factors and global market trends affecting the design and stylization of game box art in the Czech Republic. For the purposes of the research, we conducted a general analysis of game development in the Czech Republic, and after considering the primary goals and scope of the research, we primarily focused on the period between 1989 and 2010, two key milestones for the Czech gaming industry. While 1989 symbolizes the beginning of free enterprise in the gaming sector and the opening of the market to independent developers, 2010 represents the advent of digital distribution and a paradigm shift in game development, which fundamentally influenced the form and function of game box art.

The beginning of our research involved finding and critically evaluating relevant sources that could relate to the topic of game box art in the Czech Republic. The most essential study for understanding the historical context in Czechoslovakia relies on the foundational research of Jaroslav Švelch for understanding the historical context of gaming in Czechoslovakia. His comprehensive study, Gaming the Iron Curtain: How teenagers and amateurs in Communist Czechoslovakia claimed the medium of computer games (Švelch, 2023), provides a crucial analysis of early game culture and creation under the specific socio-political conditions of the era. More specifically relevant to the development of the local gaming industry before the Velvet Revolution is his earlier work, "Adventures in everyday spaces: Hyperlocal computer games in 1980s-1990s Czechoslovakia" (Švelch, 2021). This latter research maps the development of the local gaming industry and also touches upon the situation with box art design for games, which in the early period of game development, with their specificity, reflected not only technological and aesthetic changes but also market dynamics and the changing preferences of the gaming community. Although Švelch (2021, 2023) does not extensively detail the issues of distribution and game box art, his analyses offer significant contextual parallels and highlight the causality of individual production processes that shaped the form of game distribution after 1989.

In the Czech Republic, Bendová (2016, 2019) successfully addresses the issues of the gaming industry and games in the academic environment in her books Umění počítačových her [The art of computer games] and Co je nového v počítačových hrách [What's new in computer games]. In these texts, Bendová primarily focuses on digital games as a new type of contemporary art. Another source of information was the publication Umění klasických adventur – Historie point-and-click her [The art of classic adventure games - The history of point-and-click games] (Dyer & Jarratt, 2024), which is a book produced by the English publishing house Bitmap Books, supplemented in the Czech translation by Xzone with a special chapter dedicated to Czech point-and-click adventure games, by Petr Ticháček. For a broader understanding, one of the first studies addressing the situation of the game industry in Central Europe appeared in 2010 in the IEEE Annals of the History of Computing - namely, Durnová's (2010) paper, "Sovietization of Czechoslovakian computing". In the European context, we can learn more about gaming culture from the studies by Wasiak (2014, 2015, 2023). For a formal and contextual understanding of the issue from the perspective of the global gaming industry, we chose the overview by Schreier (2021), which provides a concise list of important moments in world gaming history. Regarding the issue of game box art as a work of art on a global scale, Bitmap Books' (2023) The art of the box and Art of Atari by Lapetino (2016) were fundamental. Lapetino (2016) captures the entire development of box art aesthetics of the main hegemon of the gaming industry - the USA - while also highlighting individual illustrators and their artistic approaches since the inception of the gaming industry. Despite these wider academic inquiries, we were surprised to find that gaming issues, in general, do not receive much attention in academic research, particularly concerning the specific focus on Czech game box art. Even graphic design (Newark, 2002), as an artistic field, is often underestimated due to its ephemeral nature, and its product – game box art – has not yet been viewed as an artistic artifact within this specific area of study.

The starting point for this research involved engaging with primary sources, namely Czech game magazines from the 1980s and 1990s such as *Excalibur*, *Score*, *LEVEL*, *Hráč*, and *Počítačové hry*, supplemented by archived disk magazines (diskmags). These periodicals were crucial for understanding the context of Czech gaming communities, their specific characteristics, and the dynamics of game supply and demand, as reflected in contemporary reviews and advertising sections. As such, these magazines offer authentic evidence of the transformation of the gaming industry and the broader developmental paradigm of the era. This initial investigation into these sources also brought to light a significant information vacuum regarding officially distributed box art for the period 1989-1994. During these years, software distribution was in a gradual transition from a correspondence model to a more organized market. Consequently, although game production existed, many titles were not distributed with official box art, which, given this study's specific focus on such artifacts, prevented their inclusion in the core analytical framework.

The main goal of this study is to determine developmental stages on how communication between the player and the game in the Czech environment changed through game box art during the period from 1989 to 2010. The basis of this is to capture the chronological development – how these visual approaches evolved over time in response to changes in the gaming industry, technological innovations, and changing consumer preferences. This research includes a historical overview from the first game box art to current trends, cultural and market influences – local cultural factors and global market trends affecting the design and stylization of game box art in the Czech Republic. For the purposes of the research, we conducted a general analysis of game development in the Czech Republic, and after considering the primary goals and scope of the research, we primarily focused on the period between 1989 and 2010, two key milestones for the Czech gaming industry. While 1989 symbolizes the beginning of free enterprise in the gaming sector and the opening of the market to independent developers, 2010 represents the advent of digital distribution and a paradigm shift in game development, which fundamentally influenced the form and function of game box art.

Visual Communication, Semiotics, Dynamics and Variability of Game Box Art

The gaming industry is a sector in which visual communication plays a crucial role in shaping player expectations and influencing consumer behaviour. The central element of this communication is the game box art, understood not merely as an aesthetic accessory but as a key paratext that frames the game text itself and actively participates in the construction of its meaning even before actual gameplay (Gray, 2010). Thus, we define game box art as a strategically designed visual and informational artifact whose primary function is to attract attention, signal genre classification, communicate key aspects of the gaming experience, and shape the potential player's interpretation of the game (Consalvo, 2007). Its design – encompassing composition, colour palette, typography, and iconography – employs specific visual rhetoric to appeal to the target demographic group and to differentiate the product in a highly competitive market (Kress & van Leeuwen, 2006). The importance of box art as a marketing tool, as generally described by Kotler and Keller (2016), takes on specific dimensions in the gaming context. Game box art must condense

complex information about the world, atmosphere, characters, and often even game mechanics into a limited space. For example, we can analyse the visual strategy of the *Assassin's Creed* (Ubisoft Montréal et al., 2007-2025) series' box art, which consistently uses a central character in a dynamic pose with a historical background, thereby immediately communicating the action-adventure genre with a historical setting while also building a recognizable brand across individual instalments. The box art thus functions as *visual shorthand* and the first point of interaction that activates the player's pre-understanding and expectations (Jenkins, 2006).

In addition to its informational and differentiation functions, game box art plays a significant role in inducing affective engagement. The visual style, colour scheme, and depicted scenes or characters are carefully chosen to resonate with the emotions of the target group and evoke a desire for the offered experience – whether it be tension, adventure, nostalgia, or perhaps fear (Genette, 1997; Gray, 2010). The aesthetic quality and execution of the box art, especially for physical and collector's editions, can enhance the perception of value and contribute to the fetishization of the object, thereby making the box art a collectible item as well. Therefore, box art is not just marketing material. This affective and aesthetic dimension establishes it in the role of a distinct cultural artifact.

In the digital era of game distribution (Steam, PlayStation Store, mobile platforms, etc.), the physical form of box art is transformed into a digital representation – typically a thumbnail or banner. However, its role as a paratext and marketing tool remains crucial, although the context and scale are changing (Kücklich, 2005). In the crowded visual environment of digital stores, *digital box art* must be designed for immediate recognizability and the ability to capture attention within milliseconds. The design must adapt to the algorithmic curatorial systems of platforms and the principles of the attention economy (Bucher, 2018). The flexibility and adaptability of game box art as visual communication across various media and platforms thus underscore its lasting importance for branding, marketing, and framing the player experience in the contemporary gaming industry ("Newzoo's global games", 2024).

Game box art, as a key visual and communicative element, faces a unique challenge stemming from the nature of the medium it represents. Unlike traditional media such as books or films, whose content is typically fixed upon release and whose aesthetic or narrative essence remains relatively consistent over time - the cover of the first edition of Kerouac's (1957) book On the road permanently refers to a specific text, just as the poster for Coppola's (1972) film The Godfather represents an unchanging cinematic work - a digital game is an inherently dynamic medium. Its form can, and often does, change through technological updates (patches, remasters), content expansions (DLCs), community interventions (modifications), or even evolving cultural interpretations and gaming practices (Juul, 2005). This fundamental variability of the 'game text', given its software nature (Manovich, 2001) and often its networked nature (live service models), inevitably also affects the meaning and function of its primary paratext – the game box art. This dynamic complicates the traditional relationship between the work and its visual representative. The box art for The Elder Scrolls V: Skyrim (Bethesda Game Studios, 2011) originally communicated the promise of a specific epic fantasy experience, visually defined by a snowy landscape and Nordic aesthetics. However, with the release of DLCs (Dawnguard, Dragonborn, Hearthfire) and subsequent remastered editions (e.g. Special Edition from 2016, Anniversary Edition from 2021), the game itself became a more extensive and modified product. The original box art (or its slightly modified versions) thus began to represent an ever-expanding and changing game world and ecosystem, whereby its original semantic relationship to the base game shifted and loosened. In re-releases, the box art is represented only by the dragon symbol, which has become a key identifying element.

This phenomenon illustrates how game box art functions in constant dialogue with the medium it represents, and its meaning is not fixed but rather processual – it evolves over time as part of a dynamic multimodal ensemble. It is therefore not just a static image, but rather a living semiotic system, whose relevance and interpretation are constantly negotiated in relation to the current state of the game and its reception. This instability contrasts with book covers, which, although they may be redesigned for new editions, the original cover remains firmly tied to the unchanging textual content of the first edition.

Variability is further accentuated in the digital environment. While the printed box art of a physical copy of a game is (apart from special editions or re-releases) immutable after release, digital box art on platforms like Steam, PlayStation Store, or mobile stores allows for and often requires visual updates. Developers can change 'key art' or icons to reflect new content updates, seasonal events, or to optimize visibility based on A/B testing and analytical data. This fluidity of digital paratexts (Gray, 2010) further strengthens the dynamic nature of game box art and emphasizes its role as an active marketing tool even after the game's release. At the same time, however, this can lead to situations where older, un-updated box art (whether physical or digital) loses relevance or even appears misleading if the game itself has undergone significant changes or become technologically outdated.

The economic structure of the gaming industry has also changed. Instead of onetime sales of physical copies, new forms of monetisation (microtransactions, DLC, etc.) began to prevail (Pravdová et al., 2023). The Czech gaming industry reflected this development with a delay, but after 2010, Czech game studios also began to adapt to new trends. Online distribution also made it easier for smaller studios to access a wider audience without the need for collaboration with traditional publishers (Juul, 2019). This development enabled the rise of a new generation of game developers who experimented with game mechanics and narrative approaches. It can therefore be said that digital distribution and the development of online platforms not only changed the economic structure of the gaming industry but also democratized game development, allowing independent developers to reach a global audience without the need for the high entry costs required for distributing physical copies.

Historical Development of Game Box Art

Game box art, as a specific form of packaging design, loosely follows the tradition of book and film covers, which in the past played a crucial role in marketing and the aesthetic expression of content. Historically, the development of book covers can be traced from their beginnings in the 19th century, when they served primarily as protective packaging, through artistic covers during the 20th century, to complex branding tools (Hollis, 1994). Similarly, film posters and VHS or DVD covers from the 1970s to the 1990s reflected the visual style of the films and became an integral part of their marketing strategy (Whalen & Taylor, 2008). Game box art only lightly reflects this development and further expands on it with regard to the specifics of the interactive medium and the needs of the global gaming community. In this context, the graphic design of game box art includes not only the selection of colours, typography, and illustrations but also the creation of a visual identity that conveys the content, emotions, atmosphere, and genre of the game. The box art thus functions as a key element in the players' decision-making process and, at the same time,

as part of the publisher's marketing strategy. Meggs and Purvis (2005) also describe graphic design on game box art as a form of 'visual storytelling' that connects the product with the player's immersive experience. Game box art, therefore, cannot be perceived merely as a decorative cover but also as a gateway to the world the game offers.

From a semiotic perspective, game box art can be understood as a visual text that forms a complex structure of signs and symbols interpreted by the recipient within a specific socio-cultural and technological context (Hall, 1980). Traditional semiotic theories, such as de Saussure's structural approach or Peirce's pragmatic semiotics, define the sign as the basic unit of meaning, whose interpretation depends on conventions and cultural codes. These fundamental approaches provide basic tools for analysing meaning, but to fully understand contemporary complex multimedia messages, including game box art, their framework needs to be expanded, as they do not always fully account for the dynamics and interplay of different communication modes in a single artifact. Therefore, in this chapter, we primarily draw on concepts from social semiotics and visual communication, especially the visual grammar of Kress and van Leeuwen (2006). These authors emphasize that the meaning of visual elements – such as colours, shapes, typography, and composition – is not inherent and static but is actively constructed through their mutual relationships within a given visual message and in interaction with the recipient and their knowledge of visual conventions. Kress and van Leeuwen (2006) also develop the idea of multimodality, i.e. the interplay of different semiotic resources (e.g. image, written text, graphic elements) that together constitute the overall meaning of the message. In the context of game box art, this approach allows for a detailed analysis of how individual visual elements (e.g. logo, main visual, textual descriptions, rating icons) function as 'signs' in a broader semantic structure and how their combination creates a specific message. Game box art is thus not perceived merely as a passive carrier of information about the game, but as an active medium that, through its visual rhetoric, shapes player expectations, evokes emotional responses, and communicates the intended identity of the product. For example, the illustration of the main character on the box art of The Last of Us (Naughty Dog, 2013) not only identifies the protagonist but also, through a specific dark colour palette, the character's expressive face, and dramatic composition, strongly suggests the genre (survival/post-apocalyptic), dark atmosphere, and emotional depth of the story. This multimodal approach, as emphasized by other theorists of new media and visual analysis, characterizes the specifics of contemporary communication, where meaning often does not arise linearly but in the dynamic interplay of different modes and in the active interpretation of the recipient.

We can observe this dynamic and the transformation of the function and aesthetics of box art more clearly in its historical development, which can be broadly divided into several successive phases that reflect technological progress, marketing strategies, and prevailing trends in graphic design. The early phase, roughly covering the 1970s and the first half of the 1980s, was associated with arcade machines and early home consoles like Atari or Intellivision. During this time, box art, typically on cartridge boxes, primarily had to attract attention in stores. Their main goal was to provide basic information – the name of the game, the platform, and possibly a brief description. Graphical elements were limited, often reduced to simple typographic solutions and screenshots from gameplay. Examples include the box art for Magnavox Odyssey from 1972, which contained only the game title in basic font and an image from the game. This aesthetic stemmed from technical limitations and early gaming technologies, as well as the absence of sophisticated marketing strategies or significant competition. The box art here did not aim to evoke atmosphere; its role was – given that games at this time were technologically primitive and their content fixed – rather to identify the product (Whalen & Taylor, 2008). Another type was box

art with a strong illustrative element, often in the style of sweeping fantasy or sci-fi art, which promised much more colourful and complex worlds than the technology of the time could actually display. The graphics were bold and colourful, but their connection to the actual, often highly abstracted in-game graphics was only loose. The main goal was to stimulate the player's imagination (Lapetino, 2016).

Subsequently, in the 8-/16-bit era from roughly the mid-1980s to the mid-1990s, with the rise of dominant players like Nintendo and Sega (with their NES, SNES, Master System, Mega Drive consoles), game box art design began to gradually professionalize. Iconic characters like Mario or Sonic appeared, becoming the core of visual identity and key marketing elements. While cartoon illustration still dominated, it began to more close-ly reflect the game worlds and specific characters. During this time, regional differences in box art design also became prominent, especially between the aesthetics preferred in Japan and Western markets (USA, Europe), reflecting different cultural preferences and marketing strategies. At the same time, the importance of *branding* grew – logos of console manufacturers and publishers became an increasingly prominent part of the box art.

Another technological leap came with the era of early 3D and the advent of CD-ROM media in the mid-1990s, associated with consoles like PlayStation, Nintendo 64, Sega Saturn, and the boom of PC games on CD. With new technological possibilities, 3D renders began to appear on box art, often emphasizing the new visual quality and depth of games. The influence of film posters grew stronger, designs took on more epic, cinematic dimensions, and began to systematically communicate the genre and intended atmosphere of the game. Although there was still room for traditional illustration, photorealistic and digitally generated images gained popularity and became a more common part of visual presentation.

With the further maturation of console generations in the early 21st century, from the era of PlayStation 2, Xbox, and GameCube up to the PlayStation 3, Xbox 360, and Wii generation (i.e. roughly until 2010), further standardization and professionalization of design occurred. With the increasing complexity of digital games and the development of digital technologies such as 3D rendering, visual strategies for box art changed in the first decade of the 21st century. Illustrations gave way to credible images of characters or scenes from games, which better expressed narrative depth and atmosphere. For example, the box art for BioShock (2K Boston, 2007) with the iconic Big Daddy character, does not offer an explicit description of the game but rather mystical symbolism of an unknown world, which the player deciphers only during gameplay. The dominant element thus became high-quality key art, often focused on the main character in a dynamic pose or on a dramatic scene from the game. This era emphasized the semiotic meaning-making of individual elements – composition, colour, and details became part of a complex marketing strategy. Photorealism and cinematic aesthetics were common, especially for high-budget AAA titles, and strong branding was already a matter of course. The visual language of these box arts already fully and consciously utilized established principles of composition, colour, and visual hierarchy to effectively communicate the message. All this happened at a time when, alongside the still strong position of physical distribution, digital distribution also began to assert itself more significantly.

Finally, in the current era, which began roughly after 2010 and continues to this day, characterized by the dominance of digital distribution and market diversification, the focus of box art's meaning has largely shifted to its digital form – an icon, thumbnail, or banner in online stores and on platforms like Steam, PlayStation Store, Xbox Marketplace, or mobile app stores. Although physical editions (standard and collector's) still exist and their box art fulfils its specific role, the design of digital visuals must be optimized for immediate recognizability in an extremely crowded visual environment and often for display in very small formats. This leads to greater diversity in styles – alongside hyperrealistic

box art for AAA games, there are minimalist or typographic designs for indie titles, retro stylizations, or strongly authorial art approaches. The ability to easily update these digital visuals (e.g. for new DLCs, seasons, or based on A/B testing) and adapt them to platform algorithms is becoming common practice, reflecting the dynamics of the platform economy and the constant battle for user attention (Švelch, 2023). The example of the game *The Witcher 3: Wild Hunt* (CD Projekt Red, 2015) shows how box art evolved from a physical cover featuring the hero Geralt to dynamic digital visuals reflecting expansions (*Hearts of Stone, Blood and Wine*). Unlike a book, the cover of which remains static, a game's digital box art can be updated, underscoring its representative function – it is not just a cover, but a flexible interface between the player and the medium.

Specific Development of Game Box Art in the Czech Context (1989-2010)

The Czech gaming industry has undergone dynamic development since its inception, closely linked to broader socio-economic and technological changes. After the fall of the Iron Curtain and the Velvet Revolution in 1989, opportunities for free enterprise opened up, which not only allowed for the expansion of game distribution and production, but this specific period also enabled the creation of a unique visual language for game box art that reflected the aesthetic and cultural contexts and needs of the gaming community at that time. The graphic design of game box art gradually evolved from amateur (hand-drawn), often experimental designs to more sophisticated visual styles that corresponded to and reflected the gaming subculture as well as global trends. The causality of the specificity of the visual identity of Czech game box art can be sought in the economic and cultural transformations that Czechoslovakia was undergoing.

In the early 1990s, game distribution was a relatively challenging process. Although relatively large gaming communities existed, they were isolated within collectives, Socialist Union of Youth (SSM) clubs, around Svazarm (Union for Cooperation with the Army), or around individual game magazines. The process of creating game box art also had its limitations – both technological (available hardware and software) and professional. It is also worth considering the aspect of market competitiveness, which was minimal at the time, or perhaps non-existent. It was only over the following decades that a gradual 'semi-professionalization' of game production and game box art design occurred. Game box art in the Czech environment thus sometimes became not only a means of promoting the gaming medium but also a document of the visual history of the Czech gaming industry, reflecting the aesthetic preferences of the time, technological possibilities, and also the evolution of consumer expectations.

The specific situation of the Czech gaming industry also influences the definition and function of game box art. As Švelch (2021) states, game box art for Czech games often reflected the amateur nature of creation in the 1990s and was an expression of individuals' enthusiasm rather than that of professional designers. Consequently, Czech game box art from this era can be understood not only as a marketing tool but also as an authentic cultural artifact, documenting the development of the gaming industry during a period of transformation.

This research encompassed a comprehensive survey of Czech game titles officially distributed for sale between 1989 and 2010, identified through available game online databases. From an initial collection of 265 game titles, a selection of 119 titles was made for closer analysis (Appendix A). The simulation genre was deliberately excluded from this focused set for several reasons: its box art aesthetics showed minimal change over the period, and its inclusion could have significantly distorted the research findings regarding visual evolution. Moreover, the simulation game genre was, from its inception, primarily targeted towards the German and American markets rather than specifically at the Czech player. Based on the analysis of the selected titles, our research indicates that game box art in the Czech context between 1989 and 2010 went through several developmental phases, which we can divide based on the production paradigm into the following stages: amateur period (1989-1995), commercial standardization (1996-2000), and professionalization and visual sophistication (2001-2010). An individual analysis of every game cover within the broader collection was deemed likely to lead to redundancy and unnecessary repetitiveness, further justifying the selective approach.

a) Amateur period (1989-1995)

After the fall of the Iron Curtain in 1989, the Czech gaming industry found itself in an early, often amateur phase. Game box art during this period was characterized by the absence of a unified visual identity and significant variability in the quality of workmanship. They often included handwritten descriptions or, in better cases, simple hand-drawn illustrations by the 'distributor'. Specific examples from this period include game titles by Petr Mandík (MAEL), distributed on cassettes and illustrated with a plotter, or the game Světák Bob [Man-of-the-world Bob] (Bohewia Software, 1993) by Petr Vochozka, whose distribution only included a small card with an illustration and the title. Also frequently mentioned is the title Tajemství Oslího ostrova [The Secret of Donkey Island] (Kolář & Vlček, 1994), which was originally distributed in a simple plastic bag with textual information, although it later received a boxed edition (Picture 1). Although it was a standardized box art format, its design consisted of a stock photograph of Mount Rainier, which had no intrinsic semantic connection to the game. This suggests an intuitive selection of a visual element rather than a targeted and elaborate design. In Czechia, this situation was completely different. This was due to historical development and the critical view of the then-ruling establishment on computer technology. Although an official market for game titles did not exist, we now know quite well that games entered circulation through gaming communities, local radio broadcasts, and also distribution in the form of mail orders for cassette tapes or other media carriers. These first distributed game box arts were absolutely unique in their distinctive design. Sometimes it was just slips of paper with a mere handwritten description, but we can also find box art with a drawn illustration from the 'original distributor'. In Trojan's (1989) interview from 1989, František Fuka proclaimed that he owned more than 1,500 game titles in the 1980s, and he only chose those that genuinely interested him. Not all titles were Czech, however; often they were merely ported foreign titles. In any case, the speed of game dissemination in the Czechoslovak community can be illustrated by Fuka's experience, which he described in an interview for the magazine Počítačové hry as follows: I record [games] for friends, they for others, and... that's how programs multiply and are passed on here. And at an incredible speed. One of my games that I released into the world, was offered to me from Bratislava after six days (Trojan, 1989, p. 3). Thus, neither the form of game box art nor the Czech game market in an official context existed in the 1980s, which makes this period all the more interesting. The uniqueness of individual box arts will yet be the subject of a number of academic studies currently in preparation.



Picture 1: Game box art of digital games Světák Bob (left) and Tajemství Oslího ostrova (right) Source: own processing of games' box art from archive of Herní historie, z.s. (Bohewia Software, 1993; Kolář & Vlček, 1994)¹

b) Commercial standardization (1996-2000)

With the gradual semi-professionalization of the first local distributors, such as Vochozka Trading or JRC, international trends also began to be reflected in game box art. Visual design became more sophisticated, with an emphasis on more elaborate illustrations, rendered graphics, and more effective marketing strategies (advertising, paid reviews). The form of game box art stabilized into standard boxed packaging. Perhaps the most prominent game title from this period is *Hidden & Dangerous* (Illusion Softworks, 1999). This tactical shooter from Illusion Softworks represents the first Czech production with international acclaim. The game's box art reflects more advanced rendering capabilities, utilizing a darker tone and realistic stylization of soldiers in action. The design strives for authenticity and emphasizes the tension of armed conflict, clearly communicating the game's genre and mood. During this period, this aesthetic also took shape, resulting in several 'dead ends', such as Dream Land: Final Solution (Top Galaxy, 1999). This ambitious, high-budget project combines sci-fi iconography (planet Earth, spaceship, human and ape heads) on its box art. Although visually attractive, it suffers from thematic dissonance and unintentionally reveals a key plot twist of the game. The composition appears chaotic, and the typography lacks hierarchy, which reduces communication effectiveness (Picture 2). This case shows that even an advanced technical approach does not guarantee success if coherence with the game narrative and a well-thought-out visual strategy are lacking. In the Czech Republic, the situation again evolved with a slight delay, because the possibility of free enterprise only opened up after 1989 - the "black market", which had effectively functioned in the Czechoslovak gaming community for years, thus gradually began to be suppressed. In 1991, the magazine Excalibur published a warning in the advertising section: We warn everyone, who intends to advertise that making copies for commercial purposes is contrary to copyright law and, according to the Criminal Code

¹ Remark by the author: Although the game Světák Bob was released in 1993, the first version of the game box art for later distribution featured the year 1994.

(§ 152), is an illegal activity ("Upozorňujeme všechny", 1991, p. 28). Until 1994, the Czech game market was practically semi-amateur. There was only a fraction of people who were truly dedicated to distribution. At the end of the 1980s, there were several types of home computers on the market with various media, so it took longer for the market to stabilize. Games were distributed in a sealed bag, and the most common supplement to the data medium was a manual that informed the player about the game, gameplay, or how to deactivate anti-piracy protection. It is only in 1994 that we find evidence of Czech games starting to be released in so-called *big boxes* – cardboard boxes with a 'sleeve'. Typical dimensions of a large game box were approximately 178 mm x 229 mm x 51 mm. This form of box art was typical for foreign titles, and this trend was naturally adopted by the Czech gaming scene as well. There were only a few titles that used different formats or forms for their distribution.



Picture 2: Game box art of digital games Hidden & Dangerous (left) and Dream Land: Final Solution (right) Source: own processing of games' box art from archive of Karel Kopic (Illusion Softworks, 1999; Top Galaxy, 1999)

c) Professionalization and visual sophistication (2001-2010)

In the first decade of the 21st century, the Czech gaming industry established itself on the international market, which was also reflected in the visual appearance of game box art. This box art began to use more complex visual strategies (an effort at narrative visual connection), including advanced digital illustrations and consistent brand identities that corresponded to global standards. An excellent example of such a transformation is the standalone game extension *Operation Flashpoint: Cold War Crisis* (Bohemia Interactive Studios, 2001). This title represents a significant milestone in the professionalization of Czech game design. The box art uses a realistic photograph of a soldier aiming a rifle directly at the viewer, thereby creating a strong sense of confrontation and drawing the player into the action. A muted, earthy colour palette and focused lighting enhance the dramatic effect and relate to the themes of a military environment. Overall, the box art effectively communicates the seriousness and tactical depth of the game, reflecting its ambition to compete with AAA titles on the international market. Another example is the title *Mafia: The City of Lost Heaven* (Illusion Softworks, 2002), where the box art, designed by Daniel Vávra, is an example of highly stylized design with a limited colour palette (black, white, red) and the silhouette of a gangster. This visual style refers to the aesthetics of *film noir* and classic gangster films, which reinforces the game's cinematic ambition. The low modality of the image, combining silhouettes and an abstracted background, allows the viewer to focus on symbolic elements and evokes a specific retro atmosphere. Or the RPG title *Inquisitor* (Wooden Dragon & Cinemax, 2009), which presents itself with box art by illustrator Eric Cochla, depicting an inquisitor in a dramatic conflict with demonic forces. The illustration combines traditional painting techniques with digital elements and uses Gothic typography with an integrated cross in the title, which enhances the dark fantasy atmosphere and religious themes. The composition uses the Renaissance principle of the 'serpentine line' for dynamism. The box art effectively communicates the genre and themes of power, faith, and conflict (Picture 3).



Picture 3: Game box art of digital games Operation Flashpoint: Cold War Crisis (left), Mafia: The City of Lost Heaven (middle) and Inquisitor (right)

Source: own processing of games' box art from the archive of Tomáš Nestorovič (Bohemia Interactive Studios, 2001; Illusion Softworks, 2002; Wooden Dragon & Cinemax, 2009)

After 2000, fundamental changes gradually occurred in the global gaming industry, which also influenced the development of the Czech gaming scene. Key factors of this period include, firstly, the development of CD and DVD media carriers with larger capacity, then the development of the internet, and subsequently also the gradual digitization of game distribution and a shift in business models towards digital platforms. This development led to a significant transformation not only in the way games are distributed and monetized but also in the composition of the development scene itself. In the Czech context, this period can be described as a phase of formation of established game studios, which gradually professionalized and gained international recognition. Games are most often distributed in plastic cases measuring 170 mm x 135 mm x 15 mm. The entire outer surface of the case is covered by a transparent plastic pocket (open at the top and bottom) for inserting the printed box art. Only special editions or limited editions of games are released in big boxes. The main and fundamental shift in the distribution of game titles was unequivocally the gradual replacement of the traditional model of physical media by digital distribution – Steam, PlayStation Store, and Xbox Live Marketplace. This trend became particularly evident after 2010, when digital distribution began to dominate the market, leading to a transformation of marketing strategies, especially in the area of visual presentation of games (Erway, 2010). Whereas in earlier years, the physical box art of a game was a key element of retail sales, in the digital era, its function was replaced by online visuals in the form of *thumbnails*, virtual *box arts*, and advertising elements (Hamari et al., 2017). These changes led to the need to optimize visual communication for various platforms, such as mobile applications, online stores, and e-commerce platforms.

In conclusion, game box art in the Czech context stands as a unique cultural and visual artifact, documenting the evolution of the gaming industry, technological advancements, marketing strategies, and shifting consumer expectations. The ongoing digitization of distribution and the increasing prominence of online visuals necessitate further systematic reflection and archiving of this phenomenon.

Looking at the last decade (after 2010), a significant trend has been the gradual replacement of physical game carriers with digital distribution, profoundly altering the form and function of game box art. Traditional physical box art, once a key element of retail sales, has largely been supplanted by online visuals such as thumbnails, virtual box arts, and advertising banners on online platforms. This shift demands that digital box art be optimized for immediate recognition in a highly crowded visual environment, often in very small formats. This leads to a greater diversity in styles, including hyperrealistic designs for AAA games, minimalist or typographic approaches for indie titles, retro stylizations, and strong authorial art approaches. This evolution also underscores that the box art is no longer merely a static cover but a flexible interface between the player and the game medium.

While the digital shift has largely prevailed, it is important to note that some large game studios, such as Warhorse studios, still continue to produce classic physical distribution. This approach, however, remains financially demanding due to the costs associated with manufacturing, packaging, and shipping physical copies. Conversely, the digitalization of distribution has significantly liberalized the game market, enabling small solo creators and independent studios to enter the world of game development without the high entry costs traditionally associated with distributing physical copies. This development has fostered a new generation of game developers who can experiment with game mechanics and narrative approaches.

Future research could delve into more detailed comparative analyses with global trends, examine the specific influence of digital distribution on box art design beyond 2010, and analyse how players perceive and interpret these evolving digital box arts.

Conclusion

This study of Czech game box art from 1989 to 2010 reveals its evolution through three distinct phases, which closely mirror the development and professionalization of the Czech gaming industry as a whole.

The period commenced in 1989 with the emergence of a free market, building upon earlier forms of amateur game production that often sought to emulate Western gaming trends. The creation of box art in these early stages was also intrinsically linked to available technological and professional capacities. Frequently, the roles of game developer and distributor were embodied by the same individual or small group. A partial shift in this paradigm occurred with the advent of the first dedicated game distributors, such as Petr Vochozka and JRC. The market continued to coalesce and form until approximately 1996, a period that can be seen as an intermediate stage characterized by the gradual transformation from a correspondence model of distribution to a more organized market. After 1996, game distribution and, consequently, box art aesthetics, began to normalize and standardize. The 'big box' format became prevalent, a trend adopted from foreign markets, which typically offered more space for presentation and accompanying materials like manuals. This era reflects a specific focus of Czech game production, with titles, including popular Czech adventure games, primarily targeting the domestic audience. This situation largely persisted until around 2001, when the first Czech games began to achieve international recognition and success beyond the local market, with titles like *Operation Flashpoint* and *Mafia: The City of Lost Heaven*. This marked the onset of a professional era in Czech game box art creation, characterized by more complex visual strategies and brand identities corresponding to global standards. While this period saw sophisticated and successful designs, it also included ambitious projects that, despite visual appeal, sometimes faced challenges in coherently communicating the game's narrative or achieving market success. The scope of this research concludes in 2010, a year that signifies another major paradigm shift: the ascendance of digital distribution, which fundamentally altered the form, function, and marketing of game box art.

In summary, Czech game box art from 1989 to 2010 serves as a unique cultural and visual artifact. It not only reflects the trajectory of the national gaming industry, technological advancements, and marketing strategies, but also documents the evolving visual history and consumer expectations within a specific socio-cultural context. Given the ongoing digitization of game distribution, this phenomenon merits further systematic scholarly reflection and archiving.

Acknowledgement: I wish to express my profound gratitude to Vojtěch Straka (Herní archiv and the Herní historie society) for his exceptional guidance through the Czech gaming landscape and its collector community. He played a key role in connecting me with Tomáš Nestorovič, whose comprehensive collection was indispensable for completing this research. My sincere appreciation is also extended to Dominik Chlup (ceskehry.net) for generously sharing his valuable and authentic insights into the history of Czech game development.

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Appendix A: A List of Analysed Game Titles

Year	Title	Year	Title
1989	Město robotů	1997	Boovie
1993	Expedice na divnou planetu	1997	Prokletí Eridenu
1993	Asterix a Obelix	1998	Fish Fillets
1993	Světák Bob	1998	Horké léto aneb Majer v akci
1994	Tajemství Oslího ostrova	1998	Brány Skeldalu
1994	Smrtelná hrozba	1998	Hovniválové aneb Záhada komixu
1994	Stíny noci	1998	Signus – The Artefact Wars
1994	7 dní a 7 nocí	1998	Posel bohů
1994	Leo: Erotická čísla	1998	Bubliny
1994	Mavlin: Vesmírný únik	1998	Polda aneb S poctivostí nejdřív pojdeš
1994	Muzeum Mrtvol	1998	Husita
1995	Magic Island: The Secret of Stones	1998	Argo Adventure
1995	Dračí historie	1998	Ve stínu havrana
1995	Ramonovo kouzlo	1999	Horké léto 2
1995	Paranoia!	1999	Berušky
1995	Mise Quadam	1999	Polda 2
1996	Ve stínu magie	1999	HyperCore – Out of Dimension
1996	Turbo Speedway	1999	Dream Land: Final Solution
1996	Oil Empire	1999	Hidden & Dangerous
1996	Katapult	2000	Pohádka o Mrazíkovi, Ivanovi a Nastěnce
1996	Rytíři Grálu	2000	Polda 3
1996	Paranoia II	2000	Flying Heroes
1996	Unlimited Warriors	2001	Original War
1996	Colony 28	2001	Operation Flashpoint
1996	Asmodeus: Tajemný kraj Ruthaniolu	2002	Brány Skeldalu 2 – Pátý učedník
1996	Swigridova kletba	2002	Operation Flashpoint: Resistance
1996	Alchemix	2002	Pivař
1996	Testament	2002	Team Factor
1997	Léto s Oskarem	2002	Polda 4
1997	Lurid Land	2002	Mafia: The city of Lost Heaven
1997	Mutarium	2003	Legenda: Poselství trůnu 2
1997	Gooka	2003	Korea: Forgotten Conflict
1997	Edna	2003	Hidden & Dangerous 2

2003	Vietcong	2006	El Matador
2003	Posel smrti	2007	Bonez Adventures: Fulaova hrobka
2003	Necromania: Trap of Darkness	2007	Painkiller: Overdose
2003	UFO: Aftermath	2007	UFO: Afterlight
2003	6 ženichů a 1 navíc	2007	Reprobates
2004	Gooka – Záhada Janatrisu	2007	Arma: Armed Assault
2004	Wings of War	2007	Fish Fillets II
2004	Hidden & Dangerous 2 – Sabre Squadron	2007	ArmA: Queen's Gambit
2004	Rapid Gunner	2007	Ghost in the Sheet
2004	Vietcong: First Alpha	2008	Memento Mori
2004	Shade – Hněv andělů	2008	Tale of a Hero
2004	Bloodline	2009	Arma 2
2004	Jets'n'Guns	2009	Pat & Mat 1
2004	Berušky 2	2009	Machinarium
2005	UFO: Extraterrestrials	2009	Půl kila mletýho
2005	Daemonica	2009	Numen: Contest of Heroes
2005	Vietcong Red Dawn	2009	Inquisitor
2005	UFO: Aftershock	2010	PacIn: Nermessova pomsta
2005	Ni.Bi.Ru: Posel bohů	2010	ArmA II: Private Military Company
2005	Cold War	2010	Dreamkiller
2005	Vietcong 2	2010	Mafia II
2005	Polda 5	2010	ArmA II: British Armed Forces
2005	Samorost 2	2010	Alter Ego
2006	Gumboy – Crazy Adventures	2010	Alternativa
2006	Žhavé léto 3 ½	2010	ArmA II: Operation Arrowhead
2006	Ro(c)k Podvraťáků	2010	Axel & Pixel
2006	Alpha Prime		

ACTA LUDOLOGICA



THE MIDDLE AGES IN COMPUTER GAMES

Houghton, R. (2024). The Middle Ages in computer games: Ludic approaches to the medieval and medievalism. D. S. Brewer.

Jacob Abell

As the representation of medieval cultures in digital games has become increasingly prevalent, scholarly analysis stands to clarify how modern players understand medieval cultures through digital play. This is the thesis with which Robert Houghton opens his impressive and thoroughly researched monograph. The contemporary proliferation of medievalist games corresponds to a growth in scholarship on the topic, which Houghton valuably identifies in diverse studies issuing from German, Italian, and other academic communities beyond the English-speaking world. Indeed, Houghton's book offers an impressively systematic approach to his topic, supplying footnotes throughout that aim at a global analysis of both medievalist games and resulting academic reflection. Medievalists and ludologists alike will find a first-rate summary of the extant literature as well as a series of illuminating theses about the state of digital medievalist games.

Houghton's introduction and first chapter lay out a series of preliminary theoretical concerns with a focus on understanding how medieval games are situated in the broader landscape of digital games, identifying the material conditions that shape contemporary digital game production and considering the effects of player and designer demographics on game creation and reception. This portion of the book provides timely disciplinary considerations that will be of broad interest for scholars working in game studies. Many sections in the introduction and first chapter could serve as isolated readings for undergraduate and graduate courses.

In Houghton's discussion of medievalist game genres (chapter two), the author argues that medievalist games afford a greater importance to roleplaying than games set in other historical periods (p. 68). It is argued that roleplaying promotes an "empathic engagement with history" (p. 79) lacking in many historical games of other periods. Turning to "Combat and warfare", Houghton's third chapter asserts that medievalist games are overwhelmingly characterized by "interpersonal violence" (p. 80). Such games often perpetuate the perennial construal of the Middle Ages as "barbaric and brutal", a persistent stereotype with origins in the Renaissance (p. 81).

Houghton valuably reveals how the financial and logistical constraints of digital design can distort the historical accuracy of medieval cultures. In some cases, however, those same limits may inadvertently reinforce – rather than obscure – historical accuracy. For instance, Houghton argues that medievalist games tend to present a more historically accurate depiction of knights, at least with respect to their limited power within larger units of feudal and military hierarchies. Curiously, this is partly the result of the high cost and advanced technology required to simulate combat on horseback (p. 100). The resulting historical accuracy of knights depicted in combat – often fighting as infantry within complex armed units – results from the material constraints imposed by design costs rather than thoughtful considerations on the part of game developers. With respect to technology (chapter four), digital games that depict both medieval and post-medieval periods often frame later eras as more enlightened and progressive with respect to intellectual discourse, technological innovation, and religious tolerance (pp. 118-119). Houghton is especially persuasive on this point, arguing through examples derived from games such as *Civilization* in which the player is unable access key technologies and cultural contexts within the medievalist portions of the game narrative. In these games, the Middle Ages appear as a time of cultural regression in explicit contrast to more enlightened pasts and more experimental futures.

In his analysis of "Rule and rulership" (chapter five), Houghton argues that medievalist games valorize individual choices above the actions of states (pp. 136-137). Such games may offer less sophisticated depictions of diplomacy than those found in games set in post-medieval periods (138-139); however, Houghton claims that digital games dramatize medieval economics and diplomacy with more sophistication than other "medievalist media" such as George R. R. Martin's *Song of ice and fire* saga (p. 142). Medievalist games may be more likely to foreground the causal role that personal relationships play in politics, focusing on alliances, marriages, and close relationships between rulers as the fundamental drivers of political activity (pp. 146-147).

Houghton's analysis of religion (chapter six) argues that medievalist games frequently populate their digital environments with the visual symbolism of religion, while failing to thematize religious belief and practice beyond superficial characterizations. Often, Christianity and Islam find themselves opposed in order to structure a "clash of civilisations" narrative (p. 164). As with the themes of his other chapters, Houghton valuably reveals the extent to which the inflexible features of game mechanics sculpt the exposition of religion in medievalist games. When competition governs the player experience, religion – like warfare and other design elements – is often depicted as a series of antagonistic encounters that exist to provide obstacles and conflict for the player to engage.

Intriguingly, Houghton reveals that many medievalist games resist a stereotypical impulse to construe medieval religion as inherently opposed to technological progress. Houghton cites a range of games in which religious tropes are positively associated with technology and magic as overlapping realms of applied knowledge (pp. 165-172). Perhaps the most striking example of this pattern occurs in *Sid Meier's Civilization V* in which players must acquire 'Theology' as preparation for 'Education' and other technical forms of knowledge and technology (pp. 173). In many cases, religion is often depicted as an institutional force that develops in tandem with technology rather than impeding growth and development (pp. 184). The chapter conveys the surprising degree to which medievalist games resist many of the stereotypes that one might expect from such games.

Chapter seven focuses on morality. Houghton proposes that "ludic medievalism" (p. 185) emphasizes the details of moral decision-making to a greater degree than other medievalist media. In contrast with games set in other historical time periods, medievalist games tend to focus on ethical "dilemmas" and "quandaries" (p. 186) as a primary fixture of gameplay. This comparatively pronounced ethical dimension is grounded in tropes derived from Christian religion and chivalric cultures. However, this increased focus on morality does not always imply a corresponding increase in nuance. For example, Houghton argues that the ethical focus of medievalist games tends to justify extreme violence (pp. 195-196). Nevertheless, other games such as *World of Warcraft* trouble facile distinctions between good and evil as fixed moral poles (p. 203).

Houghton's reflections on race and nationality (chapter eight) and gender and sexuality (chapter nine) may find the broadest audience owing to the rapid proliferation of scholarship on these topics within studies of cultural medievalism. Unsurprisingly, many medievalist games centre the racial identity of their players around European white male subjectivity (p. 213). These games exhibit a related tendency to produce reductive accounts of nationhood, in which "prejudice, discrimination, and condemnation of multinational characters" (p. 215) are frequently visible. Indigenous groups are rarely represented (p. 216), and Arabic and Asian cultures find themselves subject to exoticizing stereotypes (p. 218). A geographic bias toward Northern and Western European cultures grounds all these tendencies (p. 224). In other instances, racial stereotypes are transmuted across cultures when games create imagined racial groups as part of fantasy narratives. Hence, the construction of orcs and elves in certain games combines racial stereotypes variously associated with African, Asian, Native American and other non-European cultures (p. 228-229).

It is to Houghton's great credit that he avoids repeating the 'case study' approach that he identifies with Carl Heinze's widely read work on games; however, the book might have benefited from occasionally presenting more sustained close 'readings' of particular games to help illustrate some of the major arguments in even more specific detail. This is not at all to suggest that the book lacks argumentative clarity. Houghton's project invokes an impressive range of games to substantiate the major arguments. Nevertheless, a reader might appreciate the text's arguments more deeply if the book supplied screenshots and a more focused analysis of some of the games under discussion. Ultimately, the book's arguments persuade and enlighten regardless of the lack of focus on case studies. Houghton makes good on his promise to supply a nearly comprehensive study of his topic, and the illuminating results signal invigorating possibilities for the critical study of medievalist games.

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LOCALISATION OF VIDEO GAMES IN SLOVAKIA

Kocscelníková, M. (2024). *Lokalizácia videohier na Slovensku*. Constantine the Philosopher University.

Zdenko Mago

The research monograph *Lokalizácia videohier na Slovensku* [Localisation of video games in Slovakia] presents systematic and comprehensive research on the localisation of digital games into the Slovak language. From a broader point of view, it represents research on game localisation at the local level from the perspective of a non-global, minority language. The author, Mária Koscelníková, has capitalised on her years of experience researching this topic in Slovakia, addresses the current needs of the Slovak translatological community and fills a perceived gap in the field of multimedia and interactive translation research. The book is based on an interdisciplinary framework and combines theoretical knowledge with empirical analysis of selected localised digital games containing Slovak.

The monograph's introduction discusses the theoretical framework of localisation in the context of translation and digital games as a basis for the fundamental academic literature in the field. The author provides a comprehensive explanation of the terminological differences between localisation, translation, internationalisation and globalisation – the GILT cycle – emphasising the need to distinguish localisation as an extensional process in relation to translation itself. She pays particular attention to the specifics of culturalisation, identifying them as an important component in the successful adaptation of game content to the target culture. Subchapters 1.2-1.4 offer exclusive insights into the issue of Slovak's limitations for specific terminology/language of the game sphere, i.e. the adaptation of Anglicisms and their impact on word formation.

A key asset of the publication is the consistent reflection of the Slovak context in relation to digital game localisation. In Chapter 2, the author provides an overview of localisation teaching and research in Slovakia and abroad, while critically assessing the current situation in academia, where digital game localisation is still not a well-established part of translation education. Chapter 3 then analyses the legislative, linguistic and cultural particularities of localisation in Slovakia, highlighting issues such as the economic disadvantage of localising games into Slovak, the dominance of the Czech language on the local market and the lack of systematic support for translation activities in the field of digital games. It is pointed out that Slovak is a 'minor language' from the point of view of the (global) games industry, which leads to its neglect in commercial practice, even though there is a demand for localised games in Slovakia. The fact that Czech is a related language generally understood by Slovaks contributes to this situation, so it could be considered as a kind of substitute to ensure linguistic coverage within a larger region without the need to include another minority language in the localisation process. Despite the indisputable significance and extensive discourse coverage in Chapters 2 and 3, it would have been appropriate to place more emphasis on the topic of amateur user (participatory) translations of computer games, which is typical of the local Slovak gaming environment.

Chapter 4 then presents a certain qualitative contrast by discussing the typology of digital games in a very superficial way. Although this is a highly debated topic in game studies, neither the scope nor the coverage of the basic literature on the subject is qualitatively comparable to the preceding or following sections. Consequently, this chapter may appear redundant in relation to the topic, contrary to Chapter 5, which summarises models and specificities of digital game localisation based on the research of Mangiron, O'Hagan, Bernal-Merino and Kabát; and Chapter 6, which presents the often-overlooked pragmatic aspects of digital game localisation, i.e. types of localisers, costs and financing of localisation processes.

The research part of the monograph is based on the analysis of 13 computer and mobile games of Slovak and foreign origin that have been localised into Slovak. In analysing the texts, the author employs the adapted models characterised in Chapter 5, applying a narrative-functional approach, assessing aspects such as text accessibility, visual integrity, adaptation of variables, consistency of linguistic solutions or the presence of errors. The analysis identifies specific shortcomings, including inadequate distribution of texts within bubbles, incomplete descriptions, inconsistent titling/acting, and disregard for length constraints. A valuable contribution is then the systematic summary of the results in Chapter 9, which compares localisation strategies and quality across the titles analysed. The final findings reveal that the frequency of Slovak localisation of digital games is low (even games originating from Slovakia do not necessarily include Slovak) and that game companies prioritise experience with digital games over translatological competences, so localisation is often done by self-help (e.g. by programmers themselves), resulting in higher numbers of translation errors. The quality of the localisation is also affected by whether the translation was integrated into the development process or implemented additionally.

Koscelníková points out that localisation is not just a linguistic activity, but a complex team process with technical, cultural and aesthetic aspects, the success of which depends on localisers cooperating with developers and designers. The findings are also related to the non-optimal position of localisation within academic education. She therefore concludes by recommending the inclusion of localisation modules in the translatology curriculum, increasing support for research in this area, and generally gaining legislative support for the use of Slovak in digital games.

Overall, the monograph can be considered an important contribution to the development of digital game localisation in Slovakia, and to the development of Slovak translatology in general. The publication is characterised by its high level of professionalism, with extensive referencing to a substantial corpus of scholarly literature and visual material. It synthesises research and practice, thereby initiating a discussion on the importance of linguistic equality in digital media. While the language used is professional and rigorous, it is also accessible to readers outside the academic community. The monograph makes a significant contribution to the field by addressing an under-researched area and by establishing the localisation of digital games as a legitimate translation discipline. The publication has the potential to become fundamental material for further research and for the needs of teaching localisation (not only) at Slovak universities.

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Mochocki, M., Schreiber, P., Majewski, J., & Kot, Y. I. (Eds). (2024). Central and Eastern European histories and heritages in video games. Routledge.

Adam Kysler

Originally marginalized in academic discourse, digital games have, in recent decades, established themselves as a significant subject of interdisciplinary research. Academic criticism primarily targets the lack of critical reflection and the dominance of a globalized approach to the history of this medium, which tends to prioritize narratives centred on the markets of the United States and Japan. Research findings derived from these geographically specific contexts were often generalized and applied universally, without considering the distinct historical, cultural, and social conditions of different regions (see Huhtamo, 2005; Guins, 2014; Swalwell, 2021). In recent years, however, scholars' approaches have shifted, with the local context of digital game history research emerging as a significant factor. The reviewed book serves as evidence, focusing on historical game studies within the context of Central and Eastern Europe. The publication consists of 12 chapters, including the introduction, which focus on specific games or regional topics within the field of Central and Eastern European (CEE) historical game studies.

In the introduction, the authors discuss the lack of book publications dedicated to this region as a larger whole. Furthermore, the introduction lists publications and conferences focused on this topic, along with the authors' presentation of the scope of the book and definition of key terms such as historical game studies. Research of history and games can be divided into two main directions: history of games and history *in* games. History of games takes into account the games made and published in the past, making the games "historical". Conversely, a game can be considered historical if it incorporates historical themes, a concept referred to as history in games. These approaches can be applied independently or combined, depending on the researcher's perspective and objectives. Chapters in this publication integrate these approaches to broaden and highlight underrepresented regions of CEE.

Maravić et al. in their chapter, explore how Serbian video games reflect a broad spectrum of approaches to local cultural heritage. The chapter is divided by the analysed game titles, which emphasize their unique interpretations of Serbian cultural heritage. Namely they analyse the games *Pagan: Absent Gods* (Mad Head Games, 2019a), *Pagan Online* (Mad Head Games, 2019b), *Vampire Legends: The True Story of Kisilova* (Organic 2 Digital Studio, 2015), *Prokuv'o* (Notaroš et al., 2019) and *Golf Club: Nostalgia* (Demagog Studio, 2018). The discussion also touches on the western and global influence on the games, even though they are not intended for commercial distribution abroad. Despite this, the authors consider that these games allow "local players to think about 'their' heritage outside the authorized heritage discourse narrative" (p. 27).

In the third chapter, Majewski et al. research the Polish-Lithuanian Commonwealth heritage in games. This historical period provides a rich foundation for diverse interpretations and narratives, which serve as a base for the examined games. Firstly, the terminology and conceptual frameworks are presented, highlighting the different discourses that were then analysed in Polish-Lithuanian Commonwealth-themed games. The analysis offers findings in terms of discourses used in games and their development and also comparison with adoption of different narratives in other types of media.

Kot presents a study of S.T.A.L.K.E.R.: Shadow of Chernobyl (GSC Game World, 2007) and its historical context. The chapter examines the game's characters and factions, drawing symbolic parallels to the socialist-era or even the ongoing Russian-Ukrainian war.

Bailey examines *Black Book* (Morteshka, 2020), a game set during the historical period of the Russian Empire, highlighting not only its portrayal of history but also the role of fan-created explanations and guides. These fan contributions fill gaps left by the game, shaping their own interpretations of the historical context for players.

In the following chapter, Serada and Mianowski explore how *World of Tanks* (Wargaming, 2010) is intertwined with the ideological and economic landscape of Belarusian game development. By examining not only the game itself but also the developers' marketing strategies and interactions with the player community, Serada and Mianowski argue that *World of Tanks* is used as an instrument to support the state ideology.

Makai in his chapter explores Hungarian digital games and their relationship to folklore and traditional forms of play. In the case of *Operencia: The Stolen Sun* (Zen Studios, 2018), the author highlights the use of characters and locations drawn from folklore; however, their contextual depth is limited in favour of gameplay considerations and player's expectations.

In the chapter dedicated to *Disco Elysium* (ZA/UM, 2019), Meier not only emphasizes the game's representation of social and political contexts, but also argues that it challenges prevailing stereotypes by allowing players to navigate political crises without explicitly condemning opposing ideologies or the individuals who embody them. According to the author, the protagonist's ideological stance can be interpreted as a form of empathy.

Communism, long tied to the historical backdrop of Eastern Europe, has found frequent representation in digital gaming. Kovalčík, Kabát, and Neumann, in their analysis of *Workers and Resources: Soviet Republic* (3Division, 2024) from Slovak developers, explore how the game engages with historical memory and meets the expectations of its player base. While the gameplay reflects elements of the Soviet era, these depictions stem more from the developer's curated view than from strict historical authenticity. The resulting narrative, though selective, resonates with players and supports the game's underlying aim of making a commercially viable product.

In the following chapter, Pýcha and Váňa explore Czech and Slovak heritage as represented in games such as *Kingdom Come: Deliverance* (Warhorse Studios, 2018), *Hrot* (Spytihněv, 2023), and *Felvidek* (Pavelka & Ganaj, 2024). These titles can also function as virtual museums, showcasing the themes and historical periods they portray. While not always historically precise, they often spark curiosity. They can motivate the players to research further online or even visit real-world locations to compare them with their virtual counterparts.

Mähkä and Walliander examine the *Finnish Army Simulator* (Please Be Patient, 2023) with the concept of 'perceived realism' exploring the accuracy versus authenticity in the game. They argue the game leans more toward authenticity, capturing the atmosphere and emotional experience of serving in the Finnish army. Although it incorporates accurate military elements, aspects such as its locations remain fictional.

In the final chapter, Camarda explores the digital recreation of Luxembourg in 1867. Initially developed within virtual environments like *Second Life, Sansar,* and *Roblox* (Roblox Corporation, 2006), the project also fostered its own community. Such platforms offer accessible tools for preserving and experiencing historical heritage in immersive ways. The book offers a unique perspective on digital games by exploring how developers' heritage and cultural backgrounds influence their games. It also offers many observations in terms of the accuracy and authenticity of games. Many games prioritize gameplay and entertainment over strict realism or historical accuracy. For many developers, the marketing and popularity of their work often take precedence over the realism and accuracy they might otherwise claim. Contributions, such as this book, serve as valuable sources in the field of regional game studies.

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Crisis of Artists (Not Only) in the Digital Games Industry

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Martin Engler is an artist, indie game developer and lecturer. His work is primarily dedicated to creating fictional worlds which are intertwined in his artistic as well as academic practice. That is visible in multiple projects and cooperation with different organisations dedicated to education around game development and art. His skill set includes various art mediums, disciplines and techniques from traditional to digital, such as traditional artistic printmaking, graphical art, painting, illustration, figural drawing, anatomy, sculpting, animation and their digital versions as well as visual development, concept art, prototyping, game design, game and comics creation. He holds an Mgr. art. (MFA) from the Academy of Fine Arts and Design, Bratislava, and a PhD at the University of Ss. Cyril and Methodius in Trnava (UCM). Engler is a co-founder of CA Pomimo, which has its primary focus on sharing artistic skills as well as publishing young comic book authors in *Pomimo* magazine. He teaches various subjects at the Department of Digital Games at UCM, and in the Department of Visual Effects and Game Design at the Academy of Performing Arts, Bratislava.

In the age of this consumerism-driven world, when moral grounds are diminished, there is a threat to the fundamental values that artists hold and have created historically. Via the false attempt by tech companies to 'liberate art' for everyone, AI models, especially those generating art, represent a massive threat under multiple conditions. These are: destroying various forms of market, pushing industry to cut costs in the form of employees and replace them with AI, stealing rights and using artwork to train their models, disrupting the model of trainees in industry, disrupting the dreams of young people to become game or other artists, diminishing the importance of different roles and education for young artists. Even though the real impact on art is hidden from the average user, the impact of AI is continuously forming an even bigger threat (see Engler, 2024). To uncover the importance of artistic thinking, we must delve deep.

The start of the crisis seems to be the loss of artistic vision and the industry's need to create a copy of an artist's representation and style. Something that is a must when creating a media of massive proportions, like a digital game. The need is justified and obvious, because the disruption to the visual representation of different artists would be a disruption of harmony to the spectacle and complexity on which digital games are built. For instance, after creating some of the first great projects in digital games that created immersive experiences on a massive scale, such as World of Warcraft (Blizzard Entertainment, 2004), many young players began to dream of becoming game artists. Massive inspiration that flowed through this immersive experience did not just inspire them but also prepared them to become a tiny part of the machinery that is an AAA game company. To fit the needs of the company, with an exact game and with an exact style, an artist must become a copy of the artist who formed the artistic style of the game. Learn the rules of that particular art style, learn that particular workflow and the technical skills that represent it. But what does that mean exactly? It means that the path of that young artist is set in stone to become a part of the machine that represents the game, not a creator. Of course, this does not necessarily mean that they never create anything else. But their formative period and the plasticity of their youth is mostly consumed by the aesthetical and creative guidelines of the job, blindfolding them for a crucial period.

During years of studying, creating art and teaching art, with hundreds of artists that we could work with, talk to, understand, study or teach them to become artists themselves, we learned that there is some philosophy and knowledge that has a crucial impact on artists and therefore their art. It creates the real context, shapes the artist, creates innumerable possible ways to explore, and ultimately creates an artist that is unique in the way of their thinking. The kind of artist that is not defined by one style or one role, but the kind that can create, give advice, understand the big picture, lead towards an artistic vision and has no problem switching their role because they talk the 'language of art' such as renaissance artists.

The medium itself, due to its enormous complexity and the need of one style, one vision, formed a unique occupation known as concept artist. An occupation that holds the knowledge of different styles, roles, art practices, techniques and joins them with a knowledge of the world that must be gathered and used to create and generate new ideas, and the representation in the form of art and design based on a concept. Now, the word generate is again where we stumble upon a problem, because the needs of industry to grow, to be better, to be faster, means more money, but does not necessarily mean higher quality. Therefore, the work of these artists is fast, immense, stressful, underappreciated and mostly invisible to regular people. However it holds the essentials to creation itself, which are diminished in copy based or technically based artistic roles in industry. Instead of the education and uniqueness that must be nurtured over time and the benefits that this education could give other artists, consumerism is expeditious and tends to resort

to fast solutions such as AI. To evaluate, becoming a good concept artist takes dedication, practice, understanding, experimenting, constant learning, technical skill and experience on complex projects, which means sometimes a decade of training, during which you struggle and balance on the path of existence. To become a 'AI artist' essentially all you need is a credit card and a few seconds or minutes to generate a picture. There is some basic taste needed, but because generators learn the way of understanding likeability by using 'borrowed' images created by professional artists, it generally generates something that looks nice on the first take. Of course, that is disputable, and a trained artist would instantly identify its dysfunction. The problem lies in how quickly it can be created, uploaded, and disseminated on the internet. How much 'art' could an individual create during one day without constraints of logic or concept? Even without barriers of physical creation, it usually takes weeks to come up with great ideas and layering, to align them with concept and create their artistic representation. Concept, logic and physical constraints always refine and deepen over time. Without them we risk no meaning, no reason and therefore no quality. The lack of education, philosophy and aesthetics form a quantum of 'art' without meaning and depth. Art is becoming worthless, but the average person does not yet realise.

Understanding this requires understanding the importance of aesthetic and philosophical education, as well as the time and dedication required to understand art. This is, of course, primarily the responsibility of artists' education, as it is not usually included in general education. The crisis of education, fundamental values and morality is becoming a global problem, driven by a monetary mindset. We can see the results in an instant in products and marketing, dissociating the artist, their name, their art, values that artist represents and transforming it into a product with no legacy. It is like a copy of a copy of a copy, which can be replaced with more beautiful packaging once it becomes boring. If a basic consumer lacks the ability to understand its value, then how can a reformed consumer, an Al artist, create it? Another problem is an artistic educational crisis, where institutions and their representatives cannot decide whether new genres and media are acceptable or not. Some institutions still treat digital games and fiction as an 'abomination', driving away talented people with a desire for proper education, who then rather turn to YouTube tutorials and struggle with the complexity and no context.

Furthermore, social media has become a prevalent, fast and mainstream way of living, seeing and understanding life, which means artists have had to adapt their ways and creation for people to see their art. There are many testimonies of artists on how this has degenerated their way of thinking and diminished their art so they could 'be seen' through an algorithm. Now, as all the main social media companies are building their Al generators based on that, it has become their biggest enemy. There is this saying among old tribes of the world, who reacted to technology such as photography: "something that captures and steals their souls". This is what art means to the artist, perfectly captured by the words of Oscar Wilde in "The picture of Dorian Grey" (Wilde, 1890). Al companies 'stealing' art to create models that imitate art, representing decades of work, building philosophy, understanding, and knowledge, is just a result of people's neediness, thinking that is driven by money, loss of ethics, and the importance of self-improvement. The strengths, resources and time that should be invested in the education of humanity as a whole are being lost. Unique creators and their art serve as an offering to consumerism, capitalism, performance, and most probably and ultimately the control of thinking.

Being able to create concept art and therefore reinterpret the world in its immense complexity and beauty, to create values in projects and educate artists and people is a way of thinking that holds the essence of the mentioned 'language of art'. This is a call for self-realization, awareness, understanding and communication to all artists, creators and people who see meaning in things around them. Build values that are real, to create, because that is an essential part of being. Do not just copy, create without meaning, or 'steal' anyone's future. Try to grow not only in your craft but also grow in philosophy and character. Learn and educate yourself like all the best artists did.

Just some questions to think about for the end: Did we really deplete all the ways a human brain can become more efficient? Is AI really needed to solve already solved problems, or is it just people's laziness and neediness to become better versions of themselves? Why are the brilliant creatives who create entirely new worlds with complexity, thought through to tiny details, usually invisible, while big companies hold all the rights and are cherished by the audience?

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