Abstract
The affinities, interaction, and cross-fertilization of theatre art with games date back at least to the early modern period. However, since the 1990s, a pronounced and promising interconnection has been fostered between theatre and digital games, in theory, and practice, manifesting in fields like theater in education. In the present paper, we set forth some of the key constitutive elements of the said interconnection, underlining the benefits of studying digital gaming using theater as a basic reference model. Next, we turn to the affordances of the theatre-digital games alliance for the theatre and its reception by a diverse public. Finally, we discuss the presence of the said alliance in learning environments, zooming in on a few well-documented and effective methods through which it has been integrated into the praxis of theatre in education.

Keywords: Digital games; performance; theatre; theatre in education
1. Introduction

Huizinga (1971) became a classic in game studies after its publication in English in 1971, scholars whose research focuses on gaming have been claiming that games can be viewed and studied as theatrical means while the theatre, in turn, is an interactive gaming technology (Bowman, 2010). In the past few years, theatre scholars too, such as Bloom (2018), have embraced that proposition. Bloom expands on how in the early modern period, the experience of playing a game in a gaming house or gambling club, on the one hand, and participating in a theatrical event or attending a play, on the other, overlapped to a significant extent, which made them seem and feel very similar (for instance, when considering strategies of playing such as speculating based on limited evidence, withholding or divulging information according to certain tactics, wagering on knowledge, and so on). Gamers in the audience, Bloom posits accessed the meanings of drama drawing on their experience of gameplay, and she goes as far as to argue that it is largely due to this state of affairs that theatre was established in the entertainment market. Although until relatively recently, the relevant discourse centered on analog games and theatre works, in the past few decades emphasis has been placed increasingly on digital experiences of gameplay and theatre play.

With the digital turn of both games and the theatre, the rich historical connections of the two media were strengthened, and the interrelation between digital games and the theatre became felt as never before in entertainment, art, and learning contexts (Çelik, 2023). In the 1990s, and in the same period when new theatre forms were being developed that were adapted or entirely based on the digital environment, the emergence of digital games revolutionized gaming ontology and epistemology. One need only consider the influence that the prevalence of digital games has had on game design, production, dissemination, and reception; how the dominance of digital games transformed gaming as a site of expression, communication, socializing, and, by extension, also transformed the presence and uses of games beyond the entertainment (uber)industry. Digital gaming, according to Fromme and Unger (2012), is not simply an integral part of media convergence culture; it now features as one of the most important “players” in our contemporary multiply mediated culture. This partly explains why, in the past couple of decades, theatre leaned toward digital games, on the one hand, looking for new expressive and communicative tools with which to enrich its resources, and on the other hand, seeking to attract audiences different than those typical of traditional dramatic theatre, especially younger demographics. It may be that the affinities, interaction, and even the cross-fertilization between theatre and games were already there, but the unique properties of the digital mode fostered a very fertile and promising interconnection between the two, both in theory and in practice.

1.1. Purpose of study

Let us focus, then, on some of the key constitutive elements of the said interconnection and underline, among others, the benefits of studying digital gaming using theater as a basic reference model. For space-saving reasons, in the present paper, we will address only Massively Multiplayer Online Role-Playing Games, as they are commonly known, or MMORPGs for short.

2. Methods and material

The study uses a literature review method. The study discusses the presence of game alliance in learning environments, zooming in on a few well-documented and effective methods through which it has been integrated into the praxis of theatre in education. In our reporting and documentation, we aim for accuracy. Without fabrication, falsification, or improper data manipulation, all research findings and interpretations are given openly and truthfully.

3. Results

3.1.1. Digital games through the lens of theatre

The influence that the performance studies paradigm exerted on the study of all manifestations of the
art of the theater and, in fact, of all manifestations of the performing arts, recent developments in the performing arts field, as well as the expansive understanding and application of performance and performativity now allow us to discern the benefits of studying digital games, and MMORPGs in particular, through the lens of (dramatic) theater, or within a theater-based performance framework. After all, foundational texts in the field of performance studies, as Fernández Vara (2009) has shown, clearly establish that connection, while in the field of game studies, too, dramatic models have been repeatedly invoked to study virtual environments, in game design, and to refer to different strategies for creating uncertainty and tension in gameplay. Although the said connection has not been fully and convincingly theorized yet, we have plenty of evidence to advocate for its potential.

A theatrical performance can be described, in general terms, as a structured, regulated cluster of events in which the participants are engaged in processes of meaning-making and meaning (re)presentation with a social basis and implications in specific time and space configurations; processes where all materials involved, persons as well as objects, function as signs and symbols, are involved in the text and are invested with subtext. If we accept that description, then we understand why scholars like Fernández Vara (2009) correlate, without equating, a theatre performance experience with the experience of playing an MMORPG, to enrich our understanding of both. Given the space limitations, it is not possible to analyze all affinities and correspondences between a theatrical play and an MMORPG, or rather between a live performance and a play session, about basic characteristics, design principles, operative conventions, and sociocultural uses, based on a single game, such as World of Warcraft, Lost Ark, or Elder Scrolls, or some other popular game (see MMP Populations). Instead, we will set down, roughly, a few of the above.

A typical MMORPG, like a typical theatre work, is grounded in a performance practice in which a combination of elements compose a fictional world oriented toward a narrative, able and poised to get animated through the participants’ presence and energies to tell a meaningful story (or stories); this is what is often referred to as the text, here broadly (and poststructurally) conceived, and it can be more or less definitive and solid, or open and flexible, depending on its content/story and purpose/thematic material. The fictional world is structured and organized by causality, internal and external motivation, and conceptual coherence, and people are invited to enter and participate in it, mentally, effectively, viscerally, and sometimes kinesthetically (Boyle et al., 2019; Yi, 2021; Mao & Cho 2024). Some of the fundamental elements of the fictional world are:

- **Characters**: human and more than human, embodied by human performers or non-human agents
- **Plot**: essentially what happens in it, which is more compelling when it is infused with tension
- **Setting**: the time and the space in which the story unravels through action, but also the scenery and stagecraft (physical and digital elements, but also involving intangibles, and their arrangements)
- **Interaction and communication**: dialogue, the speech of all kinds, bodily interactions but also mixed-media and multi-modal interactions, as well as other forms of communication using which the fictional world comes alive, characterization reveals aspects of the human condition, action becomes purposeful, themes are conveyed (Jacobus 2008).

Similarities regarding basic characteristics lend a first impression of the affinity between the two media (with the term “medium” here used with its broad sense). The interconnection under examination, however, is further enriched when we also take into account similarities in terms of design principles that support the development of all the constituents of the fictional/theatrical but also of the fictional/game world and the internal apparatus of each. Bowell and Heap (2013) have identified and expanded on six such principles which they view as vital for building a theatrical work, especially in the context of theatre in education, and we find that the same principles, quite interestingly, apply to the construction of a game world. The themes, that is, the aspects of the human condition that get interwoven in the fictional world, constitute a core design principle of a theatre piece and an MMORPG. The same holds for the context, meaning the fictional circumstances through and in which themes get explored. This also holds for the roles, the dynamic constellations of human
and more-than-human qualities, behavioral patterns, habits of thought and action, and other properties expressing what we call “character”, and for the frame of interaction and communication within which anything meaningful happens within the fictional world; the field of forces constituted by the different perspectives, the workings, and the propensities, capacities, and powers of all animate agents of action, as well as the dispositions of inanimate objects.

Another design principle common to theatre and MMORPGs is the intricate system of signs that combine to impart layers of meaning, bring significance, and direct attention to the events taking place (from objects and scenic compositions to music and audio scapes, to verbal and other linguistic content, gestures and movements, and so on). Signs are the “information-bearing phenomena” that allow participants to create meaning on the interface between the live theatrical performance and play session, on the one hand, and each participant’s own perceptive and agential field, on the other (Bowell and Heap, 2013). Finally, in both we discern strategies; that is, how signs and their significance get organized for the synergy of characters, plot, setting, interaction, and communication to properly function so that participants can become productively involved in meaning-making and meaning (re)presentation processes.

Inseparable from the above both experiencing a live theatre performance and a digital gameplay session are certain operative conventions (Fernández-Vara, 2009; Boyle et al., 2019; Punpeng & Yodnane 2023). Here we will refer to three of them. First, the actual text in the case of a theatre work, whether a playtext, script, or score, comprising dialogue, stage directions, and so on, corresponds to the MMORPG’s code and mechanics as Fernández-Vara (2009) has shown, which can be marked by some degree of generativity. Second, similarly to how a playtext/script/score is actualized, substantiated through the performance, that is through “the ensemble of stage systems” used in production (Pavis, 1982), in the case of an MMORPG, its code and software-hardware constitution are actualized and bodied forth through the game’s runtime behavior, its ludic properties and potential that allow for the player’s input, including the functions and actions of the players vis-à-vis the workings of the game, their strategies of play, in-role and out-of-role interactions with other players and with the text of the game; these comprise the performance of an MMORPG’s text. Third, the mise-en-scene which serves as the link between text and performance, the interrelationship between what all onstage and offstage constituents, animate and inanimate, do during a performance and what the participants of the performance receive, finds a corresponding convention in MMORPGs.

In the latter, the mise-en-scene is not limited to the functional, aesthetic, interactive, or immersive content of the game as received by the players during its runtime. It extends to the player’s interaction with the game beyond the game’s runtime or a specific play session; in other words, the dynamic, game-poietic reception that happens after the “actual” game is over, in the various gameplaying communities, like those assembling in game-specific forums. There, sometimes in and sometimes out of role, players continue to feed into the “drama” of the game beyond the bounds of game code and runtime, according to their own needs, desires, and concerns. As a matter of course, a great portion of the player base enriches and expands characters, plots, settings, interactions, and communication through “customized” processes of meaning-making, co-creating, in a very real sense, the game’s performance outside of the “game proper”.

Concerted and coordinated, conventions, design principles, and foundational elements of the fictional world channel the sociocultural potential of the theatre, not only as a form of art and means of entertainment, but also as a mode of learning. The way they pertain and apply to MMORPGs and the fictional world of a game allows them to have comparable and, in many cases, similar uses. Indeed, experiencing and studying MMORPGs in theatre terms too helps us appreciate their relevance and resonance as a medium. More specifically, given the affinity and compatibility we have already outlined, it helps us comprehend the many diverse ways in which digital gaming can be used intermedially and interartistically in various cultural environments, including education. Moreover, by approaching digital games/ing through the lens of theatre, the social art par excellence, we can appreciate the value of MMORPGs as sites for negotiating different cultural identities, norms, expectations, and so on; a value palpable in-game forums, which often serve as spaces where
intercultural connection and learning are fostered (Salen and Zimmermann, 2003). Therein, discussions, tensions, remediations, and exchanges of meaning, all kinds of productive interaction among players with different cultural backgrounds and orientations, compose a discursive and affective Topos where a social, intercultural, transaction unfolds that spill over the rim of a game’s modus operandi, at the same time exerting critical influence on it, in time shifting its ideological coordinates and, by extension, those of digital gaming culture.

About the above point, it is important to also distinguish how digital games have evolved in terms of ethical and political charges. Digital games, taken collectively as a medium, have become more and more inclusive and democratic in recent years, responding to the explicit and implicit demands of gaming communities. Having absorbed the output of feminist and postcolonial critiques, for example, many MMORPGs are increasingly oriented towards providing empowering experiences for players as contributors to and even co-creators of the gaming experience, and articulate progressive responses through their hardware and software construction to transformations occurring at the level of values, priorities, concerns. Hence, many MMORPGs now sacrifice historical authenticity to move away from heterosexist and homophobic patterns of interaction, invest in enhancing the presence of non-white and non-heteronormative figures and cultural paradigms, avoid reproducing patriarchal and racist structures, adapt to support the gaming experience of people with disabilities, and move in the direction of promoting social justice (Shyba, 2007; Mukherjee, 2017; Vossen et al., 2018; Spöhrer and Ochsner, 2023; Larreina-Morales & Mangiron 2023). Boal (1979) had written about the theater that it may not be revolutionary in itself, but it is a site, and an experiential way, to rehearse revolution. Given the foregoing, and has replaced the term “revolution” with the less controversial term “beneficial social change”, we agree with Shyba (2007) that the same can be said for digital gaming.

3.1.2. Theatre through the lens of digital games

That many instances of contemporary cultural fermentation, also known as culture wars, first manifested not in the realm of “high culture” but within game culture testifies to the latter’s purchase and resonance, which cannot but benefit theatre if properly tapped into within the frame of an intermedial/inter-artistic alliance; that is, purposefully and without compromising theatre’s aesthetic and sociopolitical singularities and idioms. This is not only so as theatre can appeal to and draw in diverse audiences, especially younger constituencies, but also because such an alliance has been shown to enrich the toolboxes of each, particularly forms of theatre and digital games that seek to empower participants, assist them in cultivating sociocultural competences, as well as their critical consciousness and agency (Shyba, 2007).

Several theatre creatives have acknowledged the potential inherent in such an alliance and tap into digital gaming to explore new territories of theatre poetics through experimentations with gamification (for example, regarding narrative structures, plot devices, scenic solutions or inventions, and so on), to actively engage audiences, and turn them into actual contributors to the theatrical event. Below, we refer to two indicative cases. In both, the performance logic and workings of MMORPGs are crucial in the inception and production of the works. Both Now Dira Oh Now by Rude Mechanicals (first presented in 2012) and Whist by ΑΦΕ (first presented in 2017) have delivered innovative practices through which the theatre-digital games alliance gets fleshed out. The former has emphasized the idea that theatre and MMORPGs are sites ideally equipped to feed into and off the exercise of sociability and socialization, while the latter on the digital mode of MMORPGs and how that can update and add to theatre’s sense-making and world-poietic capacities.

Now, according to its creators, derives from an intermedia and inter-artistic combination of the social dynamics of Live-Action Role-Playing Games, the rationale of MMORPGs, the design of escape rooms, the content of Serious Games (SGs), and an aesthetic that draws from the literary worlds of the Brontës. During the performance, participants collaborate, interact with a rich mixed-media scenic environment, and draw on insights from the field of evolutionary biology to solve puzzles, which allows them not only to “unlock” the next (each) phase of the unfolding drama, the mysteries of the story, as well as, practically, the room they are
in but also to gain a deeper, experience-based knowledge of the losses that inevitably accompany the selection processes and alleged randomness driving evolution. The participatory, multiplayer component of *Now* is what allows the practice of intellectually, emotionally, and physically navigating through its beautiful as much as the devastating dramatic world, a practice that lies at the heart of the work’s modus operandi, to be experienced as a shared, social quest. This is, in fact, the most significant asset of *Now*, from which all of the benefits it entails for the participants arise.

In the course of the said quest, the weight of the whole endeavor shifts from enjoying a well-designed entertainment piece to appreciating the value of a theatrical/dramatic experience energized by a mission that is at once artistic, social, and pedagogical, and partaking of that mission: *Now* addresses a socially and politically topical issue, the bioethical dimensions of human evolution, of urgent importance in the age of environmental crisis, through an inventive and gripping theatrical poetics, while, at the same time, encouraging participants as a collective, on the one hand, to my valuable lessons for the present and future of the human condition, and on the other hand, to recognize the necessity of formulating their position regarding the bioethical problematic in which the production immerses them.

Less “guided” than *Now*, *Whist* essentially attempts a bold investigation of the changes in spectator-participant perception and meaning-making that accompany the digitization of gamified theatre. This hybrid work is theater as much as it is a visual art installation and digital game, and as such it tests but also shifts the boundaries of theatre poetics, as Gordon (2017) has noted. At the same time, it invites/challenges audiences to actively participate in transforming their assumptions about what interactive theater means and offers. Donning virtual reality headset wearables, participants embark on a journey into a deeply symbolic world of unfolding dreams, home to the diversified drama of *Whist*—a journey conceived precisely to conduce to the said transformation. What dream each of the participants experiences depends on the strategy of play they follow as they interact visually and kinesthetically with the sculptures installed in the performance space. By aiming their sight and/or touch at specific points on the sculptural installations, while simultaneously inside the digital game world using the wearable VR technology, participants “unlock” dreams which they then are free to explore, as they, at the same time, explore the physical space of the performance.

Thus, each participant experiences differently their journey through the digital game-inflected dream world and their interaction with the dramatic content of the play, depending on how and where they move and direct their attention while within the context of each dream. At the end of the performance, each participant receives a short psychological profile which results from their overall response to the entire experience in terms of social behavior, association, and interaction manifested by them (Gordon, 2017). In other words, in this unique theatrical game, the patterns of behavior, reaction, and interaction with other participants, with the characters, and with the intermedia and inter-artistic environment of the piece itself ultimately reveal important information about dispositions, inner workings, and potential of the participants-players. Perhaps the main advantages of a work like *Whist* are those related, on the one hand, to what contemporary audiences learn about the new possibilities of theatre play and gameplay, and on the other hand, to what they learn about themselves and their agency to the extent that they are invited to own the artistic-ludic experience.

3.1.3. The theatre-digital games alliance for theatre in education

The question of owning meaningful experiences involving both digital gaming and theater poetics, and the learning potential of experiencing the co-creation of such intermedial and inter-artistic works are beginning to move from the margins to the center of applied theater practice in recent decades. More than a few theatre practitioners are now leveraging the alliance of theater and digital games to advance the mission of applied theater through the development of new strategies that make its practice more relevant, more diverse, and conceivably more effective. Theater in education, formal and informal, was one of the first forms (or types) of applied theater to invest in this alliance and has delivered promising examples of good practice. Within and
without the English-speaking world, numerous theatre-based or theatre-inflected, education programs and research projects employ digital games to achieve various learning goals. Some interventions aim to promote learning about theater and drama, and some about other subjects and content areas (Anderson et al., 2009).

The popular methodology of process drama has proven highly compatible with MMORPGs, which it attracted into its orbit around the mid-2000s. It is now a common topic among theater educators but also applied theater practitioners in general, that process drama, although accessible to educators without prior theatre training, requires that educators interested in using the methodology are aware that they, as well as the learners, will need to alternate the “hats” of the actor, the director, the playwright, and, of course, the teacher and student respectively, as the drama progresses and as a “play-text in action” is being crafted (Author surname, forthcoming). Educators (here cast as facilitators) and learners work together as equals to conceive and develop a dramatic world that functions as the context for exploring select themes that promote learning about a specific area, but also about theater itself. An effective process drama intervention is characterized by consistency, continuity, and cohesion between individual episodes and the latter’s constitutive action units which together compose and articulate different aspects of the dramatic world and the learning processes that feed into and off the dramatic world. Thus, learners become motivated to invest their powers (cognitively, affectively, bodily, etc.), energized to contribute their input, and committed to achieving goals to whose determining they have participated, which means experiencing the learning that is taking place as a personal affair and themselves as co-responsible for its course and results so that they can consequently reap more benefits from the learning process (Author surname, forthcoming).

In a well-researched paper, O’Mara (2016) elaborates on the affordances of the integration of process drama and digital games concerning the cultivation of literacies; that is, the cultivation of transferable functional, critical, and creative competencies related to language use and beyond. The author draws on an Australian Research Council (ARC-) funded project to put forward a student-centered, participatory learning model in which process drama strategies incorporate MMORPG properties and functions about the development of text and action, but also to document how the said model’s application in a variety of learning environments significantly improves learners’ linguistic output and many aspects of their language performance serving different purposes. As O’Mara’s (2016) study shows, the combined advantages of process drama and MMORPGs facilitate the development of play texts in action marked by strong sociocultural resonance beyond the immediate educational environment where they sprang, by learners who, in addition to learning, become active theater makers, actors, but also quality media content creators. This, she claims, can reinvent the praxis of language arts education and arts education in general.

Around the same time, as if informed by ARC’s and O’Mara’s (2015) research, the Pierrepont School in Connecticut breathed new life into the reception of classics in education by theatrically presenting classical works such as Homer’s Odyssey or William Shakespeare’s The Tempest, through the use of digital game platforms. The success of the first interventions-performances within the school context was such that director and theater educators Eddie Kim and his students (middle and high school students) founded the theater company EK, which specializes in developing digital theater projects that combine the logic, mechanics, and aesthetics of MMORPGs with classical literature, with the tradition of epic theater (going back to the work of Bertolt Brecht), with devised theatre, as well as with the tradition of Banraku puppetry.

As Darvasi (2016) writes in an article dedicated to EK’s pioneering work, in a “typical” production, live performers (students) perform well-known plays or reworked prose fiction in scenes also created by students in MMORPG environments, where avatars are also designed, managed, and performed by students, directed by Kim. In other words, at the heart of the EK’s theatre-making methodology is the dramatization/theatricalization of classical literary texts both within the world of a digital game such as Minecraft, wow, or Call of Duty, through avatars, in scenes directed by Kim and honed by him and the students, and live by the students who perform the playtexts. The two “threads”, the one inside and the one outside the digital game environment are not independent of each other but interwoven, inseparable; they unfold about...
one another, in harmony and synchronously in the context of a mixed-media theatrical performance. Throughout the process of developing such a piece, students learn to think, speak, and act as digital puppeteers, performers, technicians, and so on, in a collective, often switching roles and complementing each other’s abilities and functions, which means that the learning gains for each student and the group multiply (Darvashi, 2016).

As far as we know, this endeavor was the first to involve students in the development and presentation of original works, based on classical literature and developed through digital game technology, which indeed boldly “re-equip” classical reception (and here we are not only referring to education-framed classical reception with its inevitable limitations) in a manner that is fitting for today’s media culture of which the teenage student demographic is an integral part. At this point, it is worth remarking that young learners, the “digital natives” of our societies (Prensky, 2003), are likely the primary beneficiaries of an educational practice that harnesses their extracurricular interests and media-based entertainment outlets to effectively diagnose and then meet their learning needs. However, this does not mean that today’s “digital immigrants” (Prensky, 2003) cannot benefit from educational methodologies, strategies, or techniques that integrate “the benign empowering uses of digital technologies” with the inherently social apparatus of theater (Anderson et al., 2009).

On the same note, and emphasizes how digital games, especially MMORPGs, can be used to mitigate the risk of alienation from the art of the theater on the part of demographics that turn to digital games as an interactive form of entertainment, socialization, and learning (albeit not often consciously so), Foster (2017) proposes the development of a “theatre for gamers”. Foster shows and proves through his practice-as-research project how the design of a digital game, in terms of concepts, themes, technologies, facilities, and strategies of play can be mined as a very useful and attractive resource for developing live performances and winning over new audiences, especially those found among gaming communities. Although the details of Foster’s proposal are beyond the scope of this paper, it is important to note, if only in passing, what the main components of his “theatre for gamers” reveal about the need to revitalize contemporary rehearsals of positive social change at the intersection of entertainment, arts, and learning.

With audience members redefined and repositioned as players; theater creatives recast as facilitators; distributed authorship and distributed responsibility for the theatrical event; and the replacement of set narratives and storylines with generative story worlds, the “theatre for gamers” is poised to serve as a site and vehicle of arts-based social action. Its digital component, moreover, which is worth singling out, implies that the social action to which it is oriented can be mobilized in a most opportune fashion, through new technologies and their representations which facilitate theatre participants as both gamers and learners to make sense of, describe, and communicate “their lived experiences of and responses to “a technology-saturated world” where “the human and the technological, the real and mediated have become […] blurred and inseparable” (Anderson et al., 2009). This can allow digital natives and digital immigrants alike more and richer opportunities to develop ownership, responsibility, and control “over the means and uses of technology” and, by extension, become critically aware of how new technologies and their affordances shape their personal and social identities, as well as of ways to become their authors and authority (Anderson et al., 2009). It is suggested that a “theatre for gamers” as a resource for educational programs and interventions would be easy to align with the beneficial critical theory and practice (or critical pedagogy) of multiliteracies that Mirra et al., (2018) have delineated; especially so with the four modes of learning which, as their research has shown, are now necessary if education (of all types and levels) is to enable learners to interrogate and improve the social and material conditions of our post-digital societies: critical digital consumption, critical digital production, critical digital distribution, and critical digital invention. We dare also suggest that the above holds for the theatre-digital games alliance itself as the ground into which novel learning methodologies can be built.

4. Conclusion
In this paper, we attempted to show that theatre and digital games, both seen as interactive media and means of expression and communication, can learn a lot from one another and that an alliance of the two, buttressed up by existing affinities, carried great learning potential which begs to be further explored and theorized.

At a time when digital gaming is redefined as much more than entertainment appealing to and accessible by only certain populations, and theatre is redefined as much more than an art form appealing to accessible by only certain other populations, and both get reinvented as learning resources available to all and sites where all could and should be able to attempt rehearsals of beneficial social change, to tap into such an alliance is more than sensible, indeed it seems to us long overdue.

References


