Environmental Storytelling and Active Spectatorship in Walking Simulators and Exploration Theatre

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ABSTRACT

This article aims to construct a comparison between exploration immersive theatre-analysed through the work of the British theatre company Punchdrunk - and the video game genre of walking simulators. This comparison is rooted in strong similarities between the two media forms, namely the use of the environment as the main site of storytelling and the exploratory agency afforded to the audience. The narrative use of the environment is discussed through the concept of environmental storytelling, identifying in that regard two different design strategies employed in both walking simulators and exploration immersive theatre. On one hand, environmental storytelling can rely on cause-and-effect relationships, turning the player/audience into a detective, while on the other hand environmental storytelling can be used to construct an atmospheric narrative, experienced affectively and aesthetically by the wandering player/audience.

Keywords

immersive theatre, Punchdrunk, walking simulators, environmental storytelling, atmosphere, indexical storytelling, explorative agency

INTRODUCTION

In an interview by Jakob-Hoff (2014), Fulbright's lead designer Steve Gaynor openly discusses being inspired by Punchdrunk's show *Sleep No More* (2003 - current) while designing the studio's debut game *Gone Home* (The Fullbright Company 2013), a subversion of the haunted house trope that uses personal objects to tell the story of an American family. In that same interview, Punchdrunk's artistic director Felix Barrett opens up about being inspired by the capability of digital games to make the players "work" to access their narrative content, instead of being "spoon-fed". Both Gaynor and Barrett, then, discuss how openness and ambiguity are central in the creation of the experience of active spectatorship in their work. In that regard, Barrett describes the pleasure that derives from "solving the theatrical riddle", adding that "there's nothing worse than a resolution at the end of an evening", while Gaynor states that "the story is the puzzle in Gone Home", describing how the lack of unambiguous feedback regarding the interpretation of the story tasks the players with the responsibility of actively building a personal interpretation.

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This cross-contamination between Punchdrunk's exploration-based immersive theatre and Fullbright's exploratory video games (commonly labeled as "walking simulators") is also reflected in the academic discourse around the intersection of the two media forms. Theatre in general, and interactive theatre in particular, has been used as a comparison for the study of digital games by scholars such as Frasca (2001), Fernández-Vara (2009), Homan and Homan (2014). Similarly, game studies have been applied extensively to analyse immersive theatre in general, and Punchdrunk shows in particular, by scholars such as Biggin (2017), Klich (2016), Machon (2013). Moreover, explicit comparison between Punchdrunk shows and walking simulators have been made by Kagen (2022), who cites Punchdrunk's Sleep No More in the context of their inquiry on wandering games, and by Westling (2020), who mentions the walking simulator Everybody's Gone to the Rapture in their analysis of Punchdrunk's immersive theatre. This article aims to situate itself in the context of these crossmedial studies, constructing a comparison between these two media forms and discussing their similarities in terms of stage design and modes of audience participation.

EXPLORABLE NARRATIVES: PUNCHDRUNK SHOWS AND WALKING SIMULATORS

Punchdrunk shows are here discussed and analysed as belonging to the broader genre of immersive theatre. As Machon points out, the term is currently used to describe "interdisciplinary, sensory and participatory performance work occurring in places outside of traditional theatre venues" that would previously be labelled as site-specific, landscape or sensory theatre (Machon 2013, 64-66). Immersive theatre is therefore used as an umbrella term, describing different practices that have in common the inclusion of the audience in the space of the performance. This common element is outlined in Alston's broad definition of immersive theatre: "theatre which surrounds audiences within an aesthetic space in which they are frequently, but not always free to move and/or participate" (Alston 2013, 1). Founded in 2000 by the director Felix Barrett - who was then joined in 2003 by the choreographer Maxine Doyle - Punchdrunk is considered among the pioneers of immersive theatre. Despite experimenting with multiple formats in their 20 years of activity, Punchdrunk have created a very recognizable genre of exploration-based immersive theatre. Probably the most successful among Punchdrunk shows premiering in London in 2003 and still being represented in New York and Shanghai -Sleep No More is a reinterpretation of Shakespeare's play Macbeth mixed with elements from Hitchcock's movies Rebecca and Vertigo. The Burnt City, the most recent exploratory show of the company, creates instead an interplay between a tragic retelling of the Trojan war - based on Aescylus' Agamemnon and Euripides' Hecuba - and the story of archeological discovery of the remains of the city of Troy. The aforementioned shows are structured as promenade performances, set in large scale, non-theatrical buildings which are transformed into explorable settings by a team of designers, led by professionals having a long standing relationship with the company such as Beatrice Minns and Livi Vaughan (Kinnersley 2023). The spaces are designed to be touch real: "as close to 'real' as possible; offering authenticity in the

sensual reality of rooms and contiguous spaces" (Machon 2018). The settings are not illusions to be experienced visually, affording instead multi sensory and deep exploration. Drawers are filled with objects, perfume bottles can be opened, books and diaries contain information about the world and intimate details of the lives of the characters. The space thus becomes a vehicle of narration, not less important than the dramatic performance. In addition to the narrative conveyed by the spatial design, dancers move across the space performing scenes organised in time loops that happen simultaneously in different areas. Audience members are then free to explore the space at their own pace, with no predefined or enforced path. They can choose to follow a character and witness their story, to rummage through drawers in search of little details and secrets, or to wander aimlessly and enjoy the atmosphere and the unexpected encounters (Eglinton 2010).

Fulbright's exploratory video games - like the aforementioned Gone Home - are instead discussed as belonging to the genre of walking simulators, an umbrella term used to describe exploratory games in which, according to Grabarczyk, "traversal is the main (or even the sole) mechanic" (Grabarczyk 2016, 244). The progenitor of the genre has been almost unanimously identified with Dear Esther (The Chinese Room 2012), a solitary exploration of a deserted island intertwined with a fragmentary narrative about a car crash. While several exploratory games existed before Dear Esther, the game - firstly developed by Dan Pinchbeck as an academic project and then released as a commercial game (Pinchbeck 2008) - represents the turning point from artistic/academic experiments to commercial games. While all having in common the subtraction of ludic elements and the focus on the aesthetic, narrative and atmospheric potential of virtual environments, walking simulators present for the rest a huge variability in regards to the narrative structure they employ and in the type of stories they tell. In Proteus (Key and Kanaga 2013), the player explores a procedurally generated island, experiencing the changes in its landscape as it moves through the cycle of the four seasons. Everybody's Gone To the Rapture (The Chinese Room 2015) is an exploration of a deserted guarantine zone, in which the player pieces together information gathered from the environment and from ghostly reenacting of past events in order to understand the cause of the disappearance of the villagers as well as their private stories. Sunset (Tale of Tales 2015) tells the story of a fictional South American coup d'etat from the perspective of the foreign maid of a rich art collector. Firewatch (Campo Santo 2016) follows the adventure of a grieving man working as a fire lookout in the Wyoming wilderness. Last but not least, What Remains of Edith Finch (Giant Sparrow 2017) tells the story of a family curse discovered through the exploration of an uncanny family home and experienced through the eyes of its former inhabitants. The radical subtraction of the ludic elements, together with a strong focus on the narrative and the aesthetic, makes so that the player in walking simulators takes a more spectatorial role: free from challenges and dangers, they can focus on experiencing the gameworld and its content. On one hand, the subtraction of conventionally ludic elements - such as explicit tasks and goals, obstacles and challenges other than spatial orientation - puts

the player in a spectatorial position, promoting a focus towards the audiovisual elements in the gameworld. On the other hand, design choices such as the use of the first person perspective and the subtraction of UI elements - particularly the elimination of the HUD - aim to reduce the mediation between the gameworld and the player, enhancing their sense of presence. In terms of narrative techniques, walking simulators generally use environmental storytelling to convey a consistent portion of their story, constructing codified spaces that need to be explored and decoded by the players.

Walking simulators and immersive theatre thus configure as innovative practices, as they both challenge the conventions of the media they originate from. Immersive theatre reshapes the separation between audience and performers, that Machon describes as "defined by the delineation of space (auditorium/stage) and role (static-passive observer/active-moving performer)" (Machon 2013, 27). In particular, Punchdrunk's works challenge this separation by constructing large scale spaces, cohabited by performers and audience, in which audience members are not passive but are free to explore the whole space at their own pace. Walking simulators subvert instead the paradigm of the "player as the hero", reducing their possibility to affect the gameworld with their action. Instead, they construct virtual environments that the player is free to explore as an observer of predestined events. Moreover, both Punchdrunk shows and walking simulators make use of ambiguity and openness to engage the attention of the player/audience. Ambiguity is also used as a design tool in order to create uncanny atmospheres, mixing familiarity and intimacy with the mysterious, the horrific and the supernatural (Aller 2022, Machon 2018, Muscat et. al. 2016).

The audience experience of both Punchdrunk shows and walking simulators is rooted in the act of exploring an environment. However, the different conventions of theatre and video games greatly influence the way in which Punchdrunk immersive theatre and walking simulators are perceived and discussed by scholars and critics. Biggin (2017) points out how Barrett frequently uses terms such as empowerment, transgression, individuality and authorship to discuss the audience experience in Punchdrunk shows. Conversely, walking simulators have often been described by their detractors as boring, short, lacking interactivity, and essentially affording nothing more than walking (McGovney 2016). Academic inquiries also highlight this subtraction of agency: in that regard, the player action in walking simulators has been discussed by Sengün (2017) in terms of passive spectatorship. Despite this difference in perception between walking simulators and Punchdrunk shows, placing the focus on the formal elements in play - namely the use of the environment as a site of storytelling and the exploratory agency afforded to the player/audience highlights instead the similarities in regards to the user experience. Considering walking simulators and explorable immersive theatre as a shared design space can thus allow the integration of perspectives and tools from game studies and theatre

studies, enabling a deeper understanding of the possibilities and challenges of environmental forms of narratives.

ENVIRONMENTAL STORYTELLING PRACTICES BETWEEN THE PHYSICAL AND THE DIGITAL REALMS

While also employing more conventional forms of narrative such as voiceover, written text and acting, both Punchdrunk shows and walking simulators use spatial design and stage setting to convey their stories. Punchdrunk's unique performance structure - with multiple scenes happening simultaneously in different areas - relies on stage setting to evoke the presence of the characters when they are not physically present in the space. Walking simulators also employ narrative elements embedded in the space to convey most of their narrative, minimising the use of non-environmental narrative techniques such as cutscenes and multiple choice dialogues. Both Punchdrunk and walking simulators can thus be described as spatial experiences in which the player/audience is incorporated into a narrative environment, able to explore it at their own pace, and the narrative is not presented in a linear fashion but scattered throughout the space for the player/audience to retrieve. Borrowing from Gibson's ([1979] 2015) ecological approach, it can be argued that, as the properties of natural environments affords specific agential possibilities to the creatures inhabiting it, a narrative environment is similarly filled with narrative affordances that allow the player/audience to draw meaning from them. This concept closely relates to what Nitsche describes as evocative narrative elements:

"The elements that are implemented in the game world to assist in the comprehension will be called "evocative narrative elements," because they do not contain a story themselves but trigger important parts of the narrative process in the player. These processes can lead to the generation of a form of narrative" (Nitsche 2008, 3).

It should be noted that *exploration* is a necessary precondition for the interpretative process that leads to the generation of a narrative. While neither in Punchdrunk shows nor in walking simulators the player/audience has the capability of influencing the events, they are however able to choose how to explore the space. Ryan describes this particular form of agency as *internal-exploratory*. In this form, the user is placed inside the narrative world, whether by accessing a physical space with their own body or by being afforded a perceptual and agential standpoint inside a virtual space. Their agency is however "limited to actions that have no bearing on the evolution of the virtual world, nor on the personal destiny of the avatar: actions such as travelling around the virtual world, looking into its nooks and crannies, picking up objects, examining them, and looking for Easter eggs." (Ryan 2006, 111-112). The internal-exploratory form of agency can thus be described as an *active spectatorship*, as the agency of the player/audience is limited to the process by which the narrative

is retrieved. Thus, while the spatial divide between audience and stage is removed, there is still a separation between the narrative events and the process of their discovery by the player/audience.

In game studies, the discussion around the narrative use of environments is framed through the concept of *environmental storytelling*. The term has been coined by the designer Don Carson (2000) to describe the staging techniques they use to design both theme park rides and digital games. The term has been subsequently picked up by Jenkins in their inquiry on the role of spatial design in the creation of narrative effects in digital games:

"Environmental storytelling creates the preconditions for an immersive narrative experience in at least one of four ways: spatial stories can evoke pre-existing narrative associations; they can provide a staging ground where narrative events are enacted; they may embed narrative information within their mise-en-scene; or they provide resources for emergent narratives" (Jenkins 2004, 123).

Jenkins' discussion touches upon a variety of spatial features that possess narrative potential: however, the discussion on environmental storytelling has since then mostly focused on what Jenkins describes as embedded narrative. In that regard, Domsch iterates on Jenkin's categories, focusing more directly on the techniques used to narrativise space and on the narrative potential of the mise en scene. Following Jenkins' use of detective stories and melodrama as examples of embedded narrative, Domsch describes on one hand how visual clues can be used to provide narrative information using a cause-effect relationship in the same way in which clues are used in detective fiction. On the other hand, Domsch describes how visual landscape cues can be used to construct soul landscapes, "reflect[ing] the mood of a protagonist, a scene, or a whole narrative" (Domsch 2019, 111). This dual function of evocative narrative elements - on one hand as visual clues pointing out to past events by a causal relationship, triggering a process of interpretation in the player's mind, while on the other hand as evoking an atmosphere that is perceived sensually and triggers an affective response in the player - is also highlighted in the academic discourse around immersive theatre. In that regard, Machon describes the audience activity in immersive theatre performances as (syn)aesthetic, describing the aesthetic experience of practices based upon the embodied perception of the audience, moving between the sensual and the intellectual, the literal and the lateral:

"These realms are defined by their outcomes for each individual, distinguishable by a *felt* appreciation of 'making sense' in a semantic and cerebral fashion and '*sense*-making', understanding through somatic, embodied perception via *feeling* (both sensory and emotional) created in performance. In (syn)aesthetic practices the process is often fused as a making sense/sense-making experience" (Machon 2013, 104).

The way in which each immersive show or walking simulator is constructed can orient the player/audience perception more towards the "making sense" or the "sense-making". In that regard, Punchdrunk offers the possibility to experience their show with different attitudes, as they offer both the affordances for semantic interpretation and reconstruction of events and plot as well as a strong atmospheric and sensorial experience. In walking simulators, while the focus on the aesthetic experience and the sense of mystery and ambiguity are always present, individual games tend to privilege one of the two modes of aesthetic experience described by Machon. In that regard, Zimmermann and Huberts (2019) understand walking simulators as a spectrum between two different design philosophies: on one side of the spectrum the explorative game, in which the focus is on the interpretation of the evocative narrative elements; on the other side of the spectrum, the awareness game, which is focused on the experience of the gameworld's atmosphere. As environmental storytelling can be used both to signify a cause-effect relationship and to create an atmospheric experience, these two forms of environmental storytelling also encourage different behaviours for the player/audience, that are discussed in this article using the archetypes of the wanderer and the seeker as a tentative taxonomy.

Indexical storytelling and the seeker archetype

The semantic facet of environmental storytelling holds a prominent position in the academic and professional discourse around environmental storytelling in games. Vella discusses embedded narrative as a "structure [...] in which the architecture of the gameworld bears the scars of events that happened there prior to the player's arrival" (Vella 2011, 2) - linking this particular narrative structure to ruinous places as remains of the past and pointing out the interpretive role of the player. Fernandez-Vara discusses cause-and-effect environmental storytelling as *indexical storytelling* - following Peirce's categorisation of signs - as "an index has a relation to the event, often is the consequence of it, which points to something that happened or is going on, inviting the player to reconstruct what happened [connecting] the relationship between the sign and the event that it points to" (Fernandez-Vara 2011, 4).

Both Punchdrunk shows and walking simulators rely heavily on indexical storytelling to convey their narrative. Punchdrunk stage design embeds traces of the characters in the space, evoking their presence for audience members who didn't encounter them. In that regard, Worthen's recounting of the stage design of *Sleep No More* shows how objects are used to evoke the presence of a character in a room. Worthen describes *Hecate's Apothecary*, where the presence of the goddess is evoked by "hundreds of dried flowers, seeds, and plants hang from the ceiling and with jars and bottles along the walls, a magic book, and Satanic runes scrawled on the walls" (Worthen 2012, 81). Similarly, Cassandra's boutique in *The Burnt City*

embeds the presence of the mythological seer in a seemingly mundane store by hiding among administrative documents - such as accounting ledgers and sale receipts - some fliers advertising fortune telling services with esoteric symbols, as well as horoscope charts featuring the same symbols printed in the fliers. Staging grounds for dance scenes can also hold traces of the performative actions that happen in those spaces. In that regard, Worthen (2012) discusses Lady Macbeth's bloodbath scene in Sleep No More: while audience members that manage to be present at the right moment will see the actress playing Lady Macbeth frantically bathing in bloody water, audience members that will enter the room at a different time will still see the trace of that scene in the bloody water left in the bathtub. Indexical storytelling is also the primary narrative motor in many walking simulators. In Gone Home players piece together the story of the Greenbriars - the player character's family - by observing and examining everyday objects in their home. In Everybody's Gone To The Rapture the player explores an empty village and its surroundings, finding the traces left by the villagers before their disappearance. In Sunset the player can gather information about characters and events in the fictional world by interacting with the objects scattered around the house. Like Punchdrunk shows, walking simulators can also use the environment to embed traces of the characters' lived presence in a space: for example in What Remains of Edith Finch the deceased family members' rooms - turned into memorials - contain the personal belongings of the late Finches, evoking the lived presence of those characters even long after their death.

Discussing the player/audience's agency afforded by indexical storytelling strategies, Fernandez-Vara discusses the player's activity in games that revolve around the discovery of past events as *detective work*:

"In these games, the player becomes a detective, and is specifically prompted to piece together the story of the events. The behaviour [...] in these games usually involves examining the environment, reading documents [...] and eventually reconstructing past events" (Fernandez-Vara 2011, 6).

Similarly, Carbo-Mascarell describes how explorative games like *Gone Home* are appealing to players belonging to the *seeker* archetype, "a type of player that approaches games, its mechanics, environments and story with curiosity, [searching] for the endomorphin thrill of interpreting found and dubious information" (Carbo-Mascarell 2016, 4). Players in explorative games and audience members in Punchdrunk shows are presented with an open, ambiguous and mysterious narrative, set in a world that bears traces of past events and is embedded with hints and clues. The player/audience member behaving as the *seeker archetype* will focus on uncovering the secrets of these narrative worlds, thoroughly exploring the space looking for hidden clues. In Punchdrunk shows and walking simulators such as *Dear Esther* and *Firewatch* whose narrative can't be fully experienced in a single

playthrough, seekers might play "multiple runs" in order to uncover as much content as possible and try to maximise their experience by accessing the shared knowledge of fellow players/audience members through blogs and social media (Alston 2016, Biggin 2017).

Engaging with the world with the goal of discovering its secrets - often rummaging through the personal belongings of the characters and intruding into their private spaces - configures the relationship between the world of the performance and the player/audience as voyeuristic. In that regard, Sengün discusses ludic voyeurism on one hand as "construct[ing] cinematic voyeurism through camera-like viewports into the story worlds they simulate" and on the other hand as "build[ing] a feeling of proximity and interaction with the objects of desire they portray, be it objects, characters, or the storylines" (Sengün 2017, 38). The scholar discusses Gone Home as an example of ludic voyeurism, observing that "players are invited to interactively snoop inside the life stories of an ordinary American family" (Sengün 2017, 39). Punchdrunk shows also possess both dimension of ludic voyeurism outlined by Sengün: touch-real environments are explicitly designed for tactile interactions, while the mask transforms the spectator into a camera-eye, anonymising them and concealing their facial expressions (Alston 2016, Biggin 2017, Gordon 2012). Moreover, Aston (2016) points out how Punchdrunk shows promote an entrepreneurial spectatorship, as the audience experience is framed as an individualistic pursuit of the opportunities that the show has to offer within the limited time-frame of the performance.

Atmospheres and the wanderer archetype

The discussion around the aesthetic experience is prominent in scholarly analysis about Punchdrunk's immersive theatre. The spatial experience and the audience exploration are framed towards the aesthetic and sensorial effect they produce. In that regard, Machon points out that the creation of an atmosphere is one of the primary concerns of the company, discussing in particular the roles of illumination and soundscapes in charging the atmosphere "with a sense of potential threat, of the uncanny, or with a spell of enchantment" (Machon 2018). In regards to the aesthetic potential of walking simulators, Aller (2022) and Zimmerman and Huberts (2019) draw from Böhme's theory of atmosphere in order to discuss, respectively, their affective potential and their uncanny effects. Böhme (2014, 2017) discusses atmosphere as quasi-objective and spatially extended feelings generated by the interaction between the objective qualities of a space and the subjectivity of a perceiver. While atmospheres can be generated by natural landscapes, Böhme (2017) also points out that atmospheres can be produced, and identifies the language of stage setting as a high level paradigm for the artisanal knowledge behind the production of atmospheric effects. In that regard, Zimmerman and Huberts argue that level design is in fact an application of the language of stage setting, drawing from Totten's (2014) inquiry of the aesthetic implications of level design. In their

architecture-based level design manual, Totten discusses how level designers can use the tools at their disposal - such as spatial qualities, lightning, sound, objects - to infuse the space with a specific atmosphere.

In order to discuss the objective elements involved in the creation of an atmosphere, Böhme (2014) unpacks the vagueness of the concept identifying five groups of atmospheric effects:

- 1) atmospheres described by "mood in their narrow sense, like serious, cheerful, melancholic";
- 2) synaesthetic phenomena, evoking sensations such as "cold, warm, soft, hard" as produced by different sensory qualities of an environment;
- characteristics "suggestive of movement, such as wide, narrow, uplifting, oppressive", which are generated by "the geometrical forms and distributions of volumes in space";
- 4) intersubjective atmospheres, which are the "first impressions" generated in the encounter of two people before they start a conversation;
- 5) conventional characteristics, which are "generated by objects and symbols whose emanation is culturally conditioned" and determined by cultural associations related to colours, materials and symbols.

Böhme's categories - the last one in particular - introduce the idea that the perception of the atmosphere involves not only the affective and sensorial domain, but can also be produced by symbolic association. At the same time, the sensory and affective power of an atmosphere can produce meaning-making effects and orient the process of interpretation. Atmosphere, then, acts as a (syn)aesthetic process, involving both the dimension of making sense and sense-making described by Machon (2013).

Examples from Punchdrunk shows and walking simulators show how the semantic effects of atmosphere can be produced in different ways. Firstly, the mood and feel arising from the atmosphere can contribute to the overall narrative effect, contrasting or complementing other evocative narrative elements. For example, the bucolic and peaceful atmosphere of the rural landscape of *Everybody's Gone to the Rapture* contrasts with the notice of quarantine posters scattered around the village, while the dim light and overwhelming soundscape work in synergy with the intense physicality of the choreography in *The Burnt City*. Secondly, the use of symbolically charged elements can point to semantic and thematic areas: in that regard, Worthen discusses how *Sleep No More* "materialises the object world of Macbeth through repetition, multiplicity, analogy, transformation." (Worthen 2012, 86), describing how the themes of innocence and childhood are evoked by multiple elements such as taxidermied deers, children's toys and dolls, pictures of children and a haunted children's bedroom. Thirdly, a specifically connotated atmosphere can function as an intertextual reference, to add an additional layer of meaning or to rely on the

expectations related to a fictional genre. The Italian connotation of the area of Troy in *The Burnt City* refers indeed to the mythological origin of the Roman civilization from the Trojan fugitive Aeneas, while the use of an atmosphere referring to horror games in *Gone Home* while telling instead the story of an LGBT+ teenager plays with the haunted house trope to construct and then disrupt the generic expectation of players.

Players/audiences focusing on the atmospheric elements in Punchdrunk shows and walking simulators engage with these experiences through an aesthetic frame of perception. Free from the burden of the interpretation-oriented mind of the seeker, the player/audience engaging primarily with the atmosphere can be described using the wanderer archetype. Players/audience members behaving as wanderers would focus on the felt experience of the world, on the emotions and meaning arising from their engagement with its atmosphere. Instead of gathering as much information as possible, the wanderer would construct an interpretation based on their encounter with the aesthetic space and their own individual journey within it, focusing on their own feeling as they encounter the work instead of dissecting the space in search of hidden clues or information. In that regard, Punchdrunk shows present audience members who don't want to engage with the indexical elements of its storytelling with a strongly connotated atmospheric experience, which affords an aimless exploration of the space driven only by curiosity and a felt interaction with the space, enriched by the encounters with the performers. In regards to walking simulators, the awareness game subgenre sees a prevalence of the atmospheric on the indexical, thus orienting the player's action towards an aesthetic-driven exploration: in that regard, a game such as Proteus is a poignant example of an environment designed to be explored as wanderers. Moreover, like Punchdrunk shows, walking simulators such as Dear Esther and Everybody's Gone to the Rapture offer both a narrative conveyed indexically and a strongly connotated atmosphere, allowing the players to wander and engage aesthetically with the space.

Contrary to the seeker archetype - discussed in terms of curiosity, voyeurism and entrepreneurial participation - the wanderer rejects any interaction with the work focused on personal achievement and instead focuses on appreciating the work as something other than them. In that regard, the behaviour of the wanderer has been discussed through the lens of the Romantic conceptualisation of sublime, the sensation of awe, wonder and terror that is caused by being in the presence of something that exceeds the limits of comprehension and measurements. Westling analyses the work of Punchdrunk through the very lens of the sublime, highlighting on one hand the distancing effect of the mask, and on the other hand how the openness and simultaneity of the structure of Punchdrunk shows creates an experience of "vertigo, awe, disorientation and the unsettling failure to comprehend, grasp or frame the experience in its entirety" (Westling, 2020, 23). Machon however points out how the sense of awe and wonder in Punchdrunk shows is not necessarily connected with grandeur, but "to what is personal, precious, possibly profound"

(Machon, 2018). In regards to walking simulators, Westling (2020) discusses *Everybody's Gone to the Rapture* as an example of the sublime aesthetic in virtual worlds, highlighting the synergy between the aesthetic space and the soundtrack in the construction of a synesthetic experience of sublime. Carbo-Mascarell (2016) analyses walking simulators such as *Dear Esther* through the frames of psychogeographical practices and the aesthetic of the Romantic movement, pointing out in particular how the landscape exists as a physical space but also as a metaphor of the narrator's mind. Vella (2013, 2015) discusses the player position in *Proteus* as aligned to the Romantic aesthetic of nature, based on an engagement with nature through disinterested contemplation:

"[Proteus] locates the player in the mode of the Romantic wanderer, perceiving the landscape through an aesthetic frame [...] seeing beauty in the potential correspondences of Mind and Nature, but also feeling detachment due to the unbridgeable gap between subject and object that the split between the two enacts in the first place." (Vella 2013, 13)

As the romantic wanderer contemplates the sublime in nature as a great force that can only be witnessed and never be possessed or tamed, in the same way the wandering player/audience forgoes narcissistic participation and instead maintains a respectful distance, focusing on their felt experience and on their own individual journey.

CONCLUSIONS

In this article, exploration immersive theatre and walking simulators have both been discussed as spatial experiences offering an *active spectatorship*, exerted through the exploratory agency afforded to the player/audience. The spatial design and stage setting in walking simulators and Punchdrunk shows have been analysed through the lens of *environmental storytelling*, identifying two ways in which the environment can be used to produce narrative effects. On one hand, *indexical storytelling* - focused on conveying information based on a cause-and-effect relationship - encourages the player/audience to act as a detective, uncovering clues and piecing together information to reconstruct past events. On the other hand, environments that rely on the construction of an *atmosphere* encourage the player/audience to approach their individual journey through an aesthetic frame. Moreover, atmospheric effects not only stimulate the player/audience sensorially, but can also trigger semantic interpretation, generating a (syn)aesthetic experience that involves both the cognition and the senses.

Discussing environmental storytelling strategies through a crossmedial perspective on one hand permits the identification of the same topics in academic literature around explorative immersive theatre and walking simulators, and on the other hand

broadens and enriches the discussion around explorative immersive forms thanks to the combination of game studies and theatre studies.

REFERENCES

- Aller, K. 2022. "I Don't Feel at Home in this Game Anymore: A Closer Look at Uncanny Atmospheres in Walking Simulators." *Mental Health | Atmospheres | Video Games: New Directions in Game Research II*, 177-194.
- Alston, A. 2013. "Audience participation and neoliberal value: Risk, agency and responsibility in immersive theatre." *Performance Research* 18.2, 128-138.
- Alston, A. 2016. Beyond immersive theatre. Palgrave Macmillan.
- Biggin, R. 2017. Immersive Theatre and Audience Experience. Palgrave Macmillan.
- Böhme, G. 2014. "The theory of atmospheres and its applications." *Interstices: Journal of Architecture and Related Arts*, 93-100.
- Böhme, G. and Thibaud J. (ed.). 2017. The aesthetics of atmospheres. Routledge.
- Carbo-Mascarell, R. 2016. "Walking Simulators: The Digitisation of an Aesthetic Practice." *DiGRA/FDG*.
- Carson, D. 1 March 2000. "Environmental Storytelling: Creating Immersive 3D Worlds Using Lessons Learned from the Theme Park Industry". *Game Developer*. https://www.gamedeveloper.com/design/environmental-storytelling-creating-immersive-3d-worlds-using-lessons-learned-from-the-theme-park-industry
- Domsch, S. 2019. "Space and narrative in computer games." *Ludotopia: Spaces, places and territories in computer games*, 103-123.
- Eglinton, A. 2010. "Reflections on a decade of Punchdrunk Theatre". *TheatreForum International Theatre Journal*, 46-55.
- Fernández-Vara, C. 2009. "Play's the thing: A framework to study videogames as performance". Proceedings of the 2009 DiGRA International Conference: Breaking New Ground: Innovation in Games, Play, Practice and Theory.
- Fernández-Vara, C. 2011. "Game spaces speak volumes: Indexical storytelling.". Proceedings of the 2011 DiGRA International Conference: Think Design Play.
- Frasca, G. 2001. *Videogames of the oppressed: Videogames as a means for critical thinking and debate.* MS thesis. School of Literature, communication, and culture, Georgia Institute of Technology.
- Giant Sparrow. 2017. What Remains of Edith Finch. PS4. Annapurna Interactive.
- Gibson, J. J. [1979] 2015. *The Ecological Approach to Visual Perception*. Psychology Press.
- Gordon, C. 2012. "Touching the Spectator: Intimacy, Immersion and the Theater of the Velvet Rope". Borrowers and Lenders: The Journal of Shakespeare and Appropriation, 7(2).
- Grabarczyk, P. (2016). "It's like a walk in the park On why are walking simulators so controversial." *Transformacje* 1(3-4).

- Homan, D., and Homan, S. 2014. "The interactive theater of video games: the gamer as playwright, director, and actor." *Comparative Drama 48.1*, 169-186.
- Jakob-Hoff, T. 2 May 2014. "At the gates of Temple Studios: Where Gaming and Theatre Collide". *Eurogamer*.

https://www.eurogamer.net/how-punchdrunk-created-a-virtual-world-in-the-heart-of-central-london

Jenkins, H. 2004. "Game design as narrative architecture." Computer 44.3.

Kagen, M. 2022. Wandering games. MIT Press.

Key, Ed and Kanaga, D.. 2013. Proteus. Mac OS. Twisted Tree.

Kinnersley, H. 7 March 2023. "Livi Vaughan Q&A: Designing For The Immersive Worlds Of Punchdrunk". *Live Design*.

https://www.livedesignonline.com/theatre/livi-vaughan-qa-designing-immersive-worlds-punchdrunk

- Klich, R. 2016. "Playing a Punchdrunk game: Immersive theatre and videogaming." Reframing Immersive Theatre: The Politics and Pragmatics of Participatory Performance, 221-228.
- Machon, J. 2013. *Immersive theatres: Intimacy and immediacy in contemporary performance*. Palgrave Macmillan.
- Machon, J. 2018. The Punchdrunk Encyclopaedia. Routledge.
- McGovney, J. 10 April 2016. "How The "Walking Simulator" Is A Cruel Manipulation". *Gameskinny*.

https://www.gameskinny.com/opinion/how-the-walking-simulator-is-a-cruel-manipulation/

- Muscat, A., Goddard, W., Duckworth, J. and Holopainen, J. 2016. "First-Person Walkers: Understanding the Walker Experience through Four Design Themes." *DiGRA/FDG*.
- Nitsche, M. 2008. *Video game spaces: image, play, and structure in 3D worlds*. MIT Press.
- Pinchbeck, D. 2008. "Dear Esther: an interactive ghost story built using the Source engine." *Interactive Storytelling: First Joint International Conference on Interactive Digital Storytelling*. Springer

Punchdrunk. 2003. *Sleep No More*. Directed by Felix Barrett and Maxine Doyle, London.

Punchdrunk. 2022 - 2023. *The Burnt City*. Directed by Felix Barrett and Maxine Doyle, London.

Ryan, M. 2006. Avatars of story. University of Minnesota Press.

Şengün, S. 2017. "Ludic Voyeurism and Passive Spectatorship in Gone Home and Other 'Walking Simulators'." *Video game art reader 1*, 30-42.

Tale of Tales. 2015. Sunset. Mac OS. Tale of Tales.

The Chinese Room. Dear Esther. PS4, Landmark edition. Curve Digital.

- The Chinese Room. Everybody's Gone To the Rapture. PS4. Santa Monica Studio.
- The Fullbright Company. 2013. Gone Home. Mac OS.
- Totten, C. W. 2014. An Architectural Approach to Level Design. CRC Press.
- Vella, D. 2011. "Spatialised memory: The gameworld As embedded narrative." *Proceedings of the Philosophy of Computer Games Conference.*
- Vella, D. 2013. "The Wanderer in the Wilderness: Being in the virtual landscape in Minecraft and Proteus." *Proceedings The Philosophy of Computer Games Conference*.
- Westling, C. E. 2020. *Immersion and Participation in Punchdrunk's Theatrical Worlds*. Bloomsbury Publishing.
- Worthen, W. B. 2012. "" The written troubles of the brain": "Sleep No More" and the Space of Character." *Theatre Journal*, 79-97.
- Zimmermann, F. and Huberts, C. 2019. "From walking simulator to ambience action game." *Press Start 5.2*, 29-50.