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# Disruptive Vocalities:

## Auditory Immersion in Punchdrunk's *The Drowned Man: A Hollywood Fable* and First-Person Digital Games

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ABSTRACT

The intimate associations between video (or digital) games and new modes of immersive performances have been observed by scholars. The liberal interactivity and experience of 'being in' the virtual space of play and 'inside' the fictional world, as an avatar-like audience-participant are just some similarities in both encounters. While Gareth White (2012) has critically interrogated the term 'immersive' in these forms of theatre from an ontological perspective, this paper examines immersion acoustemologically. Through a comparative examination of the acoustic ecologies and experienced auditory immersions of First-Person digital games and Punchdrunk's most recent production, *The Drowned Man: A Hollywood Fable* (2013), this paper posits that immersion in immersive performances is always more than 'total' since sonicities and disruptive vocalities produced by audience-participants, sounds that cannot be anticipated or appropriated to be part of a designed soundscape (utterances, whispers, sounds and noises), would necessarily puncture the virtual integrity of the performance with frequencies of emergence from the intended submergence.

In 2011, London-based Punchdrunk, pioneers of a performance genre now known as immersive theatre, collaborated with electronics giant Sony to devise a first-person immersive game-performance entitled *... and darkness descended*. As an ingenious marketing strategy to launch the PlayStation's then new First-Person Shooter game, *Resistance 3*, the interactive and sensually stimulating performance dissolved the boundaries between video games and theatre by transforming Waterloo station's railway arches into a terrifying post-apocalyptic world and placing audience-gamers in narrow, dank, and poorly-lit tunnels to complete a 'quest'. The interactive, site-specific performance-game was closely modelled on the decimated holocaustic world created in the *Resistance* game series – an alternative reality in which aliens, called Chimera, invade Russia, Europe, and the United States during World War II. In this alternate AD 1957, almost ninety percent of the world's population has been decimated; those that survived have been enslaved. Audience-gamers are identified as a small group of resistance fighters in the barren wastelands of a former United States and their objective is to send a message to Joseph Capelli, the protagonist in *Resistance 3* and one of the remaining survivors of an elite superhuman task force called Sentinel. To complete the game, participants must accomplish the set tasks and remain 'alive' to witness the end of the performance.

While *...and darkness descended* is a deliberate attempt to recreate a videogame as (interactive) theatrical experience that predicates on the "viscerality of liveness" (Allain & Harvie, 2014, p.193) and immediacy of experience, the appropriative relationship between this performance trend and digital games is salient. Marvin Carlson notes how immersive theatre is a logical development from site-specific theatre, installation art, and immersive video games (2014, p.114) and Josephine Machon (2013) draws on theories of game studies to understand 'immersion' in these forms of performances. Writing for *The Guardian,* Thomas McMullan (2014) traces the distinct ways in which immersive performances by companies such as Punchdrunk, Shunt, Belt-Up, and Dreamthinkspeak borrow conventions from video games and transform passive spectators into active participant-players/gamers. McMullan notes how immersive performances' site-specific recreation of a fictional alternate world is similar to 3-D First-Person Shooter (FPS) games such as *Half-Life* (1998). The freedom of the audience to move in these spaces and the option to pursue a scripted narrative is an apparent quality shared by both forms. Describing Punchdrunk's most recent production, artistic director Felix Barret compares *The Drowned Man: A Hollywood Fable* (2013) to the Role-Playing game (RPG) *The Elder Scrolls V: Skyrim* (2011); like the game avatars, "you can follow a character and go on a mission, or you can explore the landscape, find moments of other stories and achieve a sense of an over-arching environment" (McMullan, 2014). *The Drowned Man* is also modelled on a first-person interactive adventure game developed by The Fullbright Company, *Gone Home* (1995), where the audience member is a "hunter, an active assembler" (McMullan, 2014), placed in a space to "discover messages and trinkets behind cupboards [...]. Rather than an audience crafting their own narrative they are

peeling back layers of story, almost archeologically" (Barrett in McMullan, 2014).
The intimate associations of immersive theatre and FPS digital games are immediately evident for both privilege the individual spectator/gamer, relocate him in an alternate world and award him live agency in being part of, and even shaping, the unfolding narrative. More distinctly, immersive theatres employ installations and expansive environments, often site-specific, and require audiences to participate and actively explore (White, 2012, p.221). Audiences move within the space occupied by performers, "a space that is replete with associations and which becomes performative in new ways in consequence of the audience's presence within it" (White, 2012, p.225). FPS games require gamers to assume avatars who purposefully roam the sprawling virtual realms to complete an objective (or series of objectives). Immersive theatrical experiences mimic these virtual game encounters as such performance modes provide a sensorial experience of mental and physical immersion – the perception that one is in a virtual, 'other-world' environment. Explicating on concepts of immersion and drawing comparisons with conditions defined by game theorist Gordon Calleja, Machon observes resemblances between game enactments that involve variation in experience due to player decision-making, and immersive performances, such as those by Punchdrunk and Shunt, that likewise involve a processual interaction in which the audience-participant-performer makes diverse decisions which then results in varied individualised interpretations (Machon 2013, p.62). Immersive experiences in both mediums, consequently, direct perceptual focus from an awareness of "'being in and part of' reality to 'being in and part of' virtuality such that, in the ideal case, virtuality becomes substituted for reality" (Grimshaw, 2008b, p.119). Distinctly, virtuality understood in the context of immersive performances does not refer to the inhabiting of digitally re-composed spaces located behind the fourth walls of monitor screens. Like virtual experiences, however, these performances share the quality of animating the fictional and the 'unreal', whose relationship is ontologically bound with reality outside or the 'being here'. 'Being there' in immersive performances implies "access to the inside of the performance" (White 2012: 221), an experience of interiority in which audience-participants are invited to become 'submerged'.
In view of these intimacies – between performance, performers, audience, and space, and between digital games and immersive forms of performances – this article seeks to examine immersiveness in such theatrical practices from an acoustical perspective. In *Immersive Theatres: Intimacy and Immediacy in Contemporary Performance,* Machon acutely notes how sound is a "vital component" of the immersive experience; "designed, composed and naturally occurring sound is important" (2013, p. 95) and the absence of prescribed sounds or music, being part of a designed soundscape, can engage a participant further rather than displace him from immersiveness. Encouraged by this view, this paper will study the acoustic ecology of immersive theatres: it is concerned primarily with immersion as an acoustic phenomenon and as auditory experience. Through a comparative analysis of the acoustic

ecologies of first-person digital games and immersive performances by Punchdrunk, specifically *The Drowned Man* (2013), I suggest that immersion in immersive theatres is not an encompassing experience but one that is intermittent and fractious; this is particularly so when one, almost inevitably, hears or produces 'extraneous acoustics' – sounds that reside outside the narrative and composed soundscape and sonicities that puncture the virtual integrity of the performance. These disruptive vocalities become dissonances that perforate the encompassing soundscapes which are often, as Gareth White observes, used to maintain control over the event (2011, p. 205). Such unscripted sounds and 'noises' purposefully interrogate the degrees of intimacy and inside-ness purported by creators of such theatres and so reify the impossibilities of creating total immersion.

The designation 'immersive theatres' has been employed loosely in reviews and writings to describe a diverse range of theatrical experiences that involve some form of audience participation, sensual interaction, and mobility in a prescribed site-specific environment. Gareth White (2012) acutely interrogates the term 'immersion' in his article published in *Theatre Research International,* while Machon (2013), in the introduction to her book, discusses the variety of forms that claim measures of immersiveness. She further demonstrates the ways in which the term has been claimed by a diverse range of performance practices which involve some kind of interaction and site-specificity. Considering the pluralistic nature of such performance modes, and sharing similar concerns about the ease of (mis)appropriating the label 'immersive theatre', this paper does not posit totalising claims about auditory immersions in these performance practices and will restrict observations only to Punchdrunk's works – "where actual immersion within an experience occurs" (Machon, 2013, p.40), and where audiences are placed in extensive environments to move, engage, inhabit, and "respond within an imaginative environment" (Machon, 2013, p.68). In addition, given that the experiences of Punchdrunk's works are intended to evoke highly individualised, subjective responses to the space of play and to others at play, as "parallel theatrical universes" in which the work shifts its status in relation to the audience (Barrett in Machon, 2013, p.159), conclusions made here remain 'first-person', personal observations of being in(side) 'Temple Pictures' – the fictional Hollywood studio that was the site for *The Drowned Man: A Hollywood Fable* (2013) – on 5 August 2013.

## 'Being (In) There': Immersions in 3-D Digital Games and Immersive Theatres

Immersion, in the context of performance, remains an ambiguous designation that at once refers to the level of interactive participation but also the visceral experience of being in(side) the performance environment (and possibly narrative). To delineate kinds of immersion encountered in the range of immersive performances that exist, Machon adapts theories of immersivity developed by game theorist Gordon Calleja to posit three experiences of immersion that are similar to the psychological conditions inhabited by players of video games. As Machon describes, there is immersion understood as absorption – where the theatre event

fully engages the "concentration, imagination, action and interest" (2013, p. 62) of the participant. Immersion can also be realised as transportation: the audience-participant is "imaginatively and scenographically reoriented in another place, an otherworldly-world that requires navigation according to its own rules of logic" (Machon, 2013, p. 63). Total immersion occurs when a spectator experiences both prior forms of immersion and where he is able to locate his own "*praesence* within the experience" (Machon, 2013, p. 63). *Praesence*, as Machon describes, indicates a condition of being both present in the experience and also the 'presentness' of human sensory experience in "the live(d) audience-performer participant interaction and exchange that occurs within the event" (2013, p. 44).

While not synonymous with the immersions employed in game theory[1], the experiential similarities are identifiable. Immersive performances, like 3-D FPSes or Third-Person Role-Playing games (RPGs), rely on visual cues and acuity to allow the player to inhabit and feel 'present' in the alternate world. These cues also permit the gamer to interact, within the limitations of the game engine's parameters, with the virtual world, and to consciously experience a live(d) interaction with other avatars who may be controlled by other players. While game designers recognise that visual realism is not always necessary, it is a recognisably effective platform by which to generate immersiveness, and justifies the continued desire of RPGs and FPSes to design more life-like avatars, achieved through newer techniques and technologies such as HDR (high dynamic range) rendering[2]. Yet even as graphics engines push the boundaries of digital realism, scientific studies of place cells in rats have shown that no virtual environment, rendered visually, can completely convince the brain that a digital reality is real. In "Multisensory Control of Hippocampal Spatiotemporal Selectivity" (Ravassard et al, 2013), published in the journal *Science*, researchers from the University of California discovered that activity in place cells found in sampled rats' hippocampi, the region of the brain identified as responsible for creating and controlling cognitive maps, fell by more than half when placed in a virtual-reality environment – while approximately forty-five percent of the rats' place cells fired in reality, this decreased to twenty-two percent in virtual reality. The study proves that visual stimuli remain insufficient to create a sense of presence, of 'being there' in virtual environments, and that other sensory and proximal cues are necessary to attain deeper immersion.

To create more convincing immersive experiences of virtual other worlds, as such, video game designers rely on multi-sensory modes such as sound and haptics. If deep immersion cannot be attained solely by the visual engine, it is arguably the soundscapes of the game

1 In *Immersion in Virtual Worlds*, Gordon Calleja notes how scholars of immersion in virtual reality often confuse the terms 'presence' and 'immersion' and fail to distinguish between immersion as absorption (engagement) and immersion as transportation. He thus introduces the term 'incorporation' to account for the sense of virtual environment habitation on two levels: the virtual environment is, firstly, incorporated into the player's mind as part of his or her immediate surroundings and, secondly, the player is incorporated (in the sense of embodiment) in a single, systematically upheld location in the virtual environment at any point in time (2011, p. 232).

2 Gamers playing the new *FIFA 15* (designed by EA Sports) have been impressed by the mirror-like virtual replication of football players Lionel Messi, Eden Hazard, and Neymar. See EA Sports (2014, June 9). *FIFA 15 – Authentic Player Visuals.* Retrieved From: http://www.easports.com/uk/fifa/news/2014/fifa-15-authentic-player-visuals

that encourage deeper immersion, both as engagement and transportation. Given the nature of sound –omnidirectional, pervasive, encompassing – as auditory perception, sound design becomes an essential component to achieve a more compelling and complete sense of immersion in the game world; the same can be said of the acoustemologies of theatre and performance (which will be examined in relation to *The Drowned Man* in a later section). Such auditory immersion is enabled through a "sonic perceptual realism" (Grimshaw 2008b: 119) facilitated by the game engine's sonification capabilities. This sonic realism is not, however, mimetic fidelity to the object of emission. While such a reproductive realism, like visual realism, remains effective in creating an immersive environment, there are abstract sounds that are used in game sound design as well and it is, then, the contextual realism to the game world and its narrative that remains imperative. Acousmatic and non-acousmatic sounds, diegetic and non-diegetic music, audio effects and acoustical noise are ways that 3-D games create an acoustemology consonant with the virtual world. Interacting with the sonic environment, giving aural attention to the permeating sounds facilitates gameplay and allows the gamer to be situated 'in' the space of the game, such as in First- or Third-Person shooters where sounds provide accurate location discrimination (Grimshaw et al, 2011, p. 32). In these First-Person or Third-Person perspective games, the player is located within a field of sound and becomes an auditor of sound, influencing even as he is influenced by the soundscapes of play. The materiality of sound is that which renders it ontologically present and 'real' even if it were digitally composed, replayed, or reproduced through various technologies of mediation. It is this acoustemological quality that game developers exploit to dissolve the virtual-real boundary and achieve immersion as transportation. As Mark Grimshaw posits, "sound is of great importance, if not the greatest importance, in creating the perceptual realism of the FPS game that leads to immersion" (2008b, p. 119). Sound events and sound signals (and their interactions that form a game's soundscape) "shuttle players between real and virtual registers of aural, visual, psychological, tactile, and aesthetic engagement" (Cheng 2014, p. 13). Listening to a game's soundscape, particularly with circumaural headphones, creates auditory submersion and dissolves the spaces between the 'out here' and 'in there', the virtual and real; it is that which "play[s] at the interface of virtual and visceral experience" (Miller, 2012, p. 8).

In understanding auditory immersion in gameplay, an analysis of the soundscapes of play is insufficient because an acoustic environment does not account for the experiences of its 'organisms' (specifically, the player's interaction with the soundscape). It is necessary to examine the acoustic ecology of such games where, in soundscape studies, an ecology is defined not only as "the relationship between the soundscape and listener" (Westerkamp, 2000, p. 4) but also the "relationship between quality of an environment and people's state-of-being inside that environment" (Böhme, 2000, p. 14). In *The Acoustic Ecology of the First-Person Shooter* (2008a), Grimshaw meticulously explains the tripartite relationship between the player's experience, a soundscape (a set of dynamic sounds which the player hears),

and a game engine (which has an accompanying sonification system). For Grimshaw, this acoustic ecology is an interdependent one since existing soundscapes produced by the sonification engine compel players to act and react. Players, in turn, generate more sounds, through interaction with the game engine, which consequently facilitate an interplay that provides them with the ability to "auditorily perceive the virtual world" (2008a, p. 13). Auditory immersion is attained when the ecology is well balanced, a "'hi-fi' environment where there is a high degree of information exchange between its elements and the listener is involved in an interactive relationship with the environment" (Truax 2001, p.65)[3].

## "I don't know what's real anymore": Auditory Immersions in Gameplay

In a 'Let's Play'[4] video commentary on YouTube, titled *Alone | (MUST WATCH!!) Amazing Oculus Rift Horror Game*[5], game commentator Mark Fischbach, more prominently known by his YouTube channel handle Markiplier, experiments with the Oculus Rift by playing a First-Person survival horror game called *Alone* (2013). The Oculus Rift remains among the most popular and powerful headsets of the VR enterprise. As a low latency goggle that is worn over the eyes, the Oculus Rift generates a stereoscopic 3-D view that renders depth, scale, and parallax in high definition by employing unique and parallel image projections for each eye, mimicking the way the human eye functions in rendering coherent three-dimensional images discerned by the brain[6]. It impedes optics external to the virtual environment by constricting the field of view and limiting peripheral vision, thereby enabling an enveloping, surround-quality optical immersion that helps the gamer perceive that he is 'in' the space of play. Responding to the movement of the wearer's head in real time with almost undetectable latency, something earlier VR goggles lacked, the Oculus Rift has been praised for its ability to evoke a deep sense of spatial immersion[7].

In *Alone*, with the field of view enveloped by a three-dimensional virtual environment, the player's avatar is placed in a living room, alone. Seated on a sofa, this avatar in turn is playing a First-Person horror game on a virtual television. The gamer controls the game-within-game avatar with the conventional prosthetics of gamepad controller (or mouse and keyboard) but controls the avatar's visual field with movements of the head adorned with the Oculus Rift. Distinctly a meta-aesthetic conceived by the game designers to gesture at the game's own virtuality and also dissolve the primary virtual plane, the game-within-a-

3 In Barry Truax's seminal work, *Acoustic Communication* (2001), a 'hi-fi' acoustic environment is one where sounds are heard clearly and where the listening process is characterised by interaction. This environment invites participation and reinforces a positive relationship between the individual and the environment. Conversely, a 'lo-fi' environment alienates and isolates the listener and interaction is discouraged (2001, p. 23).

4 A 'Let's Play' is a series of screenshots or a recorded video documenting a playthrough of a video game, usually including commentary by the gamer.

5 See: https://www.youtube.com/watch?v=mYvewljW7Lg.

6 See the official website for demo videos and technical specifications: http://www.oculusvr.com/rift/.

7 Reviewing the Oculus Rift for *MIT Technology Review,* Simon Parkin notes how, "When you use the Rift, you feel as though you're actually inside these worlds (...) You can almost believe you are fully there" (Parkin, 2014).

game has the doubled avatar explore an abandoned house alone. As the player wanders around the house, clues are discovered that indicate he is not alone; not in this double-virtual space of the game-within-game nor in the primary environment of the virtual living room. This play-within-play dissolves the boundaries between two planes of perception: the double-virtual and the material-real. The actions taken within the embedded virtual plane, the game of the game, shape the first as consequences in the secondary game bleed into the primary virtual space; a deep sense of spatial immersion is thus attained not merely visually but narratologically via the double-interactivity of dual avatars. Whenever his double-avatar discovers a clue, Markiplier is unable to ascertain if it refers to an incident or object in the game-within-game or the game itself. Yet, while this absorbing meta-virtuality is constructed via the game's graphics engines, it is the soundscape of *Alone* that dissipates the borders between the virtual planes and the material reality of the gamer's physical environment simultaneously; the acoustic ecology composed by *Alone* constitutes a deep sense of total immersion that permeates the imagined margins of all three planes. Game sounds with location specificity, sounds produced by the player-environment interaction, and proprioceptive sounds from the player move between the space of the real, the primary virtual plane, and the doubled game-within-game such that a player can no longer convincingly locate himself in either environment.

An example of this auditory immersion occurs in the first few moments of Markiplier's gameplay video. Shortly after donning the Oculus Rift and 'entering' the game, Markiplier recognises that his first-person avatar is playing a game on a digitally composed television and is, in turn, controlling another avatar. As he explores the labyrinth, Markiplier hears an acousmatic sound but is unable to tell if the source is located within the game-within-game, the primary virtual space, or his immediate surroundings. He exclaims, "I don't know what's real anymore, this is so weird" (01:55 - 02:00). This occurs again later in the video when Markiplier realises his avatar is being watched. Hearing a ruffling sound and convinced it is coming from his apartment in the 'real' world, he pulls off the goggles to check and then frenziedly swears about the realness and realism of the sound signals (07:04 - 07:12). The examples demonstrate the ways in which the acoustemology of this game-within-game becomes reflected in the game, which then composes a meta-soundscape as the diegetic sounds in the embedded virtual game bleed into the first. The gamer consistently grapples with the difficulty of locating these sounds of heavy footsteps, screams, and voices and is often surprised that the agents of sound objects and sound events are located within the primary virtual space – the gamer's avatar is not alone in the house. With a high degree of sonic perceptual realism, *Alone*, then, exemplifies the permeability and porosity of sound in immersive environments and its ability to distort spatial acuity, thereby enabling the player to believe he is inside the game.

Reviewing another First-Person horror game for his YouTube video blog, Markiplier trials the Oculus Rift yet again with a dungeon crawler game, *Dreadhalls* (2013). *Dreadhalls* plac-

es the gamer in a scarcely lit dungeon labyrinth with the task of surviving and escaping from the creatures that dwell within. In the first few minutes of the video Markiplier uploads of himself playing the game for the first time – *SCARIEST OCULUS RIFT GAME | Dreadhalls Oculus Rift Horror [With Ending!]* – (Fischbach, 2013b) he is seen (and heard) swearing frequently at the diegetic hisses, growls, and grunts. Being acousmatic, Markiplier's sense of anxiety is heightened as he exclaims, "I don't know what's real, I don't know what's fake" (01:30 - 01:40). Further along the gameplay, his avatar proceeds down the corridors and as he attempts to avoid strange creatures half hidden in shadow, a gargoyle-like statue springs to life accompanied by a piercing crackling hiss, followed instantaneously by a disconcerting hollow silence. As Markiplier turns to locate the source of this diegetic noise, he is attacked, presumably by this creature, and the soundscape rumbles with sonic distortions of rapid heart thumps reverberating synchronously with red flashes that pulsate on the screen. At this point, Markiplier shrieks loudly in fear; he pulls off the Oculus Rift, breaks into tears and swears in disbelief (03:10 - 07:50). Observable from the gameplay video which shares the same first-person view as Markiplier, there is little that is terrifying about the gargoyle, not only because one never quite sees what attacks the avatar but also because the level of graphics realism is, in comparison to many digital games available today, particularly weak and unimpressive. Markiplier's intense reaction can be said to be evident of a deep immersion – both as engagement and transportation – that was experienced acoustically and not visually.

In *Playing with Sound*, Karen Collins posits how "interactive sound situates the player into the space of the game, acting as an intermediary between the virtual and the real worlds and between the character and the player" (2013, p.59). In-game sounds are manifested as "palpable vibrations in [...] players' real-world environments" (Collins, 2013 p. 14) – they are 'real' sounds, for sounds in the gameworld cannot reside behind the screen and must necessarily oscillate into the real. Sound "exists and operates both in reality and in virtuality; it has a real volume and dimensionality [...]" (Grimshaw 2008a, p. 119). Immersion in virtual environments is achieved not merely with visual realism but with sonic synchronism. The soundscapes of virtual spaces become mediums that permit the fluid movement of consciousness between virtual and real coordinates, where presence becomes both 'here' and 'there', and where consciousness becomes located along "the interface of the virtual and visceral experience" (Miller, 2012, p. 8). It is logical to conclude that the exteroceptive sounds (the ideodiegetic sounds of gameplay) and the proprioceptive sounds (sounds emitted by the player's body, such as Markiplier's own heavy breathing[8]) are what trigger a visceral, emotional, and kinaesthetic reaction in both game examples. Despite being visually 'inside' *Dreadhalls* and *Alone*, immersion is primarily achieved acoustically and in that acoustic ecology – the game's sonification engine, the player's proprioceptive sounds, and the programmed soundscape – the experience of total immersion is attained.

8 Proprioceptive sounds are audible when one uses over-the-ear, noise-cancellation headsets such as the ones Markiplier utilises.

## Drowned in Sound: Disruptive Vocalities in *The Drowned Man* (2013)

The explication and exemplification of the acoustic ecologies in FPS games is necessary, by way of critical comparison, to comprehend the auditory immersions that immersive theatres employ, particularly since immersive performances seek to compose soundscapes that immerse auditorily. Summarising the views of directors who produce works with degrees of immersiveness, Machon advocates the "affective significance of sound [...] within an immersive experience" (2013, p. 153). Composed soundscapes can assist audience-participants to "hone in on action and image, heighten the detail of the imagination and of the space and enable a sharing of alternative sensory experiences between individuals within the event [...] it creates the sensation of 'stepping into' alternative experiences" (Machon, 2013, p.152).

Such an acoustic strategy is evident in Punchdrunk's *The Drowned Man: A Hollywood Fable* (2013). Based thematically on Georg Büchner's infamous work of fragmented proportions, *Woyzeck, The Drowned Man* was performed site-specifically at 31 London Street, where the entire building of the former Royal Mail sorting office was transformed into a fictional 1960s Hollywood movie studio. With two lead narratives, the themes of love, adultery, murder, and madness were played out through the mirror tragedies of a couple within Temple Pictures and another who live on the outskirts of this imagined Hollywood town. Involving over forty cast members and a play space of over twenty-thousand square feet, spread across four levels, the performance turned six hundred audience members a night into avatars by immersing them as players in a play and at play. With no purposeful linearity, narrative action happened sporadically and simultaneously in a variety of spaces – bedrooms, bars, a diner, a caravan park, executive offices, costume shops, a chapel. In these public and private spaces, characters danced, embraced, fought, conversed, cried, and undressed as audiences, standing in immediate proximity, observed from behind a Venetian *bauta-like* mask. Immersive in an almost literal way, as White describes of Punchdrunk's other immersive works (2012. p. 225), audience members moved within this space of play as they chose to listen to the closet conversations of the characters or interact with the intricate props and detailed sets. Across all four levels, every space was covered in props and sets that helped virtualise a 1960s Hollywood film studio. Littered on the sidewalks, tables, and sofas, one could easily find film reels, cameras, wigs, vintage stationery, and even a bright red Studebaker parked in a central passageway. Mimicking the experience of Massively Multiplayer Online Role-Playing Games (MMORPG) and Massively Multiplayer Online Games (MMOGs), the audience-participant becomes a player-avatar when the masks are worn; the donning of the mask becomes a performative act of complicit play and an inscription of a virtual avatar that then becomes realised in the game space of Temple Pictures. As a dramaturgical strategy that further simulates a virtual game environment, a "parallel theatrical universe", and as a critical device to have audiences "forget they're an audience" (Barrett in Machon 2011, p. 159), the mask worn, according to Barrett, empowers individuals as it shifts their status to

a "ghostlike one" (2011, p. 160). This permits audiences to assume a character, an avatar, in the performance, to be part of the fictional environment and mise-en-scène, and to empower them to act differently from who they are in daily life or even as they would be as an audience – an erasure of spectatorship from the spectator[9]. Like the world of an MMORPG such as *World of Warcraft* or *Second Life*, the audience of *The Drowned Man* were free to roam and interact with the virtual environment without necessarily adopting a particular quest or following a prescribed narrative; they could pursue lead characters for a deeper sense of narrative or wander and linger in any space.

To immerse audience-participants aurally and place them in the acoustic space of Temple Pictures, an incessant, encompassing electronic drone flooded the common passageways of different levels. Reviewing for *Timeout*, Andrzej Lukowski described this persistent soundscape as "menacing electronic music and Spectoresque strings howl(ing) from hidden speakers" (2013, July 17). The deep reverberant drone could be regarded as an artistic intent to create an 'edgy' and ominous soundscape[10] that in turn composes a dream-like virtual existence consonant with the fantasy of being in and part of the lives of movie stars. Because it resonated not as harmony, melody, or distinctive sonic signatures, the drone was relegated to the unconscious attention of the spectator as a means of submerging him in a sonic atmosphere. In select rooms and walkways, this tonally dark soundscape was perforated by songs from the 1960s, *doo-wop*, jazz, and Chet Baker, as well as incidental music not so different from that of a film score. The labyrinth of rooms and stages was thus suffused with sound – musical or incidental – and while not all spaces were saturated with acoustic frequencies, there was a sense that the soundscape was used as a means of controlling and dictating the reactions and responses of audience-participants. In "Noise, Conceptual Noise and the Potential of Audience Participation" (2011), Gareth White notes that the soundscapes employed by Punchdrunk are dramaturgically purposeful and even "fascistic". Apart from being a functional device as a cue that allows the performers to move to different parts of the performance environment, in addition to the established purpose of creating atmosphere, the pervasive, looping sound design is used as a means to "inhibit speech between audience members [...] the same sounds are played throughout, at a volume that is also loud enough to cover much conversation. It is ironic that the atmospheres usually produced by these soundscapes are eerie, unnerving and apparently chaotic but their effect is to maintain control over the event" (White 2011, p. 205).

This auditory control and acoustic absolutism are particularly evident in *The Drowned Man*. From the moment audience members awaited the lift to take them to the different levels

9 Barrett recalls that after the early performances in which masks were used for the first time, some audience members came to apologise because they felt their behaviour had been beyond their control (Barrett in Machon 2013, pp. 160-161). These experiences exemplify Barrett's intention of transforming spectators to avatar-players.

10 Of the little that has been written about the soundscapes of *The Drowned Man*, these are the consistent observations of reviewers. See Noon, G. (2013, August 12). Punchdrunk's *The Drowned Man* is a heady brew of sex and menace. *Metro*; and also Lukowski, A. (2013, July 17). Punchdrunk: The Drowned Man. *Timeout*.

of play, they were sternly reminded to wear their masks at all times and to always keep silent and avoid chatter with friends or fellow participants[11]. The best experience of the performance, the audience was told, would be an individual one: speaking, moving, and interacting amongst familiar company was strongly discouraged. In the lift, conversations, mutterings, and nervous giggling were immediately silenced by the Temple Pictures attendant operating the lift. Distinctly, the voice became a medium to punish these unscripted sounds and disruptive vocalities, in an attempt to maintain the suspension of disbelief and the 'reality' of the virtual-fictional world. All natural sounds, inorganic to this virtual environment, had to be muted and disciplined. Even when an audience member sought assistance to exit the darkly-lit labyrinthine maze, a female assistant, clad in black and blending perfectly with the darkly-lit spaces, responded sombrely in an artificially low register, as a vocalic act of sustaining the frequencies of immersion.

In MMORPGs and First-Person MOGS, players communicate with one another through piped-in microphones and headphones to facilitate collaborative and competitive instructions. Real (though mediated) voices become a distinctive sonicity of the virtual soundscape. In communicating with the voice, identity and the body are brought into the virtual space of play and in an environment where the soundscape is primarily digitally produced; its acoustic invasion seemingly enhances the quality of presence and the real in digitised reality. Players recognise that these avatars are vocally embodied and with that engage more deeply in playing as though it were real[12]. While some gamers believe these embodied, organic sonicities would facilitate greater intimacy and deeper immersive experiences, others recognise how vocality, as unscripted, spontaneous, live, and immediate, would damage the border between the virtual and the real, thereby causing a phenomenological uncertainty due to the increased acoustic porousness of the divide. Studying the development and evolution of the MMORPG, *Second Life*, as a new social and cultural phenomenon at the time, anthropologist Tom Boellstorff suggests that what made debates about the real-time voice impassioned were questions of presence and immersion that implicated the boundary between the virtual and the real. As Boellstorff explains, "Some residents felt voice would damage a border between the virtual and actual that they wished to maintain" (2008, p. 114). William Cheng posits a similar view when he observes how, "In online gameworlds, players' voices [...] accentuate the porousness of the real-virtual divide by registering as objects of phenomenal and somatic excess" (2014, p. 141). Adding to this perspective, media theorist Richard Bartle, in an article re-published on the blog site *Game+Girl=Advance*, propounds:

11 This and subsequent analyses of *The Drowned Man* are based on my personal experience and observations while attending the performance on 10 March 2013.

12 William Cheng discusses issues of ethics, discrimination, and gender politics in such MMOGs where voice communication is prevalent. See Chapter 5 of *SoundPlay* (2014). Karen Collins also discusses the voice in games in *Playing with Sound* (2013, pp. 68-81).

> If you introduce reality into a virtual world, it's no longer a virtual world: it's just an adjunct to the real world. It ceases to be a place, and reverts to being a medium. Adding reality to a virtual world robs it of what makes it compelling – it takes away that which is different between virtual worlds and the real world: the fact that they are not the real world. Voice is reality (Bartle, 2003).

While it is contestable whether voice is necessarily 'reality' since realistic voices can be digitally composed and voices can be digitally distorted by technologies of mediation, the viscerality of a live, raw, and present voice, its grain, tenor, and timbre is intimately associated with the body; likewise, listening is an embodied experience. In multiplayer games, real sonorous relations, cooperative or antagonistic, are formed in virtual spaces and they at once enhance the experience of reality in (and at) play. As a dialectical consequence, real relationships are formed from these interacting and intersecting voices even as raw vocalities threaten to disrupt deep immersion in a virtual space.

This paradoxical audial relationship of piped-in voices in virtual environments is replicated in an audience-participant's aural experience of *The Drowned Man*. Examining the auditory reception and vocal action of audience-participants remains important for the analysis of immersive theatres' acoustic ecologies; while in FPS games, the acoustic ecology is composed of the interaction between the player, the game's soundscape, and the game engine. As earlier posited, an acoustic ecology of an immersive performance is composed of the verbal expressions, or noises, created by the audience-participants, the script as it is vocalised by the actors, the designed soundscape (of incidental/background sounds and music), and the accidental sounds in the performance space. In *The Drowned Man*, these voices and vocalities of surrounding spectators – unscripted, spontaneous conversations, utterances and questions, sneezes and snorts – consistently threaten to disrupt the impervious soundscape, designed with careful intention to create the virtual atmosphere of 1960s America. The chaotic and anarchic noises, the frequencies of reality and the immanent sounds of the body, puncture the soundscapes of designed immersive virtuality and dislocate, auditorily, the audience-participant from his avatar (and other avatars). Another noteworthy example of such a sonic interference involves an audience member who unintentionally probes (and punctures) the seams of this virtual dome by gratifying a real bodily urge. Seeing a glass of water on a coffee table beside a high-backed leather Chesterfield armchair, a young female audience member sat down, hoping for a short reprieve from being immersed and to satiate her thirst. She raised the glass and drank contentedly from it, but as she did so, the sipping sounds of satisfaction attracted an attendant, who stepped out of the shadows and quietly but firmly rebuked her. This tragi-comic moment, as acoustic phenomenon of disruptive vocalities perforating the carefully designed soundscape, made evident how 'noise' can be regarded as interference that disrupts immersiveness conceived and controlled by theatre-makers. As one moved along the corridors and shared spaces with other audience members, one heard, as well, the spontaneous narratives told

over mobile phones, in discreet whispers, or between friends. Revealed in these examples is a fear of an acoustic rupture and a disruptive discordance. As White posits, soundscapes in Punchdrunk's work are organised meticulously to "maintain control over the signal" and noise as interference could bring "chaos into the work itself, and potentially de-territorialise it" (2011, p. 206). To preserve the immersive ecology of *The Drowned Man*, a participant needs to be disciplined and to be managed; he needs to conform to the expectations of the established acoustic community – a soundscape in which "acoustic information plays a pervasive role in the lives of the inhabitants" (Truax, 2001, p. 66). Disrupting this information with vocalic data exposes the fragility of immersion in this virtual environment and de-territorialises the fictional space of Temple Pictures.

Writing about immersion in virtual-reality environments, specifically in video games, Alison McMahan notes how total photo- and audio-realism is not necessary to produce a sense of immersion, "a sense that the world [the players] are in is real and complete" (2003, p. 68). There are, however, three conditions for total immersion to occur: the user's expectations of the game or environment have to match the environment's conventions closely, the conventions of the world must be consistent, and, most significantly, the user's actions must have a non-trivial impact on the environment (McMahan, 2003, pp. 68-69).

The final condition stipulated by McMahan is perhaps applicable to the analysis of *The Drowned Man's* attempt at total immersion (or the lack thereof). The presence of disruptive vocalities and noises resounds with the inevitable consequence of adopting principles of virtual game environments without the engaged responsibilities of a committed avatar and a directed objective; they can be read (and heard) as acoustic traces of audiences feeling a lack of impact on the performance environment given that the production was heavily advertised as an interactive and transformative parallel universe with which audience-participants could actively engage[13]. Recognisably, the view that disruptive vocalities reverberate with the sense of absent absorption does not hold true for all audiences, for there were many who felt involved and invested as they pursued the actors across corridors and hallways in a quest to unravel the plot. Yet the many whispers and conversations, peripheral utterances and exclamations heard on the night that I was present revealed the performance's inability to convincingly create immersion both as transportation and absorption, and much less as a total experience. The unscripted acoustics and undisciplined vocalities continually ruptured holistic immersion; like intermittent signals, the interruptive sonorities at spontaneous play disrupted the intimacies of the virtual-fictional environment. Because an acoustic ecological analysis necessarily places the listener at the core of the sound event, sounds produced by the listener must be considered as well. In doing so, one recognises that the listener (in this case, the audience-participant) contributes equally to the acoustemological experience. Sounds of/from the body, sonicities of the real, cannot be

13 This is the phrase Barrett uses to describe the performance. See Dhaliwai, R. & Remy, T. (2014, April 15) Inside 'The Drowned Man' with Punchdrunk's Felix Barrett – audio slideshow. *The Guardian*.

silenced in the space of virtual-fiction. As Gareth White maintains, 'immersive' is a faulty label to describe these performances since they have "no strong claim to creating fictional or imaginative interiors that is different in kind in more conventionally structured audience arrangements" (White, 2012, p. 233). From an acoustemological perspective, attempts at disciplining sonorities and acoustics will almost always fail and this would mean that immersion in these performance forms is always less than total.

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