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BUILDING AN IMMERSIVE WORLD

LUKE HICKLING

A thesis submitted to the University of Huddersfield in fulfilment
of the requirements for the degree of MA by Research in Drama,
Dance and Performance

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1. Part One: The Potential Opportunities of Immersive Theatre Scholarship

The goal of this research is to determine what other mediums offer immersive theatre in terms of immersivity and worldbuilding which could help improve upon the forms practice. By breaking down processes behind how different mediums achieve immersivity it may be possible to find qualities which are transferable, and perspectives which academics in theatre studies may not have considered. These transferable ideas may help improve upon the quality of immersive theatre productions by providing richer, more detail-oriented experiences, as well as highlighting a more practical understanding of the term. To do this I need to reach an understanding about what immersion and immersive theatre are in their current contexts. I also need to generate an understanding of how different mediums immerse their audience/participants in regard to worldbuilding techniques they offer. Finally, I need to examine how these techniques used in other mediums could potentially be used in immersive theatre practice.

Many practitioners and theorists have their own idea about how to execute an immersive theatre production. There is a general consensus as to what immersive means in a theatrical context, but the way these practices are delineated means it can become confusing to discuss immersive theatre in an academic context. Regardless, as immersive trends have garnered popularity over the past couple of decades, some common immersive theatre practices have emerged, due in part to the popularity of immersive theatre companies such as Punchdrunk¹. However, vagueness surrounding the terminology means that some productions are immersive in name only, with only the most tenuous connection to any sort of established practice.

This confusion stems almost entirely from the lack of established practical elements that give 'Immersive Theatre' its shape. In a 2018 article from *The Stage*, immersive theatre practice was criticised stating that:

“the disadvantage is that there is little quality control, and although the work produced has a proven ability to tap into new audiences and breaks down the traditional barriers to engagement, it seldom – Punchdrunk aside – explores the participatory and community possibilities of the form.” It also states that “even the term ‘immersive’ has become overused. It is being used to flog everything from fine dining to frozen roast potatoes. Some theatre companies liberally sprinkle their marketing copy with the word ‘immersive’ because they know it can add £10 to the ticket price.”- Is immersive theatre growing up or growing too big, too quickly?” (Gardner, 2018).

For immersive theatre practice this means that a lack of tangible tools, meaning specific ideas, concepts, exercises, and frameworks, has led to a more aesthetic-led approach by

¹ Punchdrunk is a critically acclaimed immersive theatre company formed in 2000 and is often cited as a key influence on the production of immersive theatre shows as the form exists today. Punchdrunk shows are characterized predominantly by their aesthetically-oriented scenographic environments, one-on-one encounters, and performance structure, which can be likened to a promenade theatre event.

most in devising Immersive Theatre, resulting in a disparate range in quality of productions. Whilst aesthetics are important, it is practical tools and ideas that make immersive theatre engaging, and embed the audience within the production. These practical ideas are central in making productions function as an immersive experience.

The different approaches can be exemplified in the work of Punchdrunk and The Guild of Misrule. In Punchdrunk's *Sleep No More* and The Guild of Misrule's *The Great Gatsby* the audience is presented with a participatory experience, with targeted lighting to distinguish audience/spectator spaces, and in some parts of the performance the audience is addressed directly. Where they differ is just as important. In *Sleep No More* the audience is given the opportunity to roam freely and to experience the world at their own pace, and costuming and set design is incredibly detailed, creating a sense of otherworldliness. The audience is given masks to hide their identities, which makes them blend into the background as well as arguably releasing their inhibitions allowing them to escape from a traditional theatre mindset and explore freely. In contrast, where Punchdrunk invites the audience to explore and inhabit a new world, The Guild of Misrule's approach is to keep their audience in a single space, whilst being "hosted" by characters in the production. The focus is more on the interaction with the characters than the exploration of the environment. The costume and set design are also very detailed. Audiences are encouraged to dress the part, blending into the party (Griffin, 2019). The distinction here is the mode of interaction the audience has with the immersive experience. Instead of hiding their identities, they are given a role within the production, as a guest. One-on-one interactions still occur, however, as the characters converse with the audience, asking advice, and confiding in them. These two productions are exemplary of two opposing types of immersive experiences. In the Punchdrunk production the exploration of the scenographic environment is encouraged and emphasised, and the identity of the audience member is removed. In the Guild of Misrule's production, the emphasis is on the interaction with the characters, and audience members get to maintain their identities, playing the part of party guests.

Immersive theatre is not the only medium to develop work around the term 'immersive'. The term 'immersive' stems from its popular use in game studies in the 1980's resulting in the term branching into other mediums, including immersive theatre. The gaming industry has made strides in developing immersive experiences, literally generating environments for players to experience. Theme Park attractions are an untapped well of potential theatrical knowledge, as they physicalize environments and create an otherworldly experience. Novels, specifically fantasy and science-fiction novels, give us countless examples of engaging narrative fabrics. This treatment of narrative is not often found in a traditional theatre setting, however, it could be considered a practical requirement in immersive theatre, should the practitioner wish to emphasize the story. Readers have the advantage of spending hours with novels, espousing ideas which are to be absorbed, immersing the reader. The application of the term in other mediums has different meanings, in some cases more precise meanings, and by examining the delineations between immersive in a theatrical context and within the context of other

media may result in a more practically accurate understanding of the term. Novels, video games, theme parks, all contribute to a broader understanding of 'immersion' and could be taken into consideration when attempting to improve upon immersive theatre studies and practice. In Part Two, I will be addressing these forms independently; examining how each of them use techniques that embed the audience/participants. In Part Three I will examine how these techniques could be applied to immersive theatre practice to create more engaging immersive theatre experiences.

2. Part Two: Deconstructing Immersive Terminology

Before I determine how other mediums could contribute to the form, I must demonstrate a relative understanding of how immersive theatre engages and embeds the audience within the immersive experience. I will briefly summarise the foundations of immersive theatre and how the modern understanding of the term immersive theatre came to be. There will be a focus on Josephine Machon's scale of immersivity and Jason Warren's typology of immersive theatre in order to examine the breadth of immersive experiences. I will also try to determine which of these experiences has the greatest focus on providing actively engaging and detail-oriented experiences.

2.1 What is Immersion?

Before we can create an understanding of what immersive theatre is, it is important to clarify what "immersion" means. Gordon Calleja, a games designer and theorist, recognises the contradictions between definitions of immersive terminology. In his book *In-Game : From Immersion to Incorporation* (2011) he discusses two key terms 'presence' and 'immersion', and how the critical analysis of these terms is often contradictory in nature. His lengthy discussion of these terms within the frame of game studies and presence theory results in the identification of four conceptual challenges that arise when discussing the topic. "Researchers in game studies have used the term immersion interchangeably to mean absorption or transportation" (Calleja, 2011, p.167). Absorption and transportation in Calleja's work refer to opposing types of immersivity. Transportation has a focus on scenographic reorientation. Absorption actively engages the audience/participant in the experience. "The qualities and affordances of non-ergodic media need to be taken into consideration when understanding immersion" (Calleja, 2011, p.167). In Calleja's discussions "non-ergodic media" refers to mediums like film and books, whereas "ergodic" would mean a medium like games: "In ergodic media the function of the "surface sign" has a strong relation to the mechanical operations of the internal code that generates it." (Calleja, 2011, p.12). Meaning, the differences between different media need to be kept in mind when discussing immersion or presence. Immersion can be achieved within different mediums, but how they do this is mechanically different. "Immersion is not determined solely by the qualities of the technology being used" (Calleja, 2011, p.167). The distinction between the technologies used should be considered as it is important to recognise the distinction between the mediums. "Various forms of experience that make up immersion need to be considered as located on a continuum of attentional intensity." (Calleja, 2011, p.167). The variations in immersive work mean that to study one particular form would be dismissive of the other forms which use immersive terminology. The forms need to be considered on a scale of varying levels of immersivity rather than as either immersive or not immersive.

Mark Wolf acknowledges the broad range of experiences offered but focuses on how the immersive experience is received by the audience member, rather than on how different

mediums produce the experience. From this perspective the mode of representation is secondary to the reception and effect of the immersive experience, making it easier to cross-examine multiple mediums. Immersion, when discussed within the arts and media studies, is the cognitive encapsulation of a person within an immersive experience, “a process of being surrounded or engulfed by something” (Wolf, 2012, p.377). This includes mediums such as fantasy novels and video games, as well as immersive theatre events. In *Building Imaginary Worlds* Mark Wolf says that immersion can refer to one of three kinds of experiences. The first of these is physical immersion wherein “the user is physically surrounded by the constructed space.” (Wolf, 2012, p.377). The second is “sensual immersion which primarily concerns the senses: “what the user sees and hears is part of the controlled experience” (Wolf, 2012, p.377). Thirdly, conceptual immersion relies upon the audiences’ mental engagement with the experience through extensive secondary world details, “if they supply enough sufficient detail and description for the reader to vicariously enter the imagined world.” (Wolf, 2012, p.377). These branches of immersion usually exist in isolation depending on what medium the audience/participant is engaging in. For example, although each may still partially tap into other forms, theme park attractions rely primarily on physical immersion, video games on sensual immersion, and books on conceptual immersion. This perspective alters our perspective of what immersive means: broadening it in the sense that Wolf’s perspective widens the scope for discussion yet narrows our perspective through a more all-encompassing notion of immersivity. These mediums coalesce into a holistic field of study, and immersive theatre seems like the perfect playground for intertwining these branches. The way that Wolf views immersion, focusing on how the secondary world experience is received by the audience/participant (conceptually, sensually, physically), rather than leading with how the medium immerses the audience/participant, makes it easier to cross-examine different mediums. I will be returning to Wolf’s ideas and perspective throughout the course of this study.

2.2 A Brief History of Immersive Theatre

It is within the twentieth century where the ideals of immersive performance first began to form. “spectator/artwork relationships have been a matter of experiment and innovation since the inception of this tradition early in the twentieth century” (White, 2013, pg.2). Dadaist, expressionist, and surrealist forms, amongst others, began to expand on the treatment of aesthetics in theatre (Frieling, 2008, p.26). The intention being to move away from logic and reason within art, into forms which are more representational, unfocused and absurd.

Following from this, in the 1960’s, Antonin Artaud’s teachings garnered a large following, inspiring multiple practitioners such as Jerzy Grotowski, Tatsumi Hijikata, and many more. These practitioners sought to unlink the bond between theatre and literature, moving away from texts. Grotowski’s ‘Paratheatre’ is especially influential here in

connection to training the performer and their connection with the audience (Allain & Harvie, 2013, p.193), moving away from theatre's spatial and structural forms. These practitioners, all influencing each other, furthered Artaud's ideas "in terms of scenographic design, actor-audience relationships and highly physical performance styles." (Machon, 2013, p.30). Allan Kaprow's 'Happenings' were particularly significant in this time period. Kaprow said that "the line between art and life should be kept as fluid, and perhaps indistinct, as possible" (Kaprow in Sandford, 1996, p.197). A key feature of Kaprow's happenings were that they happened across multiple locations and performance spaces, in an attempt to avoid the static orientation of the traditional theatre setting.

The development in immersive technologies in the gaming community, in the 1980's and 1990's, created a new relationship between technology and users, improving the mechanics of the interaction (Slater, 2009). These immersive technologies work primarily to heighten the sensual experience of the audience/participant allowing them to "tune into stories with an intensity that can obliterate the world around us" (Murray, 1997, p.98). Machon comments on the emergence of these technologies saying, "the influence of Artaud is clear in the visceral deployment of technology in artistic practice that seeks to connect with humans in unusual and immediate ways." (2013, pg.35).

The culmination of these ideas has resulted in the modern immersive theatre term. "Immersive is used to refer to a promise of interactive (or interactive-seeming) elements requiring varying levels of participation; or to indicate the use of certain aesthetic and atmospheric tropes; or a production's use of a non-linear or fractured narrative structure" (Biggin, 2017, p.208). Theatre which primarily focus on the relationships between people and the space are central in the principles of immersive theatre practitioners like Punchdrunk, dreamthinkspeak, WildWorks, and more.

2.3 The Scale of Immersivity

Attempts to categorize immersive theatre are plentiful. The most precise definition I found comes from a journal article by Adam Alston, in which he defines immersive theatre as "theatre that surrounds audiences within an aesthetic space in which they are frequently, but not always, free to move and/or participate." (2013, p.128). Gareth White highlights some of the distinctive traits of immersive theatre. Firstly, "[Immersive Theatre] tends to make use of spatial and architectural interventions, and to ask spectators to involve themselves physically in tracking down or pursuing the performance." (White, 2013, p.2). Immersion tends to give a suggestion of being embedded in something, physicalised by the distinctive application of the space. Secondly, "To be inside the work, not just inside its physical and temporal space but inside it as an aesthetic, affective, phenomenological entity gives a different aspect to the idea of a point of view, and of action" (White, 2013, p.16). There is an active effort by the production team to affect the audience/participant on a conscious level, "through

attention to the performer/audience relationship and interactions with the performance space.”(Howson-Griffiths, 2020, p. 190). White believes the use of space is crucial to embedding the audience within the immersive experience: not just being in the space but engaging with the space as well. The active relationship with the space is a key factor in bringing the audience/participant deeper into the world. However, White and Alston both make comments on the ever-fluctuating nature of the definition: “At best, the immersive label is flexible. However, the extent of that flexibility jeopardizes terminological clarity.”(Alston, 2013, p.129). White reflects this sentiment by identifying immersive theatre as a form that focuses on scenography and participation: “‘Immersive theatre’ has become a widely adopted term to designate a trend for performances which use installations and expansive environments, which have mobile audiences, and which invite audience participation”(2012, p.221). White then identifies the problematic lack of clarity of the definition: “So prevalent has the use of this term become in the UK that theatre journalists have begun to propose that this trend has had its day, accused it of being ‘tired and hackneyed already’.”(2012, p.221).

Gareth White does a good job of summarising certain ideas about what Immersive Theatre is. However, what is important to note is how much he leans on the concept of physical space, and scenographic environments. A scenographically engaging production does not equate to immersive theatre. White does comment on the importance of active participation, but he highlights the participation within the context of the audience/participants relationship with the space. The Guild of Misrule’s *The Great Gatsby* has few scenographic environments and instead focuses on the engagement of the audience with the characters. White’s comment is exemplary of the emphasis on scenography being prioritised over the engagement of the audience. This is problematic because the notion of immersion relies on the audience/participant being embedded within the experience. Practitioners and theorists across multiple media have adopted the term and each has their own idea about what immersion means, meaning there are multiple perceptions of what immersive theatre is.

Josephine Machon recognises that the term immersive is often inappropriately assigned to theatre which takes place in a non-traditional environment (2013, p.66). The breadth of work that has been or could be assigned the immersive theatre label is plentiful, and each practitioner has their own perspective, resulting in a wide range of ideas about how the audience should be immersed. In response to this Machon proposes the scale of immersivity in order to “identify where a complete immersive experience exists according to the intentions, performance values and audience response to the work” (2013, pg. 101). Machon also uses the scale to “highlight the differences and similarities between large-scale immersive practice and one-to-one experiences”(2013, p.101). Machon’s book ‘Immersive Theatres: Intimacy and Immediacy in Contemporary Performance’(2013) discusses immersive theatre practice. James Frieze refers to this book as “the closest thing we have to a textbook on the subject”(2016, p.2). Machon makes a case that acknowledges the many different approaches to immersive theatre practice. This stems from Gordon Calleja’s ideas of involvement, immersion, and

presence. Machon states that “all immersive theatre exists on the continuum between ‘immersion as absorption’ and ‘immersion as transportation’, with ‘total immersion’ being the most intense affect/effect at the heart of the experience.” (Machon, 2013, pg.68) There are reflections of Machon’s scale amongst other immersive theatre theorists, including Gareth White. Like Machon, Jason Warren acknowledges the struggles to define immersivity. I am referring here to Warren’s book *Creating Worlds: How to Make Immersive Theatre* (2017) as, although not an academic text, his focus is on creating a practical understanding of how to build immersive theatre, which is lacking in much of the immersive theatre scholarship. Warren’s typology of immersive theatre experiences is reflective of Machon’s scale of immersivity. However, the vocabulary he uses is more practical, leading to a more concrete understanding of distinctions between different kinds of immersive theatre. I will be exploring Machon’s scale of immersivity to determine the breadth of immersive experiences alongside Warren, who lends a practical perception of how to define ideas within the scale.

On one end of the scale, we have Machon’s ‘immersion as transportation’ and Warren’s ‘exploration theatre’. Amongst others, these ideas are reflected by the likes of Hannah Dorita (2011) and Mike Pearson (2001): “Where 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). The audience maintains a physical presence in the space but remains separate from the action: “it doesn’t rely on the audience to propel it forwards and, artistically speaking, can take place no matter what the ticket sales are like.”(Warren, 2017, p.x-xi). Hence, emphasis needs to be given to the framing of the show in order to properly re-orient the audience/participant. As Machon states “in immersive theatre a central feature of the experience is that this otherworldly-world is both a conceptual, imaginative space and an inhabited, physical space”(Machon, 2013, p.63). The idea is to fuse the physicality of the immersive environment and the imagination of the audience/participant. However, in these immersive productions the audience is primarily placed in a passive position within the action of the show: “Interaction between cast and audience can happen, and sometimes there’s lots of it – but these interactions don’t shape the story of the piece” (Warren, 2017, p.x). The result is that the use of the scenography and otherworldliness is of integral importance (Machon, 2013, p.63). ‘Immersion as transportation’ relies on the sensation of escapism rather than actively engaging with the world. In immersive terminology ‘immersion as transportation’ is alluded to most strongly, with the audience/participant placed inside a visceral, scenographically compelling environment.

On the opposing end of the scale, we have what Machon refers to as ‘Immersion as Absorption’, and Warren’s ‘guided experience’. Amongst others, ideas concerning participatory experiences and the absorption of the audience are reflected by Susan Bennet (2003), and Helen Freshwater (2011). In these productions “the theatre event is able to engage the participant fully in terms of concentration, imagination, action and interest”(Machon, 2013, p.62). These shows rely on the audience’s willingness to be creative and engage in the secondary world experience. The audience/participant is

placed in a role as well as being provided with a mode of interaction. Choice and interactivity are at the heart of the guided experience: “There are two defining traits in these pieces. Firstly, the audience is integral: the piece cannot take place without at least one audience member present. Secondly, the journey of the experience is curated.”(Warren, 2017, p.xii). The audience participates when it is required, and the rest plays out in a pre-determined fashion. Immersive productions that absorb aim to create “a total engagement in an activity that engrosses (and may equally entertain) the participant within its very form.”(Machon, 2013, p.62). The goal is to immerse the audience/participant with engaging mechanics: “This formal shift in the traditional performer/spectator divide can, quite radically, reallocate the audience’s role into one that receives, responds and, to varying degrees restores their part in the shared performance experience.” (Heddon et al., 2012, p.120). As previously mentioned, the concept of participation is alluded to in immersive theatre definitions, but not really expanded on. However, as the ‘scale of immersion’ implies, the more affecting immersive experiences incorporate ideas of both immersion and transportation.

In the centre of this scale are Machon’s ‘total immersion’, and Warren’s ‘interactive worlds’: “Where total immersion occurs, there is always the experience of formalistic transformation in that the audience-participant is able to fashion her own ‘narrative’ and journey.” (Machon, 2013, p.63). These immersive experiences have the benefit of transportation and exploration, aligned with the freedom of choice: “An interactive world is free-roaming, allowing the audience to move through the space however they wish. [...] It also gives weight to their actions and choices, often to the extent of allowing them to influence the end of the story.”(Warren, 2017, p.xii). Josephine Machon states that all immersive events fall within these definitions, as a scale, with Total Immersion being the most preferential as it provides the most intense experience. The choices they make feel personal because they are derived from conclusions that the audience/participant has derived from their own experience of the environment, the characters, and of the narrative: “The possible influence of the audience is limitless. It isn’t confined to pre-scripted options and choices.”(Warren, 2017, p.xii). Total immersion mixes the two opposing ends of the scale to create a greater sense of the world, and a larger feeling of participation. The exploratory nature gives weight to their choices while allowing the audience/participant to construct their own narrative. Likewise, the breadth of choice gives purpose to the exploration, incentivising the audience/participant with their own narrative rather than making decisions based on the narrative of other characters in the space. The goal with this research is to determine the best tools to work with when the goal is to create the most immersive experience possible, using ‘interactive worlds’ as the steppingstone into this research because it uses components from both sides of the scale.

Machon outlines key ideas which she uses to define immersive theatre productions: ‘In-its-own worldness’, space, scenography, sound, duration, interdisciplinary/hybridized practice, bodies, audience, ‘contracts of participation’, as well as key ideas of intention, and expertise. Machon refers to these concepts in order to determine where an immersive theatre production belongs on the scale:

- The idea of an immersive production existing ‘in-its-own-world’ essentially means that “it is its own unique environment and its own unique ways of *‘being-within’* that environment for performers and participants alike” (Machon, 2013, p.93).
- Space relates to the aesthetic of the environment, the audience’s relationship with the space, and how the space conveys the ‘in-its-own-worldness’ of the event. This is pertinent in the absorption of the audience/participant (Machon, 2013, p.94).
- Scenography refers to the appearance of the space and the affect it has on the audience participant. The design of the space “is key to the experience of the space and to the otherworldliness created” (Machon, 2013, p.95).
- In terms of sound “the audio-journeys taken in these diverse events are essential in inspiring the imagination that underpins that world” (Machon, 2013, p.95)
- Duration does not refer to the length of the immersive experience, but the time spent within the world, “whether intensely concentrated to minutes or spanning days, months or beyond, the length of time spent within the world impacts on the experience of the work according to the parameters of the event” (Machon, 2013, p.96).
- Immersive theatre events are inherently interdisciplinary, taking ideas from different disciplines and folding them into the immersive experience, such as improvisation, architecture, haptic technologies, or physical performance (Machon, 2013, p.97).
- The performers presence within the space is key to the audience’s experience, especially if the performer is engaging with an interdisciplinary experience like dance or physical performance (Machon, 2013, p.98). Likewise, “the audience-participants body ‘co-authors’ the work with the artist” (Machon, 2013, p.98) through their active participation in the event, such as in the work of Adrian Howell.
- Immersive theatre inherently incorporates the being of the audience/participant into the production: “Where an event is wholly immersive the audience-immersant is *always* fundamentally complicit within the concept, content and form of the work” (Machon, 2013, p.98).
- A contract refers to how the audience engages with the work and is “formed in the creation and execution of the work” (Machon, 2013, p. 99). This is either conveyed explicitly in the form of a spoken contract or written work, or it may be implicit in the way that the immersive production is structured.
- Intention refers to whether the piece is intended to be an immersive production, and whether the practitioner has engaged with the immersive form, conceptually, thematically, and narratively (Machon, 2013, p.100).

- Expertise refers to whether the immersive theatre practitioner is practically capable of engaging with these ideas and creating a “full, undeniable immersive experience” (Machon, 2013, p.100).

The scale of immersivity is a good way to place immersive theatre that does not seem to fit within any particular definition, compensating for the current broadness of the term. Interestingly, Machon’s scale identifies the importance of balancing ‘transportation’ and ‘absorption’. The audience needs the scenographic environments, multi-dimensional characters, and a detailed world. They also need to serve a function in the immersive experience. The emphasis on scenographic environments in immersive theatre scholarship seems to diminish the importance of concepts found on the ‘absorption’ end of the scale. Machon makes it clear that the combination of both makes a “totally” immersive experience. This is where I believe the intersection of worldbuilding techniques from other mediums comes into play, specifically how the detail of the secondary world experience saturates the audience attention and promotes exploration and interactivity.

2.4 Storytelling: Filling the Gaps in Immersive Terminology

As previously established, ‘immersive’ is now a defining term for all kinds of theatre which does not take place in a traditional theatre setting. Producer Louis Hartshorn has stated “At the moment, the problem is that a lot of different work is lumped under the immersive banner,[...] Maybe we need different names for different genres within it.” (Louis Hartshorn in Iqbal, 2020). For example, *Human Traffic Live*(Gavin, 2020) is visceral and participatory with interesting scenography, however, beyond this it has no distinguishable features that identify itself as a piece of immersive theatre: “Interactive elements and experimental approaches to story and space have a complex relationship to immersion, and their use does not in itself guarantee any particular kind of experience or level of immersion in an audience member”(Biggin, 2017, p.208). *Human Traffic Live*(Gavin, 2020) is in essence an elaborately designed rave with an installation component attached, that has been labelled as an immersive theatre show, as there is a lack of tools being used to embed the audience within the experience. This is just one example of an array of different experiences that the “immersive theatre” label has been attached to. “Although these [productions] may produce exciting and affective performances, this does not necessarily mean that the audience is involved in a wholly immersive fashion”(Machon, 2013, p.66). This has led to a difficulty in discussing what immersive theatre is, and what it means to be “immersed”.

As some academics have noted, within immersive theatre scholarship there is a general consensus that the audience participates in some form and/or the design of the show uses scenographic environments. However, beyond this there is no set definition. This

stemmed from a systemic misuse of the term 'immersive' to mean something much broader: "Today 'Immersive' is used with impunity to describe a movement that is occurring in contemporary performance practice towards a visceral and participatory audience experience with an all-encompassing sensual style of production aesthetic." (Machon, 2013, p.66) This is primarily because immersive theatre terminology is relatively new, and has risen from multiple different participatory practices, such as Augusto Boal's invisible theatre. To demonstrate the vagueness of immersive theatre terminology, in *The Punchdrunk Encyclopaedia*, under the subject heading "Immersive" it reads "a water analogy of being submerged in another medium can help to describe and define immersive theatre practice" (Machon, 2018, p.142) and "an alternate analogy for describing the form, for Maxine Doyle, is 'the metaphor of an immersion heater, its association with intense heat and pressure.'" (Machon, 2018, p.142). Describing Immersive Theatre practices with analogies and metaphors fails to demonstrate the practical components of the form, as immersive theatre works best when in line with a careful, methodical approach to the world which the design of the show represents. In current scholarship there is a lack of consideration of the constraints of immersive theatre, the requirement of practical knowledge of how to engage the audience in the space and the narrative. For this reason, it may be beneficial to look to other mediums which have a greater clarity when it comes to defining immersive traits.

Due to the nature of immersive theatre, the majority of scholarship focuses primarily on the interactive, participatory nature of the practice. This means there is very little mention of the importance of narrative within immersive theatre. Any mention of narrative as a substantial contributor to the immersive experience is lacking in the work of Machon and White, as well as other leading immersive theatre theorists. In the work of Punchdrunk, narrative is often truncated and sporadic, in favour of an aesthetically pleasing, free-roaming environment. This could be because the participation of the audience member means that they are creating the immersive experience alongside the practitioners and performers as co-designers, as Frieze comments: "co-design means the participant is so involved in the making of the work that the distinction between producing and receiving is blurred." (2016, p.27). The audience becomes complicit in the creation of the immersive work, creating their own pathways. However, narrative seems to be overlooked as a method of absorption. Interactivity and narrative, when they become interlinked, can create a deep investment in the immersive experience as participation is about "continually changing tack and re-imagining how our choices are appearing at different points from different others [...] multiple fragmented narratives of our own participation playing out in our mind" (Frieze, 2016, p. 28). The drama within the storyworld generates investment with the characters in the space and their surroundings. Greater focus could be given to narrative within immersive pieces as a way to draw the audience/participant deeper into the immersive world. Stories are important because they create investment and provide purpose, as well as creating thematic nuance:

“The great thing about story is that it answers the questions as to why we in the audience are interested in a play. We are interested because the story slowly unravels, and we are gradually (or in certain types of play, quickly) presented with something that we must follow, second by second. The reason why plays and films still tend to be story based, whereas novels are less welded to sequential narrative, is that narrative is still the best way to keep people engaged.” (Jeffreys, 2019, p.13)

The lack of a focus on narrative within immersive theatre scholarship limits an understanding of the immersive experience, potentially negatively impacting the practice of the form. When practicing immersive theatre you have to adapt how you treat your set design, and your performers. Surely this would mean that you also have to adapt your story structure as, depending on what kind of immersive show you are making, as your narrative will not take place in one space. Immersive theatre practitioners can structure the narrative and the environment in conjuncture with each other for the narrative to effectively serve its purpose. Narrative is important, and is given greater attention in other media, which is one of the reasons looking at how different media can contribute to immersive theatre is important.

When discussing how we can utilise storytelling to our advantage in a non-traditional environment, we need to use non-traditional means to convey the storyworld. If a key component within immersive theatre experiences is the audience/participants relationship with the environment that must mean we can use the environment to tell stories. Worldbuilding, according to Mark Wolf is defined as “a wealth of details and events (or mere mentions of them) which do not advance the story, but which provide background richness and verisimilitude to the imaginary world”(2012, p.13). Details that contribute to the world, make it richer, provide opportunities for investment and exploration. The extraneous detail saturates the participants’ attention, creating a greater focus on the secondary world, diverting their attention from the primary world. I will be examining the enhancement of immersive theatre by way of worldbuilding, in order to bring us closer to a more engaging secondary world experience. Storytelling in some mediums provides narrative threads that the audience will experience passively, for example a movie, or a TV show. Other narrative mediums require the audience/participant to actively engage, requiring them to discern pieces of information from narrative strands, and the story’s world. The environment in theme parks and video games is used to incentivise the audience/participant. This treatment of narrative and storytelling, and the extraneous world details, could all be pertinent to the improvement of immersive theatre practice. These concepts do not have to be isolated to those media, the notion of worldbuilding is inherently linked to story and is perfectly suited for a plethora of immersive environments.

Books function very differently to how theatre does. However, practitioners can learn about their treatment of structure and drama, and how that lends itself to a theatrical context. Narrative fabric has never had more experimentation than within literature. Novels engage the audience in a particular kind of way, utilizing the audience’s

imagination as the mode of interpretation. Narrative fabric is made up of narrative threads which can also be interlaced into narrative braids, which I will discuss in greater detail in section 3.2. Simply put, a narrative fabric is “a structure that results when a narrative or world has enough detail and events such that one can trace all the events happening to individual characters or events over time.” (Wolf, 2012, p.378).

Not all video games tell stories, and there are plenty of theorists that can tell you why narrative can take away from video games (Jenkins, 2004, p.118), but modern video games have the capacity to tell emotional and cinematic stories, without detracting from the gameplay. Take developer Naughty Dog for instance and their popular video game franchises *Uncharted* (2007-2017) and *The Last of Us* (2013-2020). Neither of these franchises have anything particularly complex in them regarding gameplay. However, what sets these games apart is the connection that the player makes with the worlds the games take place in, and the narrative they take part in. In *Uncharted 4: A Thief's End* (2016) the environments have been created in such a fashion that, regardless of the game's linear level design, you never feel like you are being forced to choose a path, you feel like you are choosing that path of your own accord:

The design of a fictional world with a diversified geography composed of various locations. Each of the locations offers its own opportunities for experiences, adventures, discoveries, and meaningful action. As the player discovers this geography, she meets different characters, receives different missions, forms different goals, and faces different dangers.(Ryan, 2005, p.14).

A participant is not observing the characters either such as in the static orientation of a cinema or traditional theatre experience. You are playing as them, their decisions are yours, and that makes you care about them. This is made easier by the fact that these characters are interesting and engaging: they feel like characters rather than the quiet faceless protagonists of games like the *Call of Duty* (2003-2020) franchise.

Some of the most successful modern day theme park attractions are the plethora of Disney theme park attractions across the world. The Walt Disney company and their notion of theme has been developed extensively for decades through their team of Imagineers. Their practical knowledge is unparalleled, as evidenced by their incredibly detailed environments and their captivating imaginative stories. Unfortunately, most people do not have the same resources and experience that Disney has. However, even Walt Disney and his original team did not have these things to begin with, so what is at the heart of these incredible thematic experiences that we can draw from? Bob Iger, former CEO of Disney says this: “When I think about the culture of the Walt Disney Company it ties directly to our core values of our storytelling” (Iger, 2019). The notion of storytelling is embedded within the practices of theme park designers. Scott Lukas, theorist, and author of scholarship pertaining to immersive spaces, has this to say about the coalition between story and spaces: “Story may be considered the most relevant factor in the creation of immersion within a space. Story is what holds a space together by linking elements, creating situations, establishing moods, and involving guests.”(2013, p.155).

Theme Parks use worldbuilding, just in a slightly different way to video games. Video Games are longform experiences, usually with a set goal for the player. That means that theme attractions do not have the same length of time and breadth of space that a video game has to convey context and story. Worldbuilding works the same way, it has the same effect on the audience, but the authenticity of the environment fosters the liveness of the experience.

With the exponential increase in the use of the term 'immersive theatre' it makes it even more important to make the distinction between what is an immersive theatre production and what is an interactive performance or promenade theatre. By acknowledging the importance of narrative tools in immersive theatre productions, that distinction can be created. Due to the nature of this study and the focus on multiple mediums I will be breaking down immersive theatre practice into five key components, based on the defining traits that Machon uses to define immersive theatre productions. I am breaking it down into these key components to make it easier to create specific ties between each medium's treatment of immersion, and their practical application within immersive theatre practice. The five key components of immersive theatre design are: Intention & Framing, Space, Design, Narrative, and Performance. As well as being discussed within immersive theatre scholarship like Machon's texts, these components are commonly referred to within theme park and video game design scholarship and practices, such as in Scott Lukas' *The Immersive Worlds Handbook* (2013), or Henry Jenkins essay *Game Design as Narrative Architecture* (2004). Intention and Framing are relevant because of the contractual barrier between the audience and the performer. Space is important because of the important role of the space within immersive theatre productions. Design is an integral part in worldbuilding. Narrative plays an often-underrated role in immersive theatre productions with dramatic structure playing a crucial role in the investment of the audience. Performance is also noted here because of the distinctive differences in the treatment of the performer, both in the rehearsal process and during the production in immersive theatre productions, compared to a traditional theatre setting. Ideas related to intention and framing, design, space, narrative, and performances are interlaced within the discussions of different media in Part Two. The key components will be discussed directly in Part Three, where they will be used to highlight the qualities that can be extrapolated and used by immersive theatre practitioners. This is to create a better focus on how worldbuilding can practically enhance the execution of immersive theatre to create a greater immersive experience.

3. Part Three: Worldbuilding

So far I have discussed what immersion is, that the terminology derived from game theory, and developed into something larger, and in some cases more abstract, especially in the field of immersive theatre scholarship. I also introduced Mark Wolf, and his approach to immersive terminology. His theory will make it easier to examine how immersivity is put into practice across different mediums. Additionally, I discussed Machon's scale of immersivity, including the two opposing ends of the scale, absorption and transportation, and how a combination of the two creates a totally immersive experience. I also highlighted key components which Machon uses to define an immersive experience, some of which I will be using to discuss the use of immersive techniques from other media in part three.

I closed the previous section by establishing that a gap exists in immersive theatre scholarship. Narratological techniques are rarely discussed in immersive theatre scholarship, whereas in other immersive mediums they are discussed with greater frequency and given more importance. In this section I will be opening up worldbuilding, a storytelling tool used to enrich the world, create depth, and contextualise action. I will be discussing worldbuilding within the context of novel authorship, theme park design, and game design. This is to create an understanding of what worldbuilding is, and how worldbuilding is used in different media, so the same theory and practice can be applied to immersive theatre scholarship and practice, which I will be discussing in part three.

Within game and theme park design the term worldbuilding encompasses a range of techniques which are used to engage the audience/participant so they can interpret the events of the secondary world. In theatre scholarship worldbuilding is rarely acknowledged, and immersion is almost never discussed in other contexts. For example, we can compare these two statements made by Mark Wolf and Gareth White. Mark Wolf says the following in a discussion about the use of space within video games: "Interaction within and with a space is the means by which space is best understood [...] as spatial design is an indication of movement options and is typically the basis for the indication of interactive possibilities" (2012, p.18-19). This echoes a similar comment made by Gareth White in a discussion of the use of space in immersive theatre: "[Immersive Theatre] tends to make use of spatial and architectural interventions, and to ask spectators to involve themselves physically in tracking down or pursuing the performance." (2013, p. 2). Here both Wolf and White acknowledge the role of space within the performance setting as well as the effect on the audience/participant. Yet out of the two it is Wolf who then focuses on the processes that relate to engaging the audience within the secondary world, whereas White's theory would rather focus on the audience's means of participation, a distinction that can broadly exemplify the gap in immersive theatre scholarship. By exploring worldbuilding tools across multiple mediums it might be possible to narrow this gap in immersive theatre practice.

Firstly, I will be exploring how books conceptually immerse the reader through the use of worldbuilding, and how they achieve this through 'absorbing' and 'saturating' the reader with extraneous world details. This is evidenced by Wolf, whose valuable understanding of narrative theory is helpful in analysing the usefulness of books within this study. Our understanding of how stories are told is important because the audience/participant could potentially follow different strands of narrative in an immersive theatre experience.

I will also be exploring how video game and theme park designers use physical space and design to embed the audience/participant in the secondary world. Specifically in theme park design I will be examining how theme represents an all-encompassing notion of story. Theme Park designer Don Carson discusses how the physical presence of the audience in the space means the designer needs to quickly orient the audience/participant and provide context. Additionally, I will explore how theme parks and immersive theatre are both primarily physically immersive experiences, and how to work within the physical constraints of these worlds. In particular I will be looking at the coordination of the environment as well as the details within it that enrich and enliven the world, predominantly through the use of worldbuilding and environmental storytelling. This is embedded within the practical advice of Jenkins and Smith, amongst others. These three mediums tell their stories in different ways; however, they contain ideas that immersive theatre practitioners can extrapolate and turn into something practical.

3.1 What is Worldbuilding?

Worldbuilding is the process of fabricating a realistically lived-in environment to produce the sensation of a world beyond the narrative chain of events. Realistically lived-in means that it would appear as though the people who inhabit the secondary world can conceivably live in the environment, and what happens in the present and has happened in the past is a result of a naturally progressing growth of social systems. If the production succeeds in doing this that will promote the idea that the space and societies that live within that space can exist beyond what the audience is capable of experiencing. As Mark Wolf defines worldbuilding:

For works in which world-building occurs, there may be a wealth of details and events (or mere mentions of them) which do not advance the story, but which provide background richness and verisimilitude to the imaginary world. Sometimes this material even appears out of the story itself, in the form of appendices, maps, timelines, glossaries of invented languages, and so forth. Such additional information can change the audience's experience, understanding, and immersion in a story, giving a deeper significance to characters, events, and details (2012, p.2).

Worldbuilding refers to the construction of the entire world, encompassing all sorts of components such as maps, genealogies, people and their social customs, ecology, geography, history, and in some cases conlangs (invented languages) (Wolf, 2012, p. 2). This means that worldbuilding encompasses any extra-narrative material that does not directly focus on the narrative of the piece. It can both scenographically reorient the audience/participant in the secondary world, as well as actively engaging them in the experience.

The “primary” and “secondary” world exist on either side of the performance boundary. “Secondary world” is part of a range of terminology Mark Wolf uses when referring to an “imaginary world”. “Secondary Worlds refers to a world’s relationship with our own world, the “primary world”” (Wolf, 2012, p.14). In essence the primary world refers to our own, and the secondary world refers to the fictional sub-created world. The “primary world” is reality, the lived experience of any single person outside of a performance space. The “secondary world” can be any fictional world; a man-made construct of a different reality usually built for the purposes of entertainment. When aiming for a secondary world experience in storytelling mediums, it is not possible to build a complete world. Anyone wishing to create a complete secondary world may create a wealth of details and story components attached to the world. A designer/author/practitioner has to make decisions to condense, and in other ways reduce the world to signs and symbols, and approximations. Within video game design “gameplay takes place within a representational universe, filled with depictions of objects, interactions, and ideas out of which a player makes meaning” (Salen & Zimmerman, 2004, p.364). This is worldbuilding; every detail provides a hint as to what may come or has come before and adds to the world. These ideas build upon each other to form a larger representation of the world.

Games and theme parks often use seemingly surface level components to create something deeper and more meaningful. What happens outside of the narrative is one of the key differentiations between immersive theatre and a static audience experience, affecting the audience’s experience, their level of immersion of the story, and creating deeper significance in the details of the world (Wolf, 2012, p.2). It is the extraneous details of the world that exist on the periphery of the narrative that make worldbuilding what it is: “World information that does not advance the story may still provide mood and atmosphere, or further form our image of characters, places, and events.” (Wolf, 2012, p.29). Worldbuilding enhances a scenographically focused production in order to create a holistic secondary world experience. Generally, the narrative component of the medium is used as the intensifier for drama within the secondary world, and worldbuilding is a tool, used in interactive mediums to teach people the mechanics of interactivity, promote interaction, and improve the holistic experience. When discussing “interactivity”, I am referring to when the audience/participant engages with the secondary world physically, for example communicating with a member of the cast, or solving a puzzle. Worldbuilding operates by providing independent player/audience experiences and presenting the world to the player/audience with a convincing liveness,

which means the world appears to function independently of the constraints of the medium. Put more simply, “by allowing the audience to assemble narrative threads from world material, narrative fabric greatly increases a world’s illusion of completeness, as well as the audience’s engagement in the world” (Wolf, 2012, p.201).

3.2 Books

Science-fiction and fantasy literature have been popularized, in part, due to the detailed worlds that characterize the genre. These secondary worlds are usually very different to our primary world, and often use extranarrative world details to enhance them. The origins of science-fiction and fantasy literature can be traced back throughout millennia. For example, the *Epic of Gilgamesh* (the earliest text version dating back to 2000BC) contains the principles of the fantastical journey (Lester, 1980, p.12). Proto science-fiction came to be during the ‘Age of Reason’ influenced by a widespread interest in scientific study, which created many of the tropes found in modern science fiction (Sterling, 2020). The 19th Century saw an increased interest in these trends, such as in Mary Shelley’s *Frankenstein* which Brian Aldiss states is the “first seminal work to which the label SF can be logically attached” (1973, p.15), although *Frankenstein* is more commonly associated with the gothic genre. Later in the 19th Century the work of HG Wells and Jules Verne began the transition into our modern understanding of science fiction. Verne created stories that mixed adventure with technology, whilst Wells used science fiction as a means to criticize society (Cramer & Hartwell, 2006). Other influential authors during the late 19th century include Samuel Butler, Auguste Villiers de l’Isle-Adam, and Begum Roquia Sakhawat Hussain. These ideas were developed even further in the 20th Century, including the emergence of Pulp magazines such as *Amazing Stories*, and *Weird Tales* (Taormina, 2005). Fantasy and Science-fiction ideas were developed even further throughout the century with a greater focus on compelling prose and stylistic choices, Tolkien being a particularly influential writer within the Fantasy genre (Fornet-Ponse, 2012). The 1980’s saw the emergence of the cyberpunk genre of science fiction during the emergence of computing technologies, emphasized by writers like William Gibson (Hayward & Wollen, 1993, p.183-185). Contemporary science-fiction began with the incorporation of themes from the cyberpunk genre into the wider science-fiction zeitgeist. This corresponded with the emergence of themes such as environmental issues, biotechnology, and post-scarcity societies.

Wolf dictates that “In one sense the experiencing of imaginary worlds has always required the active participation of the audience, whose imaginations are called upon to fill gaps and complete the world *gestalten* needed to bring a world to life.”(2012, p.138). Wolf’s determination is that a novel can be just as affecting as any other medium. It is within the originality of the text, and the expression and interpretation of the world through the form that provides a unique experience for the reader. It is easier to show an audience/participant something through a visual medium, and audiences may be more receptive because of that, but they will be more satisfied by constructing something and

engaging with it (Wolf, 2012, p.49). Out of all the mediums, novels have the greatest capacity to build secondary worlds. They have an unlimited amount of time to convey the story and the only limitation they have is the human imagination. One way of examining this process is by examining the effective use of narratological tools that authors use to maintain their audience's attention, as seen in Mark Wolf's research. Storytelling mediums, with few exceptions, focus on a specific chain of events. This will be the core narrative thread of the piece. There may also be one or more subplots which tie into the narrative chain of events. "At their simplest, all narratives are the movement from a beginning point to a finishing point. Narrative is just a sequence which starts and moves inexorably to its end" (Cobley, 2001, p.9). The narrative chain of events represents the storyview, which is what the characters know and believe about the world (Vandermeer, 2018, p.216). Narrative fabric has never had more experimentation than within literature. Narrative fabric is made up of narrative threads which can also be interlaced into narrative braids. Narrative threads are "a series of causally-linked events, which usually revolves around a character, object, or location, giving a sense of what happens to it over time"(Wolf, 2012, pg.379). The instincts of the audience will intuitively help them understand that this thread will lead to some form of closure, however multiple threads that co-exist in the same world can create narrative braids interlinking due to similarities in "theme, characters, objects, locations, events, or chains of cause-and-effect." (Wolf, 2012, p.378). Finally, a narrative fabric is "a structure that results when a narrative or world has enough detail and events such that one can trace all the events happening to individual characters or events over time." (Wolf, 2012, p.378). Novels require the active participation of the reader, and within sci-fi and fantasy literature there are innumerable examples of rich, detailed, secondary world experiences, all conveyed through text. This means there is a greater focus on structure and narrative, as the readers imagination is the mode of interpretation.

As will be demonstrated in the sections that follow, theme parks and video games create symbolism that evokes particular responses from the audience/participant, in accordance with their personal understanding of genre tropes, and themes. However, the novel has a greater ability to create complex stories using interweaving narrative braids than filmmaking and gaming does, with more space for extranarrative material. Looking at Wolf's categorisation of immersive experiences, novels fall under the banner of conceptual immersion. Conceptual immersion "relies the most on the audience's imagination" (2012, p.377) as the reader is drawn into the secondary world when novels "supply sufficient detail and description for the reader to vicariously enter the imagined world" (2012, p.376). The saturation of details creates the sensation of being enveloped in a world. This means that seemingly peripheral details such as mythologies, objects, and environments hold bearing on the narrative, narrative context, or world "as the amount of world information increases, secondary world infrastructures start to take shape, until enough information is present both to raise questions and suggest answers about missing pieces in the world's history and organization" (Wolf, 2012, p.198). The presence of a

mythology gives the secondary world a sense of history and contributes toward the desired in-its-own-worldness (Wolf, 2012, p.198).

The medium allows for a breadth of expression within the writing, and the freedom of the novel comes from a lack of constraints imposed upon the delivery of the content to the reader; the work is done by the reader in their imagination. Louise Rosenblatt's transactional theory of reading determines that the images that the text evokes as well as the images that are created in the mind of the reader do not exist independently but work together:

Instead of two fixed entities acting on one another, the reader and the text are two aspects of a total dynamic situation. The "meaning" does not reside ready-made "in" the text or "in" the reader but happens or comes into being during the transaction between reader and text [...] "meaning" is what happens during the transaction (Rosenblatt, 1994, p.1063).

This idea that the reader and the text are interlaced coalesces with Wolf's idea of conceptual immersion, the reader being drawn into the world through the saturation of world information, and the blending of the primary and secondary worlds. Rosenblatt's "point is that the experience of reading is the coming together of the two into one – not two singulars meeting" (Latham, 2014, p.547). In a novel a reader can spend hours at a time in a secondary world. Rosenblatt's transactional theory further emphasises the possibilities of worldbuilding within books. This is where the contribution of extranarrative material comes into play. Everything contributes to the world, and the world is the home of the story, reflecting the narrative.

The active participation of the audience and the engagement with the imagination, are useful guiding principles when considering how to envelop a reader/audience/participant into a secondary world. Books can teach practitioners about the use of complex narrative fabric, and how the extraneous details of the textual experience can so vividly encapsulate the reader's attention. This results in the conceptual immersion of the reader, absorbing them into the world through the extraneous detail (Wolf, 2012, p.49). Although it should be noted that some immersive theatre groups such as Punchdrunk do this to a certain extent through intertextual references and the detailed nature of the environments they create, a greater focus on saturating the audience with world information and absorbing them into the secondary world is something that immersive theatre practitioners could benefit from.

3.3 Theme Parks

Theme parks evolved from earlier traditions of travelling fairs, exhibitions, and pleasure gardens (Wroth, 1896). Early examples being fairs from the middle ages, such as the Bartholomew Fair in England established in 1133AD. Fairs evolved until the 19th Century when they were characterised by attractions such as menageries, conjuring,

acrobatics, and freak shows (Adams, 1991, p.68). An innovation in mechanics during the mid to late 19th Century led to the creation of rides like the steam powered carousel, and the fairground machinery created by Frederick Savage. A combination of this new technology, coinciding with members of the working class working fewer hours with better wages, led to the popularity of modernistic fairground rides. In 1895 Sea Lion Park in Coney Island was the first permanent enclosed theme park (Adams, 1991, p.53). The early 20th Century saw the development of rollercoasters including extreme drops and speeds as a method to excite the rider (Scott, 2000). Today the amusement park industry has evolved to offer a range of experiences. Smaller theme parks have emerged such as LEGOLAND. Larger more family oriented parks are dedicated to offering the likes of thrilling roller coaster experiences, from Universal Orlando Resort, to the likes of more thematic experiences such as Disneyland (Lukas, 2008). The designers of these immersive theme park experiences have accumulated knowledge on how to develop a free-roaming, self-paced immersive experience, and these are the ideas that immersive theatre practitioners may borrow from.

Within live events, to maintain the ‘in-its-own-worldness’ of the experience, the worldbuilding in secondary worlds needs to be consistent. This is where theme park design, and the notion of theme, becomes important. Don Carson is a freelance designer and conceptual illustrator, and he was previously the Senior Show Designer for Walt Disney Imagineering. Carson says that when he considers story he is talking about “an all-encompassing notion, a “big picture” idea of the world that is being created” (2000). This entails using a specific thematic pinpoint that will determine the foundation for the experience, using the expectations of the audience against them:

“Much of this is done by manipulating your audience’s expectations, which they have based on their own experiences of the physical world, and those visions collected from movies and books, the audience is ripe to be dropped into your adventure. The trick is to play on those memories and expectations to heighten the thrill of venturing into your created universe.”(Carson, 2000).

Scott Lukas reflects Carson’s description of theme here: “In theming a central idea or theme is used to create associations between the space and the guest”(2013, p.12). If a theme park designer were to create an attraction based on pirates, they would have to do everything they can to fulfil the expectations that the audience already has about pirates. The characters need to talk like pirates, and look like pirates, they need to be doing things that stereotypically pirates would do: “Theming relies on guests’ previous associations with certain themes”(Lukas, 2013, p.68). Once a theme park designer has the established idea of “pirates” they have created a set of rules that their team can work within. If there is something that does not adhere to the “story”, they can quickly determine whether it will fit into the attraction and how to correct it. In a pirate-themed attraction, you would not see an astronaut for example. There is an argument to be made that terminologically “theming” has negative connotations, lacking artistry due to a reliance on stereotyping. Themed spaces are used as a tool by businesses to help sell their product. As Lukas states:

“Theming has been one of the most successful concepts to have impacted spatial consumer design” (2013, p.68). However, this only adds to the fact that theming is an effective way to engage people. “Theming could be called a “stereotype” of place, culture, and people, but more accurately we might say that theming is a conscious, thoughtful, and effect-producing representation.”(Lukas, 2013, p.79)

Theatre uses the clever construction of physical components to generate the illusion of otherworldliness. Even the most convincing set is merely constructed to convince an audience of its realism:

On several occasions I have had the chance to walk through the “Pirates of the Caribbean” attraction in Disneyland, CA. During my first visit, I took a breather in the “Auction Scene”. As I leaned back against one of the Caribbean stucco building I was shocked to discover they were entirely made out of painted stretched canvas! All through my childhood I had just assumed that the buildings were solid, and even today it is hard to remember they are only a clever theatrical trick.(Carson, 2000).

Due to practical and technical constraints theme park designer have to simplify and adapt their world. As Lukas states: “[Simplification] suggests that you must make choices about which things to leave out since it is not practical to re-create the entirety of the world that you are attempting to relate in buildings, attractions, and other features within your venue.” (Lukas, 2013, p.9). Decisions have to be made to condense the experience, and then ‘environmental storytelling’ can be used to make the world feel larger.

Environmental storytelling is a particularly prevalent worldbuilding technique in theme park and game design. Environmental storytelling works by taking specific elements of the world and presenting a thematic connection, or by contributing directly to the story via a seemingly independent narrative thread. Don Carson, who first posed this line of question in regard to theme park attractions, states that environmental storytelling occurs when:

the story element is infused into the physical space a guest walks or rides through. In many respects, it is the physical space that does much of the work of conveying the story the designers are trying to tell. Color, lighting and even the texture of a place can fill an audience with excitement or dread.(2000)

Environmental storytelling is a primary form of emergent storytelling in video games. A 2010 Games Developers Conference entitled *What Happened Here?* by Harvey Smith and Mathias Worch covers the role of environmental storytelling quite concisely. Smith dictates that the environment “can communicate: the history of what has happened in a place, who inhabits it, their living conditions, what might happen next, the functional purpose of the place, and the mood.”(Worch & Smith, 2010). Through environmental storytelling, practitioners can provide hints to the worlds context, but it is a different entity to worldbuilding. It is important to distinguish “environmental storytelling” from “worldbuilding” as the aims are both the same, and they do similar things. However,

worldbuilding relates the world as a whole, whilst environmental storytelling is focused specifically on small moments, ideas, and details which enhance the world, such as “cause and effect vignettes”.

“Cause and effect vignettes” are events that lead the audience to come up with their own conclusions about what happened in the history of the secondary world. Carson gives some good examples: “door that might have been broken open, traces of a recent explosion, a crashed vehicle, a piano dropped from a great height, charred remains of a fire.”(2000). In theme park attractions, due to physical and budgetary restraints, these do not have the same level of frequency as in video games, so environmental storytelling appears with much more potency and relevancy in theme park attractions. For example, in the *Twister: Ride it Out!* theme park attraction in Universal Orlando Resort, the action takes place within a limited space and the audience/participants are placed statically in the environment. However, the use of lighting, sound, and technical apparatus like wind machines, are coupled with the aesthetic design of the diner set, the neon sign, and the garage. The technical components provide the illusion that a twister is moving through the space, and the environment telegraphs information about the world. Every item becomes an inherently necessary part of the experience. By making every item in an immersive theatre thematically relevant you will only be telegraphing relevant information to the audience, streamlining the production, which I will discuss in greater detail in the ‘gaming section’.

The active participation of the audience/participant with a theme park attraction is of vital importance: “These are spaces of possibility, transformation, and excitement. Creating a space that guests truly love is a human act - one that can change the lives and guests and workers in dramatic ways”(Lukas, 2013, p.151). This is why determining the audience’s relationship with the space is important, because after determining the space they are in, their next goal is to discover what role they will have to play in this environment: “If they can’t figure out what their role is in this place, you have missed a marvellous opportunity to pull your audience deeper into your world.”(Carson, 2000). The audience may have a notion of who they are in this world, but they may not have a conclusive idea of their purpose until they experience the physical space and random encounters with peripheral characters (Carson, 2000). This does happen within immersive theatre productions but maybe not to the extent that it could. Punchdrunk’s *Sleep No More* is an example of an immersive theatre show that uses the aesthetics of the environment as the primary motivation for exploration. The audience/participant gets to explore the physical space and engage with peripheral characters. However, the audience is placed in the role of a passive observer. Even though the audience member is removed from the static orientation of a traditional theatre setting they are still limited by the lack of roleplay opportunities available to them.

Both theme park designers and immersive theatre practitioners are trying to create a live experience, tell their story, and immerse their audiences:

You become a part of the story and your life is given new purpose and meaning. Also, the great story, as we shall see, can give any space – even a mundane one – a sense of meaning. (Lukas, 2013, p.48-49).

When discussing the “theme” part of theme parks, what we are really talking about is capturing the essence of a story. Theme park designers use what familiarity the audience/participant has with stories in a way that hijacks their brain and makes them actively participate. To reiterate Wolf: “In one sense the experiencing of imaginary worlds has always required the active participation of the audience, whose imaginations are called upon to fill gaps and complete the world *gestalten* needed to bring a world to life.” (2012, p.138). Theme Parks rely on the active engagement of the audience’s imagination to fill the world. The use of worldbuilding furthers this active participation and engagement.

Theatre practitioners and theorists can learn similar lessons from theme parks as they can from video games, with the added benefit that like theatre, theme park attractions provide live experiences. Theme parks more roundly represent transferable qualities which could be incorporated into theatre practice. Immersive theatre practitioners can learn lessons from theme park designers about liveness, building physical secondary world experiences, building relationships between the audience and the space, and environmental storytelling.

3.4 Gaming

Video games are an exceedingly popular form of entertainment. Gaming culture has grown exponentially since the 1980’s, coinciding with the development of new technology. Computers are getting smaller, faster, and more powerful, resulting in new developments and smarter computing. This means game developers can create much more complex systems, with better looking CGI and animation, and complex mechanics. The advancement of these techniques and technologies has resulted in an array of detailed secondary world experiences. Whether the experience is a single player action-adventure with linear level-design like the *Uncharted* franchise (2007-2017), an open-world online action role-playing game like *Fallout 76* (2018), or somewhere in between, the gameplay, the stories, and the world, all serve to deliver a satisfying player experience.

From the late 1940’s up until the early 1970’s, video game technology was being developed and formed, paving the way for the first arcade game *Computer Space* in 1971 (Yagoda, 2008), as well as the first video game console, the Magnavox Odyssey, released in 1972 (Orlando, 2007). Video game technology develops from here, improving the graphics, data storage, and the mechanics. In 1980 Atari’s *Battlezone* was released, the first game to feature a truly 3D environment. 3D environments were improved upon exponentially. Significant milestones include *Driller* in 1987, and *Wolfenstein 3D* in 1992 (Wolf, 2008, p.xvii-xxi). The 1990’s saw the continual development of immersive gaming

technologies, along with the benefit of internet, which continued into the 21st Century. In 2004 Bungie released *Halo 2*, with an online multiplayer matchmaking system that represented a turning point in the gaming industry creating “the video game as we know it today: a mass shared experience” (Agnello, 2019). This is further exemplified by the popularity of massive multiplayer online roleplaying game (MMORPG) *World of Warcraft* (2004), with an estimated 4 million players worldwide today, 17 years after its release (MMO Populations, 2021). The recent development of Epic Games’ Unreal Engine 5, a real-time 3D creation platform, symbolises the lengths to which gaming technology has advanced. Epic Games VP Nick Penwarden states that “Unreal Engine 5 [...] will have a profound impact on developers by allowing them to focus on creating awe-inspiring art and meaningful experiences, while letting the engine worry about the technical difficulties of how to render the environment” (“Epic Developers,” 2020, p.16) On one hand, these vast technological developments have resulted, in some cases, with unfinished games being released (Schreier, 2016). However, this also coincided with the increased popularity of indie game development, due to the increased availability of digital distribution (Crogan, 2018, p.671-689).

This relationship between narrative and interactivity is explored in Henry Jenkins’ essay *Game Design as Narrative Architecture* (2004) in which he discusses two schools of thought, ‘ludologists’ and ‘narratologists’. Ludologists believe the focus of gaming should shift onto the mechanics of the game. Narratologists are interested in studying games alongside other storytelling media. The difference here is that video games are an inherently interactive experience. Jenkins comments on the poor attempts at interactive storytelling: “The application of film theory to games can seem heavy-handed and literal-minded, after failing to recognize the profound differences between the two media.” (2004, p.119). Jenkins believes games are inherently different to film, and a direct comparison between the two makes for poor analysis. His first point is crucial, “not all games tell stories.” (Jenkins, 2004, p.119) Games are experiential, and the experience need not have a narrative. The mechanical experience is sometimes all that is required for a satisfying experience. Take the success of battle royale game *Fortnite* (2017) for example. The cartoonish aesthetic, PvP gameplay, and unique build system are what contribute to the game’s popularity. His second point is that many games have narrative aspirations, and they “depend on our familiarity with the rules and goals of genre entertainment to orient us to the action.” (Jenkins, 2004, p.119) Although this is less true now in 2021 than in 2004 at the time of publication, it is true that narrative conventions are used as a supporting tool regarding the players’ relationship with the story. Thirdly, Jenkins makes a note of how narratologists need not annex games into one particular narrative corner and “the goal should be the faster diversification of games to the broadest possible range of experiences” (2004, p.120). In the 17 years since Jenkins said this, diversification is exactly what the game industry has done. This can be demonstrated by looking to releases in the last 10 years like *Overwatch* (2016), *Portal 2* (2011), *Bloodborne* (2015), *Bioshock Infinite* (2013), and *Red Dead Redemption II* (2018), exemplifying the range of games and the extreme distinctions they each provide.

Embedded and emergent narrative are discussed by theorists like Jenkins, and Salen and Zimmerman. The concept of embedded narrative against emergent narrative implies that the audience has two modes of interpretation within the immersive experience: "Embedded elements are narrative structures directly authored by game designers' approach that serve as a frame for interaction. Emergent narrative approaches emphasize the ways that players interact with a game system to produce a narrative experience unique to each player" (Salen and Zimmerman, 2003, p.384). Embedded narrative relies on the audience's ability to piece together information in the storyworld. What is desired across these mediums is that the audience has a sensation of inclusivity within the secondary world experience:

"narrative comprehension is an active process by which viewers assemble and make hypotheses about likely narrative developments on the basis of information drawn from textual cues and clues. As they move through the film, spectators test and reformulate their mental maps of the narrative action and the story space. In games, players are forced to act upon those mental maps, to literally test them against the game world itself." (Jenkins, 2004, p.126).

Embedded narrative is found within a storyworld's narrative fabric, with an audience/participant piecing together the information that is provided to them. Comparatively, emergent narrative is the narrative content produced by the spectator's interaction with the work:

Emergent narratives are not prestructured or preprogramed, taking shape through the game play, yet they are not as unstructured, chaotic, and frustrating as life itself. [...] , game spaces are designed to be rich with narrative potential, enabling the story-constructing activity of players. In each case, it makes sense to think of game designers less as storytellers than as narrative architects.(Jenkins, 2004, p.128).

When the audience experiences the emergent narrative, they have an individual experience that was teased out by their interaction with the show. Such as how worldbuilding provides extranarrative material to build upon the audience/participants experience. The embedded narrative is different, it is consistent and will never change. What these concepts establish is a sense of merging between these two narrative types. The embedded narrative is a coherent part of emergent narrative, with the audience/participant acting as the protagonist for the show, making their story the main narrative thread:

Recognizing games as narrative experience means considering them not just as bits of plot that are arranged and rearranged through interaction, but instead considering them as an ongoing activity in which a player engages with a core mechanic or make meaningful choices and explore a space of possibility (Salen & Zimmerman, 2003, p.389).

If embedded narrative provides depth, and emergent narrative provides a sense of curatorship for the narrative, then surely a combination of the two would be the most beneficial in terms of creating the richest possible spectator/participant experience. Once again, this is similar to Machon's absorption versus transportation conversation, with a combination of absorptive and transportive elements being the most potently immersive experience.

When creating environmental storytelling it could begin with "establishing a discernible chain of events" (Worch & Smith, 2010). To create effective environmental storytelling moments, practitioners must "ensure that events engage the player - echo the world at large - create characterization - minimize disconnects between the player's possible actions and pre-scripted setups." (Worch & Smith, 2010). It is important to remember that combining elements to create a larger picture is good, however, the individual components must be representative of the world's larger context after the disparate elements have been connected and turned into stories, and after the stories have been given meaning:

When game designers draw story elements from existing film or literary genres, they are most apt to tap those genres - fantasy, adventure, science fiction, horror, war - which are most invested in world-making and spatial storytelling. Games, in turn, may more fully realize the spatiality of these stories, giving a much more immersive and compelling representation of their narrative worlds. (Jenkins, 2004, p.122).

It is the details that lie within the context of the storyworld that give environmental storytelling its effectiveness and contribute toward worldbuilding. A tiny detail present in the world must be able to be traced back through the chain of events to the inciting context. These moments should be derived from the premise of the piece and exist in a self-reinforcing loop. This means the context of the individual moment and the context of the world both support each other.

Environmental storytelling primarily exists to contextualize the main narrative thread, and whilst these vignettes may tell compelling stories, they are often subject to interpretation. Everyone interprets in their own way, "[inviting] interpretation of situations and meaning according to players' views and experience" (Worch & Smith, 2010), based on their understanding of the genre, tone, and action within the space. Two different audience members may not come to the same conclusion, leading to an engaging experience, and compelling discussions. Game designers dedicate a large amount of their time toward creating spaces, and it is within the individual ideas that exist in the space that environmental storytelling takes place: "Every element of a game brims with narrative potential. The narrative components of a game are not just backstory and cutscenes. Any representational element can be a narrative descriptor... nothing is irrelevant: every piece helps tell the story" (Salen & Zimmerman, 2004, p.401). The worlds that players roam tell us even more about the story, they provide an atmosphere, an aesthetic, and through the context of the world we have a deeper understanding of the

story that the player is involved in. Worldbuilding makes it more interesting for the audience/participant as they are using their intuition to piece the information together: “Environmental storytelling relies on the player to associate disparate elements, interpreting them as a meaningful whole.” (Worch & Smith, 2010). This idea is prevalent in shows like *Then She Fell* by Third Rail Projects. *Then She Fell* is an immersive secondary world experience where exploration is the primary motivator in learning about the world and the story, using extranarrative details such as themed consumables, one-on-one encounters, and textual material. The combination of these disparate seemingly unrelated instances gives us the implication of a larger world.

Practically, we can see how the environment contributes to communicating the context of the narrative, but it also has another practical use in the form of telegraphing. Audience/participants are guided by the environment, shown hints of future events and things that lie just around the corner:

We concluded that game environments use player reference like signs and posters to communicate affordance. Signs are usually taken at face value. We’re more interested in weaving gameplay hints into the environment, creating a mini story that can be picked up by the observant player. But too often, these moments are simply there as backdrop, assembled at random. (Worch & Smith, 2010).

This “mini story” has affected the way in which the audience/participants react to the world and creates dynamic gameplay. This helps to create individual experiences rather than one shared experience. That move away from the collective experience into one that is more individual is something that shows like *Sleep No More* are missing, where the audience size can be relatively large, and the experience feels less personal due to the use of masks.

Interpretation is really at the heart of environmental storytelling. What is different with environmental storytelling compared to a traditional method of exposition is that it is active (Worch & Smith, 2010). This creates a psychological response with the audience/participant:

Swiss psychologist Jean Piaget showed that play, discovery and interaction are key to learning. This active approach to learning creates participations, which breeds investment. [...] “Active” also means that the story isn’t shoved down the players throat [...] This leads to a familiar world, which is self-reinforced, more complete, and more immersive (Worch & Smith, 2010).

The notion of being self-paced is particularly important because it highlights how the player is generating the emergent narrative rather than the audience/participant being guided through the experience. The involvement of the player generates immersivity, as the “player brings his own experience, so the act of interpretation gains personal meaning. The player is pulling the narrative which makes it self-paced, less expository” (Worch & Smith, 2010). If an audience/participant is led through the environment by a character or some other means, this creates a contract with the audience that the

experience is planned out, and every audience member has the same experience (Jenkins, 2004, p.123).

To summarize what environmental storytelling is, Smith states that it:

relies on the player to associate disparate elements, interpreting them as a meaningful whole. Fundamentally integrates player perception and active problem solving, which builds investment. Invites interpretation of situations and meaning according to players' views and experience. Can help the player navigate an area by telegraphing. (Worch & Smith, 2010)

Audiences are searching for secondary world experiences that are more compelling and engaging than the one before. In this regard the benefits of various channels of communication between academics and practitioners of different fields should appeal to those who wish to improve upon immersive experiences. Independent game designer Anthony Flack states:

All these diverse styles of image-making have one thing in common – they have the power to transport the viewer into a fantastical otherworld where the normal rules don't apply. It's like being offered a direct window into their creators' imagination. And in the case of computer games, it gets even more interesting because the audience actually has the opportunity to climb through the window and interact with this strange new world (in: Hartas & Morris, 2004, p.174).

Video Games are exceeding in diversification and development. The live event could benefit from development and diversification as well. This can be achieved through an understanding of how video games can help create a more dynamically immersive experience through the use of space, worldbuilding, environmental storytelling, and engagement with the audience/participant.

In terms of what theatre practitioners can use, video games can teach practitioners about alternative modes of interactivity, and how narrative can interlink with interactivity. The relationship between these two key features in video games has been developing rapidly alongside the evolution of computing technology. That means that the exploration of that relationship within gaming has been developing simultaneously with the evolution of the live immersive event. It could be remiss of theatre practitioners and scholars to dismiss what we can learn from this. Especially with the use of ideas like environmental storytelling, which translates so well to the live event (something which I will explore more in the next section) and works hand in hand with the core idea of worldbuilding. Once again, that self-paced, active participation of the audience within these secondary world experiences is equally important, and reflective of the ideas of absorption and transportation so prevalent in immersive theatre theory (Machon, 2013). Environmental storytelling has components of both absorption and transportation. It reflects the concept of transportation within immersive theatre in that the audience/participant is scenographically re-oriented in a new world. It reflects idea of absorption within immersive theatre as the audience/participant is actively engaging with extra-narrative

world material. As noted previously, the combination of these two ideals can create much more engaging immersive experiences. Because of this, it would be beneficial to immersive theatre practitioners to reconsider the relationship between the audience and the secondary world, and implement more environmental storytelling into immersive theatre productions, in to create richer more detailed worlds.

3.5 Summary of Part Three

Each of these mediums successfully use techniques to generate a sense of immersivity for their respective audience/participants. In books the reader has to build the environment in their imagination, through the narrative, its structure, and extranarrative material. By looking at why these narratological tools are so effective at harnessing the reader's attention it may be possible to improve the use of narratological tools used within immersive theatre design. In Video Games these environments are being created in a computer. In Theme Park attractions the theme-led notion of story means the primary focus is on the details of the environment. In an immersive theatre event, a practitioner would have to recognise the theme in order to create a consistent world that fulfils the parameters of the audience/participants expectation, whilst maintaining a convincing liveness. Worldbuilding is seen across all these mediums and could be used as a potential pathway into more detailed, engaging, immersive theatre experiences. Worldbuilding creates investment, interest, and engagement with the secondary world, which is explored by Mark Wolf. An understanding of how these mediums engage in worldbuilding and how that contributes to immersive practice could help to improve audience/participant engagement within immersive theatre productions. These ideas could be used to create much more detailed immersive theatre experiences, with a greater focus on storytelling. By conveying world information through the environment, the audience/participants would be brought deeper into the secondary world. Novels tell us that the narrative plays a crucial role in audience/participant investment and could be paid more mind within immersive theatre practice. Video games tell us about how we can use the environment to help the audience navigate the space, as well as ingratiate them within that space by giving them a role. Theme parks tell us that by relying on a theme we can create consistent secondary worlds. They also teach us to be considerate of what practitioners can and should place in the world in order to create a streamlined, budget-conscious immersive experience. All three of these mediums tell us that world information can saturate the audience's attention, creating a greater sense of immersivity and in-its-own-worldness. To be clear, these components are not entirely absent from immersive theatre practice, as they are used to varying degrees by different theatre companies such as Punchdrunk. However, there is a lack of focus on these ideas and practices which are crucial to the immersion of the audience/participant. As mentioned earlier, this is exemplified by the lack of academic texts that discuss the use of these ideas within theatre studies, as well as the inconsistent use of these tools in a practical context. With a greater focus on these practices practitioners can create consistent, and more engaging, productions. Moving into Part three, I will take this information and incorporate these ideas into specific components of immersive theatre practice.

4. Part Four: Building Immersive Worlds

In this section I will be examining how immersive theatre practitioners can incorporate aspects of worldbuilding from alternate mediums directly into immersive theatre practice. Books can teach practitioners about the complex use of narrative threads to create investment within the audience. Novels also rely on the audience/participants imagination, to construct and generate investment with the secondary world. Video Games can teach immersive theatre practitioners about the best way to construct worlds with the exploration, and engagement in mind. Theme Park designers focus on the notion of 'story', and the reliance on "theme", leaning on genre stereotypes to convey a compelling narrative experience.

In order to understand how these ideas can be transferred into immersive theatre practice, immersive theatre needs to be broken down into its functional design components. These elements can be used to identify how practitioners can adapt these techniques and philosophies for immersive theatre. These are the five key components highlighted at the end of part one. To recap, the five key components are intention and framing, space, design, narrative, and performances. These are influenced by Machon's typology for defining immersive experiences (Machon, 2013, p.93-100). In this section I will be exploring each in turn, opening up what they mean, as well as how these components can be affected by the immersive ideas found in the mediums explored in the previous section. The goal is to identify what transferable qualities could be taken from different mediums and breaking down these five key components will provide an accessible and practical perspective, as these components appear in all immersive theatre shows acting almost as a framework for the experience.

4.1 Intention and Framing

When discussing intention and framing I am talking about how the opening moments of the show will establish the world to the audience. The intention defines the story that it being told, in both a narrative and thematic sense. The frame defines what kind of show the production will be, including the level of interaction. "Most appreciators of the immersive form would probably accept that there are some shared qualities of experience and mutual aims in terms of the experiential live(d)ness of these events. Yet it is in the *intention* and *framing* of the particular acts of immersive theatre where the definitions may lie." (Machon, 2013, p.68). For example, in events like murder-mystery weekends, battle re-enactments, or spectatorial educational events "there is always a clear dividing line between fact and fiction" (Machon, 2013, p.69). Whereas events like "Punchdrunk Travel and Enrichment projects or WildWorks collaborations are *intended to be* wholly immersive, wholly artistic events, which aim to blur the boundaries of life and art, and are carefully constructed as such" (Machon, 2013, p.69). It is important to note that when I am discussing the frame, I am talking about it in a different fashion to Machon as I am focusing on the mechanics of the experience and how the intention and

framing are presented to the audience/participant. Machon has identified the goal of immersive performance as the audience being “imaginatively and scenographically reoriented in a new place” (2013, p.63). Knowing the intention of the show and how it is framed to the audience will help the practitioner establish what needs and requirements they have when designing and planning the immersive theatre experience. Ideas concerning scenographic re-orientation are especially important in theme park and game design and can be utilised in immersive theatre practice to improve upon the liveness, and ‘in-its-own-worldness’ of the experience.

The timid nature of the audience/participant cannot be underrated, which is what makes the framing so important: “We’ve all been educated to believe that theatre is a sacred art that should not be interrupted or disturbed and audience members unfamiliar with the way immersive theatre works tend to stick to that code of conduct” (Warren, 2017, p.20). It can be easy to tell the audience/participants that they can interact in a pre-show format, but practitioners need to be careful about disrupting the frame of the show. The best way to maintain immersion is by conveying the rules of interaction whilst the audience/participant is within the secondary world, rather than establishing the rules in the primary world. This is because to plant the audience/participant in the secondary world they need to be saturated with secondary world information. If the audience/participant is thinking back to a pamphlet, an email, or a briefing they received in the primary world then their focus will be drawn away from the secondary world. For example, in Hydrocracker and Blast Theory’s immersive show *OPERATION BLACK ANTLER* the audience/participant is “given a new identity as part of a small team and invited to assume the role of an undercover officer at a protest meeting” (Hydrocracker, 2021). *OPERATION BLACK ANTLER* does this well, by providing an in-role briefing in the initial phase of the show to inform the audience/participant on how to enact their role as an undercover officer. Taking ideas from games theory and practice could help break down the barrier between the apprehensive audience/participants and the immersive experience. The way that video games convey the mechanics of the experience, the basis for interactivity, is particularly helpful. This could result in more shows like *OPERATION BLACK ANTLER* where the boundaries between the primary and secondary world are somewhat blurred.

Although immersive theatre scholarship discusses framing, theory concerning secondary world boundaries is especially pertinent within game design. Game theorists like Markus Montola, and Jaakko Stenros, discuss the use of the metaphor “the Magic Circle”: “The metaphoric use of the magic circle [...] is a ritualistic and contractual boundary, which is most often based on a somewhat implicit agreement.” (Montola et al., 2009, p.10). This metaphor represents the contract between the participants. The framing defines how the audience will view the piece, defining the level of interactivity and investment: “The function of the isolating contractual barrier is to forbid the players from bringing external motivations and personal histories into the world of game and to forbid taking game events into the realm of ordinary life” (Montola et al., 2009, p.11). The frame establishes the connection between the audience/participant and the secondary world experience.

In the instance of *OPERATION BLACK ANTLER* the audience is placed into a realistic multi-space interactive environment and given the opportunity to participate through role-playing. The importance of the frame is that it establishes the distinctions between the primary and secondary world. When the audience/participant enters the world of *OPERATION BLACK ANTLER* they enter into a contract of participation where they inhabit the role of the undercover police officer. A contract of participation is an unwritten understanding of how an audience/participant will behave in the performance space.

The frame of the show is what defines the mode of interaction, representing “both an explicit and implicit relationship that is established between the performer and the audience, and which varies according to the overall frame” (Landman, 2013, p.3). A well-established frame will answer all the questions for the audience about how they should interact with the show. For example, whether they can talk to a performer or touch things in the space: “What games do best will almost certainly centre around their ability to give concrete shape to our memories and imaginings of the storyworld, creating an immersive environment we can wander through and interact with” (Jenkins, 2004, p.124). An effective game world is designed to saturate the player with world information and create elegant interactivity. *OPERATION BLACK ANTLER* achieves both of these things. The placement of the audience/participant within the role of an undercover police officer encourages them to pay attention to the world and interact with the characters of the world under the guise of gathering evidence.

An immersive theatre practitioner will need to establish the mechanics of the show, as well as the frame. Game design can teach immersive theatre practitioners about elegant solutions, and how to blend the boundaries between the primary and secondary world.

In the game design process, the game designer must select which aspects of the fictional world to actually implement in the game rules. The player then experiences the game as a two-way process where the fiction of the game cues him or her into understanding the rules of the game, and, again, the rules can cue the player to imagine the fictional world of the game (Juul, 2004, p.163).

The most elegant way of doing so is by incorporating the mechanics of the show into the audience’s opening interaction with the show. In Naughty Dog’s video game, ‘The Last of Us’ (2013) the teaching of core mechanics is integrated into the story. For example, when the mechanic is taught what makes the player character sprint it is preceded by a nearby explosion that the character must run away from, creating an in-world explanation for engaging with this mechanic. The elegant solution to teaching mechanics would be to integrate it into the experience: “Adding interactivity usually means adding choice for the user, the outcomes of which have some bearing on the future choices that the user will have to face later” (Wolf, 2012, p.377). This links back to ideas discussed in game and theme park design about the intersection of narrative and interactivity, resulting in an experience that both absorbs and transports. A practitioner will want to make the mechanics of interaction clear for the audience/participant, so they do not have any confusion about their contract with the show. In the show *Then She Fell* by Third Rail

Projects, the audience/participant is given a set of skeleton keys. This telegraphs to the audience/participant that they should interact with locked doors, chests, and cabinets, and are in turn rewarded for their exploration with extranarrative world information.

The audience needs to understand how they can engage with the work before than can participate in it, meaning that the rules and tools of interactivity need to be laid out before them for them to be able to participate effectively. In game design, these rules would be called the 'mechanics':

Game mechanics are often constructed in the following way: there is a challenge, the game provides options or possibilities to solve this task, and the players can decide or in other words: act. Players usually get stuck in this cycle until they solve the task. The game rewards or punishes their decisions. The players communicate via the interface system and are able to "act" via player (related) rules in the game. These rules include, for example, the avatar's space and range of possibilities. (Bauer, 2019, p.38)

Due to the lack of experience an audience/participant may have with immersive secondary world experiences, they also need to be able to feel comfortable when they are engaging with the immersive piece. This can be done by making them comfortable with the mechanics they are engaging in. Encouragement of the use of mechanics will be crucial, mainly because audiences are hardwired through years of experience to engage passively with live events (Warren, 2017, p.20). Practitioners should allow the audience/participants to operate instinctively once they have a grasp on what they can do in the environment.

The intention and framing of a show determine the level of interactivity in the audience/participants contract of participation, as well as establishing the basic premise of the secondary world. The frame of a show is the doorway into the production, making it a key component in terms of establishing interactivity. By examining the idea of intention and framing across these different mediums, practitioners can learn how to elegantly blend the mechanics of the performance into the experience, establishing modes of interaction in a way which does not break the boundaries of the performance.

4.2 Space

I will be discussing space through the lens of interactivity, and the use of space can alter how the audience interacts and moves through the world. The initial intuitive reactions of the audience are what will direct them through the space, and that means that the space needs to be taken into consideration during the initial stages of development. The first step in creating a Punchdrunk show according to Felix Barret, is to walk around the space, "attuning to its tempo and atmosphere" (Machon, 2018, p.266). Similarly, theme park and games designer Don Carson says the audience "will have to make decisions based on their relationship to the virtual world I have created, as well as their everyday knowledge of

the physical world. Most important of all, their experience is going to be a spatial one.” (2000). From these two approaches we can see that Barret, and by extension Punchdrunk, has a greater focus on aesthetic and mood, leading from the feelings related to the space, whereas Carson’s priority appears to be on the active engagement of the audience/participant. This explains why Carson has such a strong belief in worldbuilding and environmental storytelling as, through theme parks and video games, they are proven to be effective at engaging audience/participants in immersive secondary worlds.

The difference between space within immersive theatre events, and space within theme park and game design is that the environments within video games and theme parks are invented spaces, built by the practitioners, whereas immersive theatre experiences have a greater focus on finding pre-existing spaces and building the world around them. Due to this, within the process of creating a Punchdrunk show, that initial examination of the space is informed by intuition and emotion, “picking up on any core or implicit atmosphere or feelings generated by the space” (Machon, 2018, p.266). In contrast to this, the examination of the space is much more focused within theme park and video games practice because the spaces are built for a specific purpose. Theatre practitioners usually rely on borrowed spaces or older buildings. Some companies who create site-specific work like We Players find spaces that they can perform in without the need for altering the space too much. In contrast, an immersive theatre company like Punchdrunk will work hard to transform an existing space, imbuing it with aesthetic and secondary world details. Punchdrunk are already attempting to create transportive secondary world experiences, but their focus is too narrowly focused on aesthetics and intuition. Practitioners adapt their space to make sure that it makes sense within the narrative context of the piece, and find elegant solutions for when they do not have the desired space. Theme Park designers have to carefully select the ideas they use, because of both the budget and the space available (Carson, 2000). This means they have to make choices about what ideas will be most impactful in terms of affecting the audience/participants experience. No matter the space, practitioners will still be able to generate an evocation of the world through the use of extranarrative material and informed aesthetic choices. This exemplifies why it could be beneficial to look at worldbuilding in themed spaces and game spaces, especially considering that the discussion of space is crucial to understanding audience interaction. If the ‘frame’ is the boundary between the primary and secondary world, the ‘space’ is where the audience/participant exists within the secondary world.

How the audience/participant engages with the show is heavily influenced by the layout of the space, whether that be the size of the space, open or closed, or what entrances and exits are used. They all contribute to the intuitive responses of the audience/participants: “They will have to make decisions based on their relationship to the virtual world I have created, as well as their everyday knowledge of the physical world. Most important of all, their experience is going to be a spatial one.” (Carson, 2000). Different spaces affect the way audience/participants engage with interactivity, such as how architectural design used in video games can create the illusion of choice (Worch & Smith, 2010). However, it

also affects what details immersive theatre practitioners can put in the world, and how they can physically engage in worldbuilding. In a smaller, more confined space, the audience might feel more inclined to interact because they have a familiarity with the space. It also means putting more complex details in the space to give a larger sense of breadth to the world, with fewer opportunities for environmental storytelling, but a greater necessity for interaction within the space. For example, in 'Flight' by Darkfield, the audience/participant is placed within a 40ft long shipping container, and the interior is designed to look exactly like the inside of an Airbus 320 economy cabin. Darkfield uses the senses as well as extraneous world detail to enlarge the world they have created. In contrast, larger spaces invite more exploration, with greater opportunities for environmental storytelling. However, audience/participants may be less inclined to interact because of the lack of familiarity with different characters and different spaces. For example, in Punchdrunk's *Sleep No More*, the sets are much more minimalist, and exploration of multiple spaces is emphasised in favour of creating detailed spaces. To combat this, incrementally permitting the audience to do new things within the space in the opening parts of the show will help the audience to decide their own path and will help create an understanding of how much influence and freedom of exploration they have in the show. This harkens back to the Montola's discussion about blurring the boundaries of the primary and secondary world.

The narrative design of the space plays into this too, which is something I will be delving in deeper within the design section. As previously mentioned, environmental storytelling has a navigational purpose as well as a storytelling purpose, creating invitations for adventure and exploration. Punchdrunk does do this to a degree, but instead of creating these details there is a preference for finding details that already exist in the space and imbuing them with purpose (Machon, 2018, p.266). Environmental storytelling can be an extremely effective tool used to telegraph directions and provide an idea of what may be occurring if the audience/participant chooses that path: "Use your regions effectively and make it clear that action is always happening elsewhere"(Warren, 2017, p.59). These invitations act as a microcosm of the story you are embarking on, like a teaser. Once the audience/participant know how to engage with the space, practitioners can pull them through the space using engaging extra-narrative material: "Interaction within and with a space is the means by which space is best understood [...] as spatial design is an indication of movement options and is typically the basis for the indication of interactive possibilities"(Wolf, 2011, p.18-19) Immersive theatre practitioners have the ability to manipulate the space to take them where they want them to go or invite them to explore as much as they want.

The audience/participant experience is a spatial one, which means that design choices have to be made about what the most impactful ideas are that can be used in the space. The space can also assist in navigation, to place where the audience/participant is within the secondary world, and to create interactions and engagement using environmental storytelling. The use of environmental storytelling, and the promotion of interaction through the use of space all further the ultimate goal of immersive theatre, especially in

relation to those key ideas of transportation and absorption. These ideas then carry over to the design of the space, and the extranarrative world details that imbue the space with a sense of in-its-own-worldness, something I will discuss more in the following sections.

Using these concepts, the practitioner can create a sense of liveness and exploration that is paramount to building immersive worlds. The audience/participant will physically engage with the space; encouraged to talk to others in the secondary world, participate in the action of the show, and make choices, bringing them deeper into the world. Practitioners will have successfully designed something that tells people who they can speak to, what areas they can and cannot go to, and what elements of the space they can interact with; ideas which would be greatly beneficial to an immersive theatre practitioner.

4.3 Design

When discussing design, I am talking specifically about the appearance of the show, and the sound. For example, costume and lighting are included in this section. Immersive theatre scholarship is sporadic in terms of which ideas generate immersivity whereas theme park and video game designers have a much more focused idea of how to create immersive experiences. Video game practices can teach immersive theatre that “Space itself can convey meaning albeit in a supportive rather than primary role”(Goins, 2018, p.265). The design elements chosen to create the aesthetic and appearance of the show should be loaded with purpose, to relay the context of the world to the audience, convey story and character, and to support the narrative.

Modern video game developers can create detailed environments that reflect the narrative content of the world. Worldbuilding is incorporated into the design of these worlds in order to provide them with a more convincing ‘in-its-own-worldness’, regardless of their themes, narrative, or content. For example, the city Los Santos in *Grand Theft Auto V* is an intentional reflection of modern-day Los Angeles. This is a good example of a secondary world with a lot of similarities to our primary world, which makes it easier for the player to become invested. However, Los Santos is an exaggerated version of Los Angeles with exaggerated characters, reflecting the thematic content of the world. Supporting characters in *GTAV* are melodramatic caricatures, and the action the player takes part in is violent and excessive. In turn this is reflected by the environment, the indulgent vastness of the landscape, and the sprawling skylines. A gun range exists around every other corner and there are plenty of garages to customise vehicles. This is supported by the graffiti under the bridge, the street performers, the radio stations, and any other details which make the world feel larger, convincing the player of its reality: “Environmental storytelling is not about being as realistic as possible with your game, but grounding it within its own fiction”(Bycer, 2019). Compared to video games, theme park attractions do a good job of working within the practical constraints of a live medium. Theme parks and immersive theatre both have to wrestle with the constraints of creating

a live event which includes the budget, the available space, and the design of the space such as lighting, sound, and costuming, as well as extranarrative material (Carson, 2000). The design of the environment reflects and supports the secondary world, saturating the audience/participant, so the experience provides a more intense state of immersivity. The process of saturation takes place when the audience/participant is so overwhelmed by information that it drowns out the primary world: “If we use more energy and excitation in one prefrontal function, following the play or story, we have less energy available for other prefrontal functions, like paying attention to our bodies or to the [primary] world around that play or story” (2009, p.48). This is how audience/participants are conceptually immersed, and how the imagination is enveloped by extraneous world details (Wolf, 2012, p.377). Once the immersive theatre practitioner has created enough information for the audience to pick up then the process of saturation begins.

In the instance of design, immersive theatre company Punchdrunk has played a fundamental role in cementing immersive theatre shows as a form that relies on the design and aesthetic of the performance space. According to Punchdrunk’s founder and artistic director Felix Barret “it is through the design process that ‘the emotional analysis of the text’ is manifested.” (Machon, 2018, p.79). In this, he is referring to how the natural flow of the environment unlocks themes and ideas from the source material. The details of the secondary world represent the themes as well as the larger world. After the use of space is considered “the set construction, installation and sound are then at the heart of that design, and then costume and lighting are then detailed layers on top of that” (Machon, 2018, p.80). In *Sleep No More*, Punchdrunk uses minimalistic design choices to reflect the narrative and the themes of the world. The design of the show uses the environment to reinforce the narrative thread, as well as using surrealist elements to create a sense of otherworldliness. There are detailed environments such as an entire high street including a mortician, a tailor, and a confectioner. However, *Sleep No More*, aside from occasional one-on-one encounters, offers little in terms of extranarrative material. Whilst these environments are very well detailed, the details that inhabit the space are not imbued with meaning. For example, an audience/participant could explore the lunatic asylum portion of *Sleep No More* but they may not be able to find out information that makes the world appear larger than what the scenographic environments imply, and there are no patients in there for the audience/participant to interact with. Given that the design of the space is already key in the development of a Punchdrunk show, an increase in the use of environmental storytelling could play a larger role in creating a sense of ‘in-its-own-worldness’. This harkens back to what Mark Wolf says about ‘story’, and how the design choices practitioners make should “provide background richness and verisimilitude to the imaginary world” (Wolf, 2012, p.2).

The design of the space is where worldbuilding and environmental storytelling can be found: “These items are set dressing for the narrative paths that players follow, but they are also powerfully illuminating artifacts that shed light on all manner of incidental features, at least for anyone keen enough to spot them.” (Lawardorn, 2020). The audience

can infer and determine ideas about the world which otherwise would have gone unnoticed. These ideas stem from theme park practices that focus on liveness and ‘in-its-own-worldness’. Immersive theatre practitioners are ideally trying to make the audience participate intuitively to generate investment in the immersive world. The ideas discussed earlier about cause and effect evidence how individual components coalesce to create an impression of the world at large, give the secondary world a mythology, and provide context. If the secondary world appears lived in, as if it can exist without the presence of the audience, that will draw the audience/participant deeper into the secondary world. The design is where the individual parts of the show come together to create depth and nuance, and worldbuilding could elevate a show like *Sleep No More* beyond its aesthetic focus.

Costume design is an important aspect of creating the in-its-own-worldness that is important to the overall aesthetic experience, “in a Punchdrunk landscape costume is either an extension of design or an extension of performer” (Felix Barret as cited in Machon, 2018, p.67). In Disney theme parks, walk around characters exist to give children the otherworldly experience of being able to see the characters they love from their favourite movies in real life. This is a form of worldbuilding; theme parks use costuming to enhance engagement with secondary world material and make the world more believable. Immersive theatre practitioners need the space to be inhabited by characters from this secondary world, and appropriate attire that reflects the larger themes of the world will promote engagement. It may also be a good to consider the idea of giving the audience/participants costume as well. Like many productions, in Punchdrunk’s *Sleep No More* they provided masks to help with the immersive component of the show. In this particular instance Gareth White says the use of masks “makes the masked figure part of the action whether they are active or not” (White, p.225-226). White also notes that “there are contradictory licences and inhibitions that come with this mask” (White, p.225). However, in *Sleep No More* “The mask affects how participants attend to each other or do not, and how they bring their colleagues into their frame of perception” (White, p.225). Also “by removing our co-spectators from our vision, Punchdrunk disrupt our identification with the crowd, and facilitate a more immersive and less performative experience” (White, p.225). Costuming the audience/participant will give them confidence to engage in the show. The use of masks, whilst not always appropriate, had a great effect on how the audience felt and made them more attuned to the secondary world.

Lighting in *Sleep No More* is used to great affect and follows similar principles to how theme park and video game designers use lighting, “to control the audience, to hold the performers or the crowd back or guide it through” (Felix Barret as cited in Machon, 2018, p.167). Lighting can be incorporated into environmental storytelling, and it can be used for the purposes of telegraphing as well as promoting interaction. Firstly, it can be used to point the audience in different directions, highlighting key parts of the set as well as establishing boundaries within the space without the need for physical barriers. In Punchdrunk shows the use of smart candles are applied for the purpose of “highlighting

points that we want to make the audience aware of and to draw audience through the space – a candle in the far corner – testing how far you can make the audience journey solely through light” (Livi Vaughan as cited in Machon, 2018, p.168). In this instance worldbuilding and lighting are working together, by using the lighting to draw the focus of the audience/participants attention to an extranarrative world detail. Immersive theatre practitioners can also create different levels of depth with lighting, making a space look smaller or larger, or to frame a particular part of the set and/or to highlight a performance space. Jason Warren when discussing the use of light to create boundaries said that “the light boundary redefined the space totally” (Warren, 2017, p.31). In contrast, if the space is well lit the audience will feel more comfortable to navigate and branch out across the space. This will create the opposite effect if practitioners dim the space or use specific focused lighting.

Sound can be used as a worldbuilding device; theme parks use sound to create depth in the environment. Sound design is one of the key components in sensual immersion. Secondary worlds can become surprisingly convincing if the sound design is given plenty of care and attention: “an audio-enhanced immersive experience can define the world that you exist within” (Machon, 2013, p.95). If the audience is presented a carnival setting, the audience will not be convinced if the sounds of the carnival only appear to stretch to the end of the room; the audience/participant need to be able to hear fireworks in the distance and the distant sound of partygoers enjoying their night, beyond what is happening in their field of vision. In *Sleep No More* for example, the soundscape presented to the audience consisted of a loop of orchestrated intervals but intertwined within the music were sounds like “the crackle of a record player, a ticking clock, ambient atmosphere and a deep, bass pedal note” (Machon, 2018, p.263). Creative Director Stephen Dobbie says “it wasn’t soundtrack as background accompaniment as the overt manipulator of audience. Despite it being abstracted the sound held them back, stifled them, made them nervous, or run to something. What was impactful was the sheer control that came from the sound.” (in: Machon, 2018, p.263)

Worldbuilding techniques mix together ideas concerning scenography and the active participation of the audience. The design choices and the worldbuilding provide a richness and a clarity to the world that would not have necessarily existed in a non-interactive medium, or a typically linear narrative experience. Worldbuilding’s central purpose is to create details, and through these details we can create a greater sense of engagement in the secondary world experience. The combination of these design elements can all work together toward saturating the audience with secondary world details, conceptually immersing them in the experience. The design of the secondary world convinces the audience/participant of its reality. The storyworld provides the backbone for the narrative, and this is reflected through the design choices, such as in *Sleep No More*. However, an exploratory scenographically heavy show like *Sleep No More* could be improved through the use of worldbuilding techniques. Environmental storytelling enhances the narrative and telegraphs events to the audience/participant using their intuition coupled with the mini stories found within the environment.

Costume, for the performers and the audience/participant, adds to the in-its-own-worldness, and it draws the audience/participants deeper into the world. Sound contributes to the landscape of the secondary world, creating a sense that there is more to this world than what appears, whilst also creating mood. Lighting also creates mood, but also can be used for the sake of navigation and highlighting specific spaces and objects. Each individual component of design plays a small yet crucial role in worldbuilding, each one contributing to the shows 'in-its-own-worldness', promoting interactivity, and creating a more meaningful absorptive and transportive secondary world experiences.

4.4 Narrative

Narrative is a tool that generates investment in the storyworld, provides the intensifier for drama, and creates empathy for the characters that inhabit the storyworld. Narrative drives exploration and pushes the protagonist from place to place in search of something. In the 'Lord of the Rings' trilogy Frodo is incentivised to travel across Middle Earth to take the one ring to Mordor and save the world from the evil Sauron. This is reflective of how theme park and video games apply narrative practice to improve immersivity. Narrative provides the audience/participant with a reason to explore with a clear purpose:

We can broadly define narrative as a series of events which are causally connected, and narrative units as the events themselves. [...] Such a chain of events, often referred to as a narrative thread, typically revolves around the experiences of a particular character, place, or even an inanimate object (Wolf, 2012, p.199).

Dramatic structure creates empathy for the characters and gives the audience someone to route for (or to route against). The audience's emotions are tied to the characters. In video games there is no requirement for narrative, you can have a satisfying gaming experience purely through mastering the mechanical elements, or through a sense of competition:

Many games separate their mechanics and narratives in such a way that they can exist without one another: the story is ultimately a backdrop for game mechanics [...] More powerful are games whose mechanics are an essential part of their narrative experience (Totten, 2014, p.272).

However, without narrative, there is little incentive to keep watching, playing, and/or interacting aside from the mechanical elements. There is nothing wrong with creating a secondary world without any narrative aspirations. For example, *Overwatch* is a multiplayer first person experience characterized by its various unique mechanics. This is different for immersive theatre though; the interactivity is present but without narrative there is no incentive to explore after any sense of curiosity about the world has dissipated: "You'll need to make sure the experience you're offering is fulfilling, and never dull enough that the audience start looking to create their own opportunities for

exploration” (Warren, 2017, p.xii). Exploring the narrative provides an engagement with the audience/participants imagination and creates active participation, with the audience/participant acting as the co-designer (Frieze, 2016, p.27). As the audience/participant play an active role in the construction of the narrative it creates a distinction between immersive theatre and promenade theatre, as the audience/participant are drawn into the secondary world, instead of observing the action.

The audience will want to discover more about the world if they have a narrative incentive to discover the motivations behind the action. For example, *Crooks 1926* by COLAB Theatre manages to balance interactivity and narratology very well. The show is centred around an East End gang, set in the 1920's. Two young men, faced with the death of their father (the former gang leader), must carry on his legacy and lead the gang, staving off rivals who wish to take charge of London's criminal underworld. The audience/participant is tasked with assisting the gang in a variety of ways. In this instance the audience/participant is presented with a narrative hook and a cast of characters. The environment telegraphs world information and embeds them in the world, but when they are invited to participate they are incentivized by the narrative to do so, which assists in engaging the audience. Engaging the audience at the start may be difficult, and providing the audience/participant with a forced choice may be detrimental because it may expose the mechanics of the show:

The most elegant option is the implied choice. [...] A Forced Choice will present options, and the audience picks from them. It's a multiple-choice question, with little scope for creativity. An implied choice is a free-form question, as you haven't explicitly laid out their options before them. (Warren, 2017, p.92).

This keeps the illusion of the secondary world intact and engages the audience/participant. With *Crooks 1926* the audience/participant is presented with a plethora of opportunities to engage in the show, and they can engage in the show however they wish. The audience/participant is more likely to be active in engaging with the secondary world because they have been placed in a role and are engaged in the narrative thread. Gareth White, when discussing *Sleep No More* says: “The spectator has to choose tactics for discovering the performance - following characters as they make their journeys, attempting to follow the action of the play, if it is familiar, or staying in one spot to see what will develop there.” (White, p. 220-221). If the audience/participant experiences the struggles of the storyworld characters they may feel motivated to understand why. In this way the audience/participant is interacting with the secondary world, and through their active participation they are being drawn deeper into the experience.

Due to the interactive nature of the experience the characters can give audience members a purpose by sending them on their own quest or errand. In *Crooks 1926* this is the role of the gang member. This will roll into creating a chain of events that the audience/participant could not have anticipated but are now directly involved in, creating an emergent narrative:

Worlds are built up as more and more stories are sent in them, and if a world's consistency is to be maintained, each additional story to be added to a world must take into account all of the narrative material already present in the world. Often stories are related chronologically to each other and can be arranged in sequence, fitting together the stories' events on the timelines of the world. Additional stories can recontextualize the works that appear before them: new information can change our frame of reference; characters can be revealed to have different motivations or even be lying; and different point of view can change how we understand characters and story events (Wolf, 2012, p.205).

The idea of cause and effect is useful because the audience/participant can see the world's recent history and give the audience the idea of what opposing forces operate in the world. In *Crooks 1926* the audience/participant is dropped straight into the middle of the action. The death of the gang leader Robert has already occurred, and the inciting incident occurs when an opposing gang leader demands that apparent debts need to be repaid. Here we see what has come before and the result of that event. Worldbuilding can highlight the themes of the story by creating mini stories which reflect the overarching narrative. Vignettes also happen as a result of the larger overarching story so the interaction the audience/participant creates a unique interaction with the embedded narrative. Embedded narrative is the story that is foundational in the immersive piece and will occur every time the show is performed (Jenkins, 2004, p.126). Whereas emergent narrative is the story that the audience/participant takes away with them, what their individual experience was, and what they will probably talk about the most when they exit the show, due to the uniqueness of the interaction (Jenkins, 2004, p.128).

Narrative can be an important tool in developing a richer secondary world experiences. Ideally practitioners might want the narrative to have the depth and complexity within the characters and the world. The storyworld should follow multiple strands of narrative that coalesce to create a climactic moment:

[Many stories] bring together multiple narrative threads which run concurrently, with events that happen simultaneously in multiple threads. As multiple threads share the same diegetic materials, themes, or events, the individual threads can become tightly woven together into what we might call narrative braids. [...] As more information is added, the narrative material of the world grows more complex than that of a set of braids, and becomes what we might call a narrative fabric (Wolf, 2012, p.199-200).

The audience/participant should be able to interact with a character in the world and have some interaction with the embedded narrative. In *Crooks 1926* there are multiple narrative threads that can be followed, created by elegant choices that the audience/participant made. The audience/participant can broker alliances or orchestrate territorial takeovers, ultimately influencing the narrative arch of the show. Each audience/participant plays a role in the narrative fabric of the show. These are ideas present in books, theme park attractions, and video games.

Ideally, the 'story' is constantly reinforced by the thematic components of the space and environmental storytelling. In theme attractions you are carried through the storyworld and are presented with the thematic components of story, creating a certain level of investment. In theatre not only does the thematic essence of the storyworld need to be captured, but complexity through the narrative needs to be presented. Narrative arcs give characters depth and underpin their reasoning and purpose:

To be effective, a Living Character should be given a well-written Narrative Thrust. This is made up of two elements. First, their arc; a compelling story that the audience can uncover by communicating with them. By the end of their time with the characters, audience members should feel like they've discovered a truly fascinating plot-line that would otherwise have stayed hidden. Secondly, their function. This is the purpose they serve you as a theatre-maker, what they bring to the expanded world that can't be achieved through static means. (Warren, 2017, p.143).

This will give the characters a realness that you will not find in theme park attractions. As the audience/participant spends time in the storyworld their investment in it will grow. In *Crooks 1926* the world is populated by fully developed characters to interact with including criminal contacts and bookies, as well as more supportive characters like 'Alice Diamond' played by Holli Dillon. The narrative creates interesting characters, and the characters generate investment in the world. This is then enhanced by worldbuilding techniques due the audience/participants active participation in the immersive experience. The audience/participant may only have a couple of hours to spend in this world, so engaging the audience and providing depth to the characters will go far.

In immersive theatre theory there is a lot of discussion about the environment and the scenography, but not necessarily how the narrative can work with the environment. The contribution of these ideas in a practical theatre setting might be particularly useful due to the apparent lack of engagement of narrative theory within immersive scholarship and terminology. Even the relationship that immersive theatre scholarship has with worldbuilding, which at its core is a narratological tool, seems to be lacking in quite a few texts. The idea that characters provide additional world information, create depth, as well as form relationship is particularly useful in an immersive experience. This is evidenced by immersive shows like *Crooks 1926* or *OPERATION BLACK ANTLER* which do have a greater focus on using narratological tools to pull the audience/participant deeper into the experience. Narrative incentivises the audience, promotes exploration, creates diverging embedded and emergent narratives, and creates investment in the secondary world.

4.5 Performers

Good actors, good execution of writing, and convincing expression of body and voice, have an impact on the rest of the show. For Immersive Theatre, some components of rehearsal

and play may be the same, while others may be very different, for example, in a larger cast: “If your named parts need to be constantly ready for the next scene, who are the audience interacting with?”(Warren, 2017, p.113). Characters within the space create lived-in environments. The cast needs to be actively aware of the interactive nature of the performance: “You’re looking for artists who revel in the chaotic nature of this role, but who can also keep a close eye on the progress of the play as a whole.”(Warren, 2017, p.114). The performers are the interactive catalyst that will make the audience invested in this world, and without good characters you cannot have good drama nor convincing interactivity.

At this point I believe it is important to comment on the importance of the NPC, a term which means non-player-character. This term is used in video games, live-action-roleplaying-games (LARP’s), and other role-playing-games (RPG’s). An NPC is everybody who appears in a game that is not a playable character. Günter Hack says the NPC performs its role “shaping interaction between the user and the rest of the game mechanics”(2019, p.293) and that “they are always an integral part of the system, driving the narrative and producing options” (2019, p.293). There are different levels of engagement when it comes to the NPC in video games, dependant on how they have been programmed. In *Grand Theft Auto* an NPC is not capable of interaction with the player but will react to their violent actions in the form of running and/or screaming. In *Fallout* (1997-2018), there are plenty of pre-scripted dialogue options and you can have conversations with a plethora of supporting characters. How NPC’s work in video games is slightly different than in other RPG’s. Other RPG’s, such as *Dungeons and Dragons*, involve human interaction and have the benefit of improvisation. I want to take the treatment of the NPC and apply it to immersive theatre practice. The NPC is limited by the practical constraints posed by their programming, restricted to only speaking specific lines, and enacting specific actions. They play a supportive role in the world, to facilitate the player. They can lead the player through or to locations, give players information pertinent to the story or storyworld, trade or sell goods to the player, or exist with no purpose other than to make the world seem fuller.

If practitioners are incorporating how interactivity happens between the cast and the audience from video games or from theme parks, they need to start thinking differently about what kind of rehearsal an immersive theatre cast needs, in comparison to a traditional theatre setting. For example, *Any One Thing’s Souvenir* takes place in real people’s homes under the guise of a surprise 30th birthday party, and the actors probe the social media of the audience/participants in order to behave like they know them personally. This show mixes pre-rehearsed scenes with improvised moments in order to create a convincing liveness. In this instance, and in regard to other shows which have a mix of improvised and rehearsed scenes like *Crooks 1926*, the rehearsal process is very different. Jason Warren is an excellent source here as he is one of very few, if not the only one, to look at performance and rehearsal in immersive work. Warren discusses the idea of the autonomous company:

An autonomous company is one where everybody involved in the piece is capable of working to improve the play without permanent oversight from a director. There simply isn't enough time for one person to be intimately involved in every second of every bit of rehearsed work. Therefore, we should aim to build an autonomous company and let them loose (2017, p.118).

This is a practical way of thinking when it comes to rehearsing for an interactive and exploratory immersive event, and these principles are intended to assist in an immersive events where the action is not static, and there are multiple possibilities.

Generally speaking, when rehearsing for a play, the actor will know their role extremely well. In these immersive experiences it is also necessary to understand all of the periphery characters well too. The cast need to understand which characters oppose them, who will help them, and they need to understand how those characters will react to certain situations. The characteristics of characters help to define the apparent 'in-its-own-worldness' and generate a sense of liveness. In *Souvenir* they take this a whole step further by ingratiating themselves within the lives of the audience/participants, treating them as characters in the world. When the characters in *Souvenir* engage with the audience/participant, they are absorbing them into the world of the show. The actors will also need to know what different characters knows about the storyworld. This is because immersive theatre practitioners want to give the audience/participants something reliably interactive. This links back to the discussion of how 'living characters' support the narrative by adding to the world, however they can also create a link between the audience/participant and the world through their interaction: "Living characters give the audience a true two-way communication with the expanded world. They may enter conversation with characters who respond to their questions. Living characters are the embodiment of our immersive ideas liberated from the performance space." (Warren, 2017, p.153). If the audience/participant asks an actor a question about the storyworld then the actor needs to be prepared to respond realistically for the situation. In *Souvenir* for example, if an audience/participant broaches the subject of how the actor knows them so well, they have a prepared response because they will have done the research about the people within the space.

The difference between an NPC and what actors may do in current immersive theatre practice is that NPC's serve supporting roles as they "are the most important interfaces to a game or a gamified system" (Hack, 2019, p.297). In Immersive Theatre, you will follow a particular character or set of characters, participating in their world to varying degrees of immersivity. In immersive theatre practice the audience/participant is given the illusion of choice compared to video games, where the player's choices may move the story forward. The player of the game does not know what their goals are when entering the game. It is the role of the supporting characters, the NPC's, to define what their role is, and give them the tools to enact this role. In an audience/participant led performance, they need to be taught how to interact so they feel their impact on the piece without creating chaos: "Issues like this are potentially show-breaking and are, I suspect, a large

part of why many immersive productions dilute their level of real interaction.”(Warren, 2017, p.94) In *OPERATION BLACK ANTLER* an NPC in the role of a police officer briefs the audience/participant on how to enact their role. In *Then She Fell* an NPC provides the audience/participant with the skeleton keys which they will use to explore the space. In immersive theatre it should be the role of the cast to hand the audience a role and give them the tools and understanding to operate within this particular secondary world. To be able to do this effectively immersive theatre practitioners could use Warren’s concept of the autonomous company:

Every cast is different, but there are several unifying traits all actors in this style of troupe share. The autonomous company:

- Understand and agrees on the end goal of the piece.
- Works efficiently.
- Gets ideas on their feet as soon as possible, rather than getting bogged down in table discussion.
- Ruthlessly dissects their work after it’s been on its feet.
- Isn’t precious about ideas and can accept a cut and move on. (2017, p.118)

This way every member of the company has a shared understanding of what the endgame of the show is and feel comfortable improvising. This strengthens the ‘in-its-own-worldness’, the liveness, and the narrative fabric, whilst being led by the audience/participant. This is an elegant solution to defining the mechanics of the interaction, improving the absorption of the audience in the immersive experience. Warren’s ideas provide a practical perspective on how to develop living characters for an immersive theatre production, which does not seem to get touched upon often in immersive theatre scholarship. These ideas reflect the practical value of the NPC.

As a way of simplifying immersive theatre rehearsals Warren proposes the two-strand rehearsal process: “The two-strand rehearsal is a method designed to keep the different demands of your process distinct, allowing you to keep track of what exactly has been done.” (2017, p.119) The “two-strand rehearsal” splits the interactive and the non-interactive components of the rehearsal, making it easier to focus on each part: “The concrete rehearsals deal with the static elements of the production”(Warren, 2017, p.119). This strand focuses on what is set in stone, what is scripted, and choreographed. In *Souvenir* these are the pre-scripted moments of drama that further the narrative thread. Whilst the concrete rehearsal strand is focused on what is certain, “the Interactive strand is based around things that are more intangible”(Warren, 2017, p.119). This is about compensating for the cast’s interactions with the audience, and what could potentially happen within the space, promoting active engagement in the secondary world. In *Souvenir* these are the improvised interactions the cast has with the audience/participants. This strategy makes building the immersive event much easier,

creating clarity, and making it easier to manage the cast: “in the early phases of rehearsal, it’s helpful to keep them separate. That way, you can merge them later on when both have some kind of structure and form.”(Warren, 2017, p.119). If the cast are working with the principles of the autonomous company as well, this should make things much more practically simplistic, allowing the director to focus on individual crucial components, like design elements of the space, as well as saving time and energy.

The autonomous cast, and the two-strand rehearsal help solve the problems of mistiming, missing cast, and missing audience members in immersive theatre productions. Warren’s principles are useful across the board for immersive performance. Everything in this performance section has been about the most practically streamlined way to develop the immersive cast based on the ideals of the treatment of characters in video games and theme parks.

4.6 Summary of Part Four

By breaking down Immersive Theatre into these design components practitioners can potentially create a sense of transferability between these different mediums. This could result in the application of practical tools that immersive theatre practitioners can use. Practitioners can approach the transferability of these concepts by breaking immersive theatre into its basic design components.

Ideally, the audience is taught the mechanics through the framing and interactions with NPC’s. Framing is a concept discussed regularly by practitioners across multiple mediums. Through the use of the frame the audience can be taught how they interact. As Warren comments, the dynamic integration of the mechanics creates an elegant introduction into the experience.

The design of the space can promote interaction and movement. As within a Punchdrunk show for example, the goal is to create an environment where the audience feels compelled to move through the environment and is presented with interactive possibilities. As determined by Carson, the design should be loaded with purpose, supporting the narrative with context and “mini stories” that provide the world with an appearance of liveness. Set design, lighting, costume, and sound are all included in this umbrella. Each contributes to the holistic design of the show. As inferred by Wolf, they all combine to saturate the audience/participant with secondary world details.

Narrative is the intensifier of events. The audience/participant can follow a strand or multiple strands that coalesce to come to a climax. The focus on Mark Wolf’s commentary in this section highlights the importance of narrative content within immersive theatre productions, as it inherently provides investment in the secondary world. Narrative also provides incentive for exploration. Worldbuilding can contribute to the narrative through presenting contextual information and details.

Performances in immersive theatre could take influence from the NPC with pre-determined responses based on the interaction they have with the audience/participant. They can provide information to the audience/participant and contribute to the story. Additionally, the 'two-strand rehearsal' can enhance the casts ability to improvise and interact. These ideas contribute to the sensation of inclusivity, embedding and "immersing" the audience participant in the secondary world experience.

5. Part Five: Conclusion

Immersive theatre focuses on embedding the audience within a secondary world experience. There are a wide range of experiences that fall under the 'immersive' banner, and range from participatory, choice-oriented shows to exploratory scenographic-oriented shows. This is exemplified by Machon's 'scale of immersivity'. Some problems concerning immersive theatre have arisen due to the many interpretations of the term as many definitions use metaphoric language to describe the sensation of the experience. In other definitions there is an emphasis on the use of the environment over the necessity to draw the audience/participant into the otherworldly experience. Coinciding with this, the popularity of the term has led to the mislabeling of productions, for the benefit of monetary gain. This has resulted in many productions using the "immersive theatre" label which do not follow many or any defining immersive theatre traits. Immersive theatre productions operate by embedding the audience/participant within the experience, but some shows use the term to define a purely visceral scenographically oriented production that takes place in a non-traditional theatre setting.

Due to the fluctuating nature of immersive theatre terminology, immersive theatre scholarship could benefit from a greater focus on practical tools that focus on both transporting the audience/participant scenographically, as well as absorbing them into the world through their active participation. Worldbuilding is a tool that could help in this regard. Worldbuilding is about providing extranarrative material that provides details which help enhance the 'in-its-own-worldness' of the production. As well as this, worldbuilding saturates the audience/participant with world details. Worldbuilding is used across many different mediums. However, this thesis has a specific focus on worldbuilding in books, video games, and theme park attractions. Books use the active participation of the reader to engage with their imagination. The reader is conceptually immersed, saturated through extra-narrative details and complex narrative fabric. Video games also use extra-narrative material. However, this is incorporated into a self-paced participatory experience. Video games also use environmental storytelling as a way to provide world information, telegraph events, and provide navigation. These video game principles are shared by theme park designers. Theme parks have the benefit of being a live event, like an immersive theatre experience. This can teach immersive theatre practitioners about the constraints of building physical secondary world experiences.

Whilst not entirely absent, the following worldbuilding concepts could have greater focus within immersive theatre practice. To examine these principles, it would be beneficial to break down immersive theatre practice into its design components. These components are intention and framing, space, design, narrative, and performances, and are influenced by Machon's defining key ideas within immersive theatre practice. In terms of intention and framing, video games and theme parks could teach immersive theatre practitioners about how to find elegant solutions to convey the mechanics of the experience to the audience/participant. They do this to actively blend the boundaries between the primary and secondary world experience. Video game and theme parks use the architectural

design of the space to assist navigation, which is another element that could be incorporated into immersive theatre practice. Additionally, they use space as well as the design of the space to promote interaction and liveness. These mediums incorporate environmental storytelling into the design of the experience to both absorb and transport the audience/participant, which are key principles in immersive theatre experiences. They do this by saturating the audience participant with narrative and extra-narrative details. Narrative is an underrated part of immersive theatre productions, as it incentivizes exploration as well as saturating the audience/participant. The performances of the cast help create a convincing in-its-own-worldness. For this reason, it might be beneficial for the treatment of performers to adopt an NPC-style design in immersive theatre practice. This can be done by incorporating ideas from Warren's autonomous cast. As demonstrated, there are a plethora of ideas in novels, theme park attractions and video games that can be applied to immersive theatre. This would be useful in creating a greater practical and focused understanding of immersive theatre terminology.

This research demonstrates that there is room for both clarification and growth in immersive theatre scholarship and practice. Immersive theatre is still relatively new, and the next steps for the form could be to iron out the terminology to give it a more practical substantial meaning. As demonstrated, this could take this form of incorporating concepts from other mediums and applying them to immersive theatre practice. In terms of this research specifically, these ideas need to be tested and workshopped by implementing the concepts I have identified into immersive theatre practice.

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