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Audience behavior in immersive theatre: an environment-behavior studies analysis of Punchdrunk's *Sleep No More*

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ABSTRACT

Place can shape and influence audience behavior during a performance. This is especially noticeable in the site-specific immersive theatre model, where the performance occurs in a non-theatre setting and audiences have an active role. In this article, we argue that 'place schema' – a term from the interdisciplinary field of environment-behavior studies – provides a conceptual framework for better understanding audience behavior within immersive theatre environments. We know how to behave in a theatre building because we have codified experiences regarding the environment in our minds called place schemata. They help us process spatial information, predict what is likely to happen, and decide how to take action accordingly. However, if this spatial information does not match the 'theatre schema' we have in our minds, as is often the case in an immersive theatre setting, we would need to update our existing schema. In this article, we examine Punchdrunk's *Sleep No More* (2011 New York production, which is still running) to evaluate how audiences carry the behavioral rules of traditional theatre schema into immersive theatres and consider how expectations, roles, and rules of place influence the relationship between the audience and setting.

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Introduction

As Dorita Hannah (2011, 54) argued, place, even an empty one, always performs. Therefore, it cannot be thought of as a passive factor in any activity. In terms of theatrical experience, place affects how audiences feel and behave during a performance. This, arguably, becomes more starkly realized in immersive theatre performances in non-theatre spaces, when there is a clear invitation (or encouragement) for audiences to take an active and exploratory role in the performance environment. Audiences may know how to behave in a traditional theatre building – a space in which the audience and performance area are strictly divided, actors perform on stage in front of audiences seated in an auditorium, and audiences are expected to be silent and static during performances (Pasquier 2015). However, as Wilkie (2002, 255) mentions, behavioral rules can be rewritten for a non-theatre place. Therefore, we use the term 'non-theatre setting' to refer to any place which is not designed and built specifically for theatre purposes; it does

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not carry the rules of traditional theatres. In immersive theatre, whether set in a theatre or non-theatre place, as Josephine Machon (2013, 26) argues, 'the audience is removed from the "usual" set of rules and conventions expected from "traditional" theatrical performances.' Audience behavior is, therefore, still an area that needs further consideration. In this regard, we propose that place schema, a concept drawn from environment-behavior studies, can provide a framework to enhance our understanding of audience behavior – particularly in non-theatre settings – and aid in the facilitation of more harmonious person-environment relationships. When an audience member does not know their role and how to act, this ambiguity may cause stress rather than the anticipated excitement of seeing a performance. A place is not just a physical setting; it has many components, comprising its history, and previous experiences of occupants. It is not only the holder of experience, but also an integral part of experience. Accordingly, place schemata are codified experiences engrained in our minds that support our awareness of the surrounding environmental information and aid us in achieving our goals (Imamoğlu 2009, 159). Place schemata evolve to make sense of the conflicts that arise when our mental representation of a place does not match physical reality. When immersive theatre entails creating new spatial rules for audiences that differ from those of the traditional theatre auditorium, audiences face these conflicts and start adapting to them using their updated cognitive schemata. This is a process worth studying as it involves the audiences updating their existing schemata to form new ones based on the dynamics of the person-environment relationship. We do not emphasize a specific problem to solve but suggest that audience experience can be evaluated through environment-behavior studies to discover new ways of understanding audience experience and behavior in relation to space and place. Until the 1960s, environment-behavior studies, an interdisciplinary field of research drawing on sociology, psychology, anthropology, and human geography, was not a readily-accepted area of scholarship (Bechtel and Churchman 2002, 28). Therefore, its potential application to, for example, architecture and design was delayed; issues that for many years were considered too obvious or not problematic in architecture, were usefully highlighted after environment-behavior analysis was enacted. For example, red was considered to be an exciting color and green a calming one because red is usually associated with fire and blood, and green with nature. This inference was generally thought to be too obvious to be the subject of research. However, studies showed that it was the chromatic strength of the color, and not the hue, which was actually a critical influence on stimulation. Therefore, a highly saturated green can be less calming than a lightly saturated red. If designers select colors without a proper understanding of the mechanisms behind them, problems with perception could occur due to the conflict between application and design purpose (Mikellides 1980, 10). The aim of environment-behavior studies is not only to discover such problems through research, but also to improve our environments so that they are more suited to our needs. Similarly, we can improve immersive theatre environments by examining their relationship with audiences and their behavior. Here, while we mainly refer to immersive theatre, we also consider site-specific approaches, which are sometimes adopted by immersive productions.

An important question to consider is the degree to which audience members carry the behavioral rules of the theatre schema into immersive theatre environments. This may be significant because behavior patterns of audience members would likely be limited due to their engrained theatre schemas from past experiences; it is possible, therefore, that their

behaviors would likely not coincide with the intended outcomes or effects of immersive theatre, particularly in the challenge to traditional theatre experience that those immersive productions often present. Not all spectators may be able to respond to that challenge (or might choose not to) because audiences, as this study, among others, suggests, tend to bring the behavioral rules of traditional theatre with them. Some spectators may behave in a way that creates discord with the intentions of the production's creators who, as Kirsty Sedgman (2017, 159) states, often 'romanticize immersive performances' during their creative process. There is a tricky balance to strike here: if the rules of an immersive production are too rigid, it may feel just as restrained as traditional theatre; too loose, and it might create a disruptive, damaging, or even dangerous theatre experience for spectators, create safety risks, and cause problems with the enactment of the play itself. We explore this question of balance by proposing that one of the key benefits of utilizing place schemata in understanding the relationship between audiences and the setting is the potential for more detailed considerations of different audience profiles, and particularly their specific needs within the immersive theatre experience. The potential clashes between audience expectations and their actual experiences of immersive theatre provide ideal opportunities to consider how rules and boundaries for behavior might be illuminated. This may enable theatre-makers to develop productions within which the audiences worry less about how to behave and navigate, leading to a better sense of control, as well as safety.

We have chosen to evaluate this issue by using Punchdrunk's immersive theatre production *Sleep No More* as a case study; because of its scale, quality, and popularity – in terms of revenue but also coverage of audience experiences of the production – *Sleep No More* offers a fruitful grounding for establishing what environment-behavior studies analysis can offer to immersive theatre. The first *Sleep No More* production was created in London in 2003 and then recreated in several other sites. However, the *Sleep No More* production we focus on in this paper is the one set in The McKittrick Hotel, New York, which has opened in 2011 and is still running (Bartley 2012). The audience in this production has to navigate around the building during the performance, and they can follow the actors or discover the setting in their own way. Either way, it can be overwhelming for those with no prior experience of the performance or the space (Bartley 2012). Before developing our argument in further detail and elaborating on understandings of audience experience of immersive theatres, we offer a more comprehensive overview of what immersive theatre is and its relation to place.

Place within a place: immersive theatres

Immersive theatre as a term first appeared in the 1990s; it is often associated with site-specific theatre, since immersive performances are usually set in existing places (Bowditch et al. 2018, E-5). Site-specific theatre refers to performances that are designed for specific, already-existing spaces, be it an interior or exterior area (Aronson 2018). We emphasize the link between site-specificity and immersive theatre because even though immersive theatre is not necessarily or always site-specific, here we have mostly focused on productions that build a meaningful relationship to their sites. As Adam Alston (2013, 131) has suggested, immersive theatre 'is a participatory theatre style broadly premised on the production of experience' and therefore places audience experience – over and

above the simple act of observation – at its center. Rose Biggin (2017, 187–89) defines immersion as a cognitive phenomenon, which is produced through 'high engagement, emotional investment, rapt attention, sensory stimulation, emotion, empathy, or make-believe.' Immersion is an experience built by blending the real and fictional worlds and overlapping realities. Similarly, Alison Griffiths (2013, 2) identifies immersive theatre as a spatial operation, a performance environment that audiences can physically enter – rather than simply watching from afar (from their seats). A new place (of immersive performance) is created within a place (a building or location). Typically, audiences are not apart from the stage, but rather, there is no stage; audiences and actors share the one world of the performance. Through scenography, immersive theatre welcomes audiences to an environment with 'its own rules and logic,' making a new reality possible during the performance (Solga 2019, 11).

Immersive theatre experiences can take place in theatre buildings, however, as Jen Harvie (2013, 30) points out, immersive productions are mainly designed for existing non-theatre sites, with elements of those environments serving a meaningful role in the experience. Punchdrunk's artistic director Felix Barrett claims that their productions focus specifically on the physical buildings in which the performances take place, referring to projects such as *Sleep No More* (2011 onwards) that are considered to be highly immersive (Biggin 2017, 195–99). The production was set in an existing non-theatre place – The McKittrick Hotel in New York – and designed in detail, which enables the audience to discover the environment in a way they might not usually do in a conventional theatre building. In this example, the company has adopted a site-specific approach, meaning that when the site of the performance is changed, the experience of watching and engaging with the production will change significantly, due to the claimed codependency of site and performance (Biggin 2017, 184). As stated above, the production was originally opened in London. Then it adopted a different site in Boston (2009–2010), and then another one in New York (2011); later it also opened in Shanghai (2016). Even though the essence of the performance was protected, the experience has changed in relation to the characteristics of the buildings. While the basic architectural differences can have a direct impact on audience orientation and actor choreographies, other material differences can also be influential in how the production is experienced such as location or history of the building (Rapoport 1977, 37). For instance, in Boston, the production building had three floors, but The McKittrick Hotel in New York has six. Therefore, the choreography and design of audience orientation need to be revised according to the characteristics of each building. Another example can be the differences between locations, New York, London and Shanghai have their own specific historical and cultural characteristics, which may add unique meaning to the experience.

In immersive theatre productions set in non-theatre buildings, architectural cues and rules that might usually govern the use and movement through the space differ from those in traditional theatre buildings. In traditional theatre buildings, during conventional theatre productions, audiences are encouraged to sit in a predetermined seat, be quiet once the house lights are turned off, stay still during the performance, and applaud the actors at the end of the show. Pasquier (2015, 223) stresses that the audience generally do not step onto the stage or interact with the set, and that the performance and audience areas are divided by architectural elements such as levels or seating units. By contrast, neither behavioral cues nor rules of place are predetermined in immersive theatre

environments. Each immersive production has its own set of rules, and the audience is encouraged to make choices and personalize their experience, thus offering a way of experiencing theatre that likely leads audience members to behave in ways that might be considered unconventional in a traditional theatre building. In our analysis of *Sleep No More*, we discover how these rules communicate with the audience and help shape spectators' behavior. However, before that, we will focus on the differences between experiencing an immersive theatre production and a traditional one. Therefore, we can build a foundation for the experience of audience in the specific case of *Sleep No More*.

Being an immersive theatre spectator

'Theatre' can refer both to a performance and the buildings in which those performances take place. Our focus in this section is on the spatial meaning of theatre, including the theatre building and its behavioral rules, which have evolved over many centuries. As Dominique Pasquier (2015, 223) has identified, from the Middle Ages to the nineteenth century, theatre audiences were generally undisciplined, often mounted the stage, and would challenge the actor or the text of the playwrights. For instance, during eighteenth-century France, neither the actors nor the playwrights were respected by audiences, with spectators vocalizing adverse responses to the performances if they did not enjoy them (Pasquier 2015, 225). This generally undermined the works of theatre-makers and actors; performances were being interrupted and they felt humiliated (Pasquier 2015, 225). Audience agency during a performance can have a positive impact, in the form of increased intimacy and the generation of a communal feeling. However, when there are no limitations it can hinder the performance of the actors. For that reason, the audience body was gradually 'domesticated' through several steps: first, they were eliminated from the stage, then seated, then put in a dark hall, which finally kept them silent (Pasquier 2015, 223). These rules have evolved into the conventions of today's traditional theatre, in terms of how the building and space is built and arranged, and how the live performance is experienced. These conditions are now, as Sedgman (2018, 4) argues, part of the audience etiquette of experiencing theatre. Diane Paulus (2006, 334–35) states that these spatial and behavioral arrangements are applied to theatrical events from 'the most "radical" to the most mainstream.' She points out that 'the audience is governed by an unspoken code of behavior,' (2006, 334–35) which includes not talking to the people around you or to the performers, not eating unless it is served to you, and not making any sounds, such as unwrapping candy. However, theatre-making is often not so straightforwardly defined by these unspoken conventions, and there have been plenty of works that aim to make theatre in 'non-seated, non-static, non-representational, and otherwise non-traditional ways' (Sedgman 2018, 13). Immersive theatre offers audiences a potential challenge to conventional theatre environments and the opportunity to disrupt the behavioral rules of traditional theatre by emphasizing mobility around the performance space and participation in the performance event.

Barnes (1981) argues that it is essential to give people choices in any place experience because situations in which people feel they have no control tend to impact them negatively. When one feels in control within an environment, both their mood and performance seem to increase (Veitch and Gifford 1996). In immersive theatre, audience members often have the power to choose their locations and paths within the

performance space as well as their vantage points to view the performance and may feel more in control of their experience. However, providing audiences with too many possible choices could be overwhelming. Porl Cooper (Cited in Frieze 2016, 174) notes that immersive theatre which takes audiences away from the certainty and comfort of allocated seating and prescribed behaviors can scare people off. Therefore, it is vital to consider the sense of control – an essential concept in environment-behavior studies – to aid audiences to feel free and move fluently within the environment.

Alston (2016a, 3) provides certain defined features of immersive theatre experience as follows:

> Immersive theatre centres on the production of thrilling, enchanting or challenging experiences, which feature as an important part of an immersive theatre 'artwork' that audiences co-produce by doing more than watching, or by augmenting the productivity of watching as a prospectively participating spectator. Audiences might roam freely through spaces, interact and/or dialogue with performers and/or other audience members, or physically engage with a performance environment that surrounds them completely.

Alston (2016b, 71) also notes that the term 'immersive' relates primarily to environment, and 'can be applied to a range of practices in a range of contexts, so long as an audience engages with an environment that prompts the perception of immersion's cues.' Moreover, Biggin (2017, 27) argues that 'immersive' refers to a space created for the audience to move around and discover; it is a space that surrounds us. Throughout this article, we approach the concept of immersion as described by Biggin. Audiences are therefore encouraged to engage with the environment of the performance and are offered the chance to explore it. Our aim is to examine not only the possibilities of performance in immersive theatre and the flexibilities of the actors and audience members, but also the relation between spectators and the physical setting of the performance. The relationship between the setting, actors, and the audience is interwoven. Mike Pearson and Cliff McLucas (Pearson et al. 1995) call it a 'ghost and host' relationship, whereby the host is the existing environment, and the ghost is the setting of the performance, actors, and audience. As the ghost haunts the host, they can no longer be perceived separately. Richard Morgan (Pearson et al. 1995) indicates that they in fact become one and affect each other, to the extent that attributes of place experience (such as privacy, control, and territoriality from environment-behavior studies) turn into attributes of play experience (for example, anonymity, freedom of choice, and exploration). This interwoven relationship between place and play is also significant for immersive theatre because it can contribute to a more holistic experience.

In performance studies, Wilkie (2002, 249–54) proposes two approaches to explain the relationship between spatial rules and behavior: the repertoire and the inner rule. The former refers to our knowledge of behavioral norms that we gain from places, whereas the latter refers to the 'important means by which users can negotiate their position regarding a place and create meaning through the process of this negotiation' (Wilkie 2002, 252). In the context of site-specific theatre, Wilkie (2002, 254), indicates that the repertoire belongs to the site and the cues that govern and shape our behavior within the site, whilst the inner rule results from the complex meshing of site and performance. There are clear and useful parallels between Wilkie's approach to spatial rules and behavior, and the concept of place schemata in environment-behavior studies. Place

schemata help to understand how we 'code' places in our minds, and how the cues in the environment tap into knowledge from past experiences, influencing us to behave in line with our aims. We argue that place schemata can be similarly applied to immersive theatre productions, which build behavioral relations between the site and the performance. We develop this claim further in the next section, which focuses on place schemata as a model for analyzing immersive theatre in more detail. In particular, we analyze this relationship as it appears in *Sleep No More*, which encourages audience members to participate by making explicit choices in their viewing experience and explore the physical surroundings of the performance space.

Case study: *Sleep No More* by Punchdrunk

Sleep No More has been described as an international phenomenon (Flaherty 2014, 135). Punchdrunk turned a building at 530 West 27th Street in New York into The McKittrick Hotel and the performance takes place on six floors and in about a hundred rooms (Worthen 2012, 80). The audience members have to wear white masks and are not allowed to talk; these are stringent rules (Biggin 2017, 24–25). Once the audience arrives at The McKittrick Hotel, they go through a maze leading to a lounge in which they check into the hotel and the rules are explained to them (Bartley 2012, 4). They are guided to the first floor by an elevator, where the show begins. The performance is an adaptation of William Shakespeare's of *Macbeth*. Therefore, we see familiar characters such as Macbeths, Macduffs, and Witches. However, the performance is based mostly on physical theatre and therefore there are almost no lines of spoken text. At the beginning of the performance the audience and actors get together in the ballroom; the actors then start to follow different paths according to their own story and play it in loop. As the audience members start their journey through the performance, they can choose which actors to follow. Audiences also have the freedom to explore the performance environment, which is designed and detailed at a cinematic level in an aesthetic suggestive of the 1930s. Each floor and room are different. For instance, one can visit Lord and Lady Macbeth's bedroom on the third floor, in which there are rows of dressers and drawers from the floor to the ceiling. The dancers prance from one drawer row to another while performing and use them as their dancing platform. Therefore, drawer rows become part of the choreography. On the other side of the floor there is a large graveyard. The floor of this room is covered in dirt, which crunches and echoes under people's feet as they are walking (see: The Creative Adventurer 2021).

Our analysis of *Sleep No More* is not based on the exploration of our own experiences of the production but rather we evaluate the piece via the abundant firsthand audience accounts, comments, and reactions. Along with the experiences of scholars and professional theatre critics – whom we also draw from here – we especially wanted to focus on the experiences of non-expert audiences (non-scholars, theatre-makers, or critics) to better understand a broader range of audience perspectives, and to emphasize the potential impact of environment-behavior studies in analyzing audience experience in immersive theatre. Jan Wozniak (2015, 324) suggests that there are two ways to experience such performances: the audience can follow the performers (referred to as the tail); or choose to explore the environment as they wish (referred to as the search strategy). Therefore, in *Sleep No More* at least, each individual creates their own storyline during

the three hours of performance (Brown 2011). However, at the end of the performance all the actors head to the ballroom. Therefore, if you are following a character then they lead to the ballroom for the final scene and if you are wandering around in the building, you are lead there by black masked stewards. This freedom of wandering can be appealing to spectators and there have been many positive comments by audience members about how they felt empowered and immersed in this experience (e.g. Brown 2011; Ewert 2012; Flaherty 2014). However, there are also those who indicated that they did not enjoy this freedom. Going through audience comments on online platforms such as TripAdvisor, OnStage and Yelp. For example TripAdvisor (see: https://www.tripadvisor.com/Attraction_Review-g60763-d2631104-Reviews-Sleep_No_More-New_York_City_New_York.html, which is updated regularly with new reviews), we realized that while plenty of audience members preferred going into these performances adopting the tail strategy of understanding the performance narrative, they stress that when multiple spectators attempt to follow the actors and the density of people around the actors increases, it can make it difficult to actually see the performance. Reviewers also mention that they struggled with navigation in the floors and rooms of the hotel without maps or guides. Asya Danilova (2016), writing for *OnStage Blog* describes her experience as follows:

> One might think that in a multiple story set where action occurs simultaneously in multiple locations, the crowd should be, more or less, equally dispersed. But I often found myself in a situation where the audience is so densely stuffed in a room that I, not only couldn't see the actors well, but also was also elbowed and stepped on. . . . It was hard to let go of the anxiety, evoked by the obscured view and absence of a guided narrative.

We can see that audiences, particularly those invested in comprehending a linear storyline within their immersive theatre experience may need some guidance through their journey. This could be why many people choose the tail strategy of following others rather than exploring the environment or initiating their own paths. In traditional theatre buildings, audiences tend to sit and watch a performance from beginning to end; what they will see in the next scene is already designed, as is the sequence in which they are to be experienced is. In experiencing *Sleep No More*, some audience members may instinctively understand that they need to see a precise, scripted performance to satisfy their existing cognitive schemata, for which a tightly-structured conventional theatre performance is an expectation even though they know it requires audience agency. Unlike conventional theatre buildings in which seating is generally arranged to enable clear sight of the stage, in immersive productions like *Sleep No More*, audiences may form dense clusters in specific locations, and may often be standing rather than seated on fixed chairs, which could lead to the feeling of crowding. Although this situation could be addressed with stricter limitations on audience numbers, this still may not fulfill the level of comfort (and perhaps safety) that some audience members require. However, feelings of anxiety, confusion, or frustration are to be expected in the process of updating the existing theatre schemata of audience members not yet familiar with immersive experience. Therefore, even though the creators of *Sleep No More* aim to empower the audience and encourage them to create their own narratives (Daley 2011), this seems to not work for everyone. Some people may still expect to be navigated through the performance experience; the responses of audience members examined above indicate a potential need for clearer guidance or storylines, such as providing maps or making optional simpler,

guided versions of the performance available. A better understanding of place schemata may be helpful in guiding immersive theatre companies to develop maps and guides for their audiences. In the next section, we will discuss how place schemata can provide a perspective on understanding of audience experience in immersive theatre.

Place schemata and immersive theatre

'Place' refers to a physical location with embedded meanings and perceptual attributes. Places can shape our behaviors. In scholarship on site-specific art and performance, Nick Kaye (2000) and Miwon Kwon (2004) suggest that viewers perceive the artwork through its site; Erica Suderburg (2000, 4) states that in fact 'the "site" bec[omes] part of the experience of the artwork.' As mentioned before, as our cognitive schemata interacts with the visual and architectural cues in the environment we can immediately understand how to behave in a particular place (Rapoport 1990, 46). In line with this, David Canter (1985, 178) argues that we can figure out the associated activities of a place by examining its physical form without even being there. Therefore, we can say that our cognitive representations of places carry with them information that might help us predict specific activities and behaviors likely to happen in those physical environments. It is notable to remember that individuals come to a place with their own motivations, experiences, and goals. In terms of immersive theatre, designing the environment in which the experience will take place by considering the associated activities can help audience members to adapt to the space more easily. According to Randy Genereux, Lawrence Ward, and James Russell (1995, 54), the behavioral representations of places in people's minds substantially affect how they perceive a place as a whole. Therefore, places are evaluated and perceived by individuals; 'not only their physical features but also by the possible behaviors that can occur there, as well as the person's behavior plans' (Imamoğlu 2009, 158).

Place schemata can be viewed as the categorization of information that people retrieve from their environment. With the help of schemata, individuals understand the behavioral rules of a place and may act upon them: for example, an audience member knows to become silent when the house lights are turned off in a traditional theatre auditorium and they do so. As outlined and contextualized by Pasquier (2015), the behavioral rules of traditional theatre auditoriums as we understand them today have been shaping audience behavior since the late nineteenth century. Immersive theatre explicitly challenges these rules by staging a clash between the multiple and often conflicting rules governing the immersive theatre experience and audience members' schemata of traditional theatre behavior. Therefore, we propose that place schemata may offer a productive lens through which to analyze the rules that audience members follow in immersive theatre environments to better understand their motivations and preferences.

Immersive theatre environments provide different place cues than the place schemata of a traditional theatre building. As previously mentioned, in a theatre auditorium we culturally know how to behave according to these cues. Getting up to open the auditorium doors at this point would not be an appropriate move. Even though there may not be an announcement telling us this, we would know the appropriate behaviors based on our place schemata. However, because most of us likely have not developed place schemata for immersive theatre environments, we may have to deal with conflicts when we enter

into an immersive theatre space. As Sedgman (2017, 163–64) argues, these possible conflicts should be considered in order to understand audience behavior in immersive theatre. Accordingly, Matthew Reason (2015, 275) points out that theatre-makers and scholars might offer misleading representations of immersive theatre audience experience when comparing the works through 'over-statements of idealized or imagined possibilities' and, therefore might be disappointed in the reactions they get from audiences. Because immersive theatre simultaneously offers a new place experience through the theatrical performance and supports the performance within the place, the relationship of audience behavior to place becomes critical. Research suggests that having established place schemata when entering an environment can improve people's well-being and satisfaction in ways that better serve their needs and expectations (Canter 1985; Imamoğlu 2009; Rapoport 1990). It can also work the other way around; when an audience member meets an environment that does not match their place schemata, they can feel anxious, and that incongruity may lead to a negative experience. There can be cases where immersive theatre makers are actively seeking to disrupt audience expectations for the purposes of spectacle and wonder; however, we suggest that balancing the excitement of a new experience with considerations of the place schemata can offer the possibility of wonder without harming the enjoyment of the audience.

Multiple studies suggest that people may not function well when they experience places that do not match their existing place schemata; people can feel confused and not know how to behave (e.g. Garfinkel 1967; Hall 1966; Küller 1988, 1991). Even though immersive theatre may allow for more freedom, an opportunity to break with the fixity of theatre conventions and encourage spectators to actively engage with the performance environment, audiences still may not act upon it. Audiences who are used to the traditional theatre – which is often associated with a scripted performance that is limited to the stage – may adhere to its behavioral rules (Sedgman 2018, 19) even when in an immersive theatre environment. We might think of regular theatre-goers who frequently see traditional theatre performances in theatre buildings as spatial experts of these environments. When we have lots of experience and knowledge about a specific kind of place, we build expertise, and our cognitive schemata become stronger and more rigid. This may affect our flexibility in new contexts, as we tend to stick to activities associated with previous and familiar environments (Imamoğlu 2009; Neisser 1976; Wiley 1998). Whilst research suggests that novices may sometimes outperform experts in such domains as chess, bridge, sport, music, and physics (e.g. Hecht and Proffitt 1995; Norman 1981; Saariluoma 1992; Wiley 1998), people with expertise and rigid cognitive schemata on specific activities may be inclined to apply fixed solutions when they meet similar problems, possibly falling behind those who can deal with those problems in a more flexible way (Woollett and Maguire 2010). In the case of immersive theatre, when audience members with traditional theatre schemata enter into an immersive theatre environment, they may have difficulty adapting since they may be likely to cognize that environment using only their preexisting theatre schemata. The expertise of traditional theatre-goers potentially prevents them from being flexible during their immersive experience. Because the activity of experiencing a theatre performance and the behavioral rules of theatre buildings is interwoven, audiences may try to follow these rules unconsciously. Even in the case of an immersive theatre production set in a non-theatre place, the audience's theatre schemata will be triggered because they have likely coded the

activity with the rules of traditional theatre (and its buildings). In existing studies on immersive theatre, scholars have highlighted responses from audience members that refer to experiences of confusion, discomfort, and fear within the performance space, as well as anxiety related to making choices or wishing to be guided by theatre-makers (Burton 2013; Reason 2015; Wozniak 2015). Therefore, when some audience members encounter a performance environment that is highly incongruent with their theatre schemata, they may remain passive and observe the performance and others' participation from a distance, as this is likely to be a safer way to attain new schemata and to adapt to the situation. In this case, attempts to push audience members to interact with the environment or performers may lead to even more negative feelings towards the experience and further increase their anxiety levels.

In terms of flexibility of the audience, another challenging aspect of an immersive theatre environment is scenography. This adds another layer to the equation because each immersive theatre production creates a different world (Wilkie 2002, 255). The whole environment is designed according to the specific setting of the performance, and therefore audience members would be expected to behave differently in each different production. For instance, while *Sleep No More* is set in a film noir hotel environment with a dark and thrilling ambiance, another immersive theatre production *Immersive Gatsby* (2015), located in London and created by Immersive Everywhere and Guild of Misrule, offers a party house in a sparkling, informal environment in the 1920s. This places significant emphasis on scenography because designing the environment with clear place cues to direct audience behavior may reduce the conflict and help them adapt. In *Immersive Gatsby*, audiences are welcomed into a party setting as the invited guests of Jay Gatsby. In this case, audiences have a clear and defined role within the environment (they are party guests) and will likely have a sense of the following steps to take, even though they may still be some conflict between their established traditional and burgeoning immersive theatre schemata. Accordingly, consistency between behavioral rules of immersive experience and place cues of scenography is significant. If there is a bar serving drinks, but the production does not allow audiences to get drinks, this may increase confusion. This confusion could lead audiences to have difficulties negotiating themselves within the experience and question where and whom they are supposed to be (Frieze 2016). As a result, audiences may get upset or frustrated because their expectations of being part of the play are not realized. When audiences are discouraged from being adventurous within the environment, they may play it safe and be passive. If they follow the crowd to catch the action of the performance, this potentially harms their personalized experience and limits their chances of discovering the unexpected offerings of immersive productions (Bartley 2012).

Alongside an understanding of place schemata, we argue that the attention value model proposed for museum environments by Steve Bitgood (2010, 2), which suggests that attention may be examined at the levels of capture, focus, and engage, offers a useful critical lens for understanding audience experience in immersive theatre environments. For instance, it is examined what visitors pay the most attention to while viewing exhibitions, and found that bigger, three-dimensional, and interactive objects tended to get more attention (Bitgood 1992, 2014; Zıraman and Imamoğlu 2020). Therefore, if theatre makers of immersive productions want to draw audience attention to the scenography of the environment and encourage them to interact with it, they might

apply these findings to their design of the immersive environment. These differences might be related to many other characteristics of visitors, but in the case of immersive theatre, it seems clear that some audience members may be more motivated to explore the environment from the start, whereas others may need encouragement to do so. Bitgood queries the processes that explain visitor attention to particular exhibits and the factors that might interfere with it. Immersive productions might offer such activities as drinking at a bar or dancing on stage, which may draw attention to both the performance and the environment but might also create a distraction from exploring other elements of the environment further. Scenographic elements of immersive theatre can be seen as exhibit elements in a museum or gallery environment, each of which contributes to the individual experience of the production. Moreover, Joslin McKinney (2015) argues that scenography is a living character that is part of the performance. Theatre can be done even without the actors as the elements of scenography can tell stories and interact with audiences. Scenography has the potential to navigate audiences through the environment and provide them with a whole experience. For instance, in her observation for *Beneath the Forest Floor* (2013) at the University of Leeds, McKinney (2015, 136) argues that 'scenography may reveal such vitality of objects, materials, and things and show how this vitality does not depend on human agency.'.

In addition to audiences who are only familiar with traditional theatre, there are those who are knowledgeable about immersive theatre and could be more enthusiastic than others to participate in the performance. Alston (2013, 133) calls these groups savvy audiences; they are willing to push the limits, which may mean that offering the freedom and opportunity to participate may not be enough for them. These audiences would likely have updated place schemata: they would have background knowledge, and hence, be quite aware of the rules of immersive theatre. As mentioned earlier, people's motivations and intentions (as well as their expectations of how to behave) substantially impact the way they perceive a place. Thus, savvy audiences would likely be aware of the required flexibility that would help them transition from the traditional theatre schema to the immersive theatre schema for a rich experience intended by the producers. As examples of immersive theatre increase, so will the number of savvy audiences. However, since the schemata of immersive theatre cannot be strictly drawn, there is a risk of savvy audiences going too far and experiencing the anxiety of not participating enough. Again, it may be necessary to integrate the relevant architectural cues into the design. For instance, if there is a door that audiences are not supposed to open in a performance environment, just attaching a 'do not open' sign on it may not be the best choice as it can be easily mistaken as a part of the experience, and audiences may attempt to open it (Alston 2013, 133). In a savvy audience's immersive theatre schema, everything within scenography is there for interaction. Designing a successful immersive theatre experience is related to understanding audience profiles and their cognition of spaces. Place schemata can help to achieve that, and place cues can be used to efficiently shape audience behavior without strictly controlling them. Using the example of *Sleep No More*, we aimed to display the potential conflict between what immersive theatre aims to offer and the expectations of those still carrying the traditional theatre schema. In the next section, we summarize our arguments, and lay out their possible implications.

Conclusion

As the popularity of immersive theatres increases, people will acquire background knowledge and experience that could lead to a constantly regenerating and developing place schema. Such a flexible schema could help dissolve some of the conflicts that immersive theatre creates for its audiences. However, until then, an understanding of audiences' place experience and cognition of the place may assist immersive theatre-makers in producing works that account more readily for a vast array of audience reactions.

The literature suggests that understanding the audience profile is essential (e.g. Alston 2016a; Reason 2015; Sedgman 2018) because each audience member would have different cognitive processes and schemata. Understanding audience profiles helps theatre makers to meet these expectations and expand their target audiences. Moreover, even unsavvy audiences with strict schemata who want to experience immersive theatre can still enjoy it; the implication would be that this would naturally affect their expectations and actions. Exploratory research, such as the present one, can provide a start in understanding this differentiation between audience profiles and the difference in perception of immersive productions. These explorations can be used to improve audience experience, which can be used to improve audience experience and innovate approaches to scenography design.

Immersive theatre entails other considerations as well. Even those performances that claim to offer freedom may not always provide that opportunity fully. For instance, there is a difference between bringing an audience member to a place and guiding them through that place (Darby 2013, 54). Guiding them during the performance is not so dissimilar to seating them in a theatre auditorium; the audience member's experience comes from another's perspective as they can experience the performance and environment from a fixed physical position. However, removing the guide does not mean audiences can be free either. Setting strict rules and keeping an eye on audiences may still limit the experience. In such a case, audiences cannot explore and interact with the place or performance as much as they might want. This may limit the opportunity to observe and explore audience behavior in an immersive environment. We cannot know if people behave differently than they would in a theatre building since rules control audiences. Even if immersive environments expand the behavioral rules of the theatre building schema, they cannot break them. Audiences are given the freedom of being mobile and making certain choices with respect to their experience of the place and performance, but besides that, it is likely that they still consider the rules of a traditional theatre building while taking actions during the experience.

Attaining profiles from observations, interviews, and surveys – similar to post-occupancy evaluations (POEs) in environment-behavior studies (Preiser, Rabinowitz, and White 1988) – could be further steps to investigate audience behavior and place schemata. In architecture, to discover any issues with a newly constructed building, POEs may be employed approximately a year after the occupants start living in the building. This is helpful to understand whether the design has met the needs and expectations of the occupants. Similarly, when we look at the immersive theatre environment of *Sleep No More*, as Bartley (2012, 7) indicates, there are locked doors in the space that audiences do not pursue opening for fear of being reprimanded by stage managers; such interferences

may influence audiences to be careful about their interactions within the place. However, it would be revealing to see what would happen if spectators were confident that nobody would interfere, that they were free to treat the place as they wanted, and that the place afforded them complete freedom.

Sedgman (2017, 155) claims that some audiences respect theatre makers' choices in performance to the extent that they are ready to fall into the illusion of control to experience the performance without too much confusion. This shows us how audience expectations can differ. Barrett argues that there is no correct way to experience immersive theatre works; some people choose to follow the performer, and some choose to explore the place in their way (Flaherty 2014, 140). However, as Bartley (2012, 3) claims, most people tend to follow the performers. Even though our analyses of the audience's experiences of following the actor may indicate a need for guidance and a linear storyline, the relationship between them and those who explore the place is unclear. This creates an opportunity to observe audience behavior further, querying, for example, spectators' motivations for their choices and whether there are particular patterns to the physical paths that they carve out during their explorations of the space. Bitgood's (2010) research suggests possible new ways of garnering, maintaining, and even manipulating audience attention and engagement through scenography, as well as leading audiences through space at specific points without directly controlling their actions.

Immersive theatre offers a challenging experience for both audiences and theatre-makers, regardless of their profiles. However, looking at the experience from the lens of environment-behavior studies can be a valuable part of the creative process; it can lead us to discover issues and questions about audience engagement that were previously not considered problematic, and help to improve those experiences. Understanding the potential of place in terms of environment-behavior studies may aid theatre-makers in designing settings that may provide a more inclusive place experience for audiences with different profiles. Environment and theatre experience have a strong bond, which can be critically observed. Therefore, it is significant for theatre-makers to discover how audiences perceive the experience and audiences' cognitive processes during the experience. Such an understanding may make it possible to improve the theatre experience through better communication and engagement with audiences.

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