The Multimodality of Immersion

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Abstract

Human perception is considered multimodal in that it depends on the processes of interaction and overlap of the five senses that occur in consciousness. Recent research into synesthesia finds that a far greater percentage of the population has synesthetic capacities than was earlier thought (although they are oftentimes unaware of those capacities). Moreover, research has found that the synesthetic intermingling of sense perception and cognition produces far more complex experiential results than a simple combination of five discrete senses would imply. Aesthetic experience relies equally on the intermodality of aesthetic objects themselves: all media, old and new alike, generate multimodal orchestrations and thus appeal to various channels of communication and affection. What are the consequences of these interminglings in production and reception for a theory of immersion? I will argue that immersion is the name we give to the experience we have when our senses are attuned by a medium or a text to the expansive possibilities of our intermodality capabilities.

OBJECTS & SUBJECTS

The term multimodality makes reference to the individual modes through which communication, meaning, and experience may be categorized with regards to objects and phenomena under study, as well as to the modes of perception (conventionally divided into five realms of perceptual interface namely, seeing, hearing, touching, tasting, and smelling) that are called upon in various combinations to provide access to and awareness of the things around us.

Thus, on the one hand, these terms describe the objects of the world and the way in which they produce meaning: common questions on this (objects) side of the coin, so to speak, pertain to semiotic modes and include the manner in which text and image work together, for instance, in advertising or in comics, or how image and sound work together in audio-visual media. These questions pertain broadly to issues of intermediality and intertextuality

On the other hand, multimodality and intermodality additionally describe the interaction of living beings (or subjects) with the world through the available perceptual apparatuses. The investigations that have been undertaken in this realm include research into synesthesia, into the fundamental intermodality and multimodality of human infant perception, (for instance in the late psychologist and psychoanalyst Daniel Stern's work)[1] and into the perceptual systems available to other beings such as bees, dolphins, whales, dogs, etc. Recent research into synesthesia, a perceptual capacity that seems to be genetically determined (i.e., one is a synesthete or one is not, and generally other family members are as well), suggests a greater prevalence of this capacity within society than had once been thought (findings from 2006 suggest it is 88 times more prevalent than had been previously thought when testing did not rely on self-referral).[2]

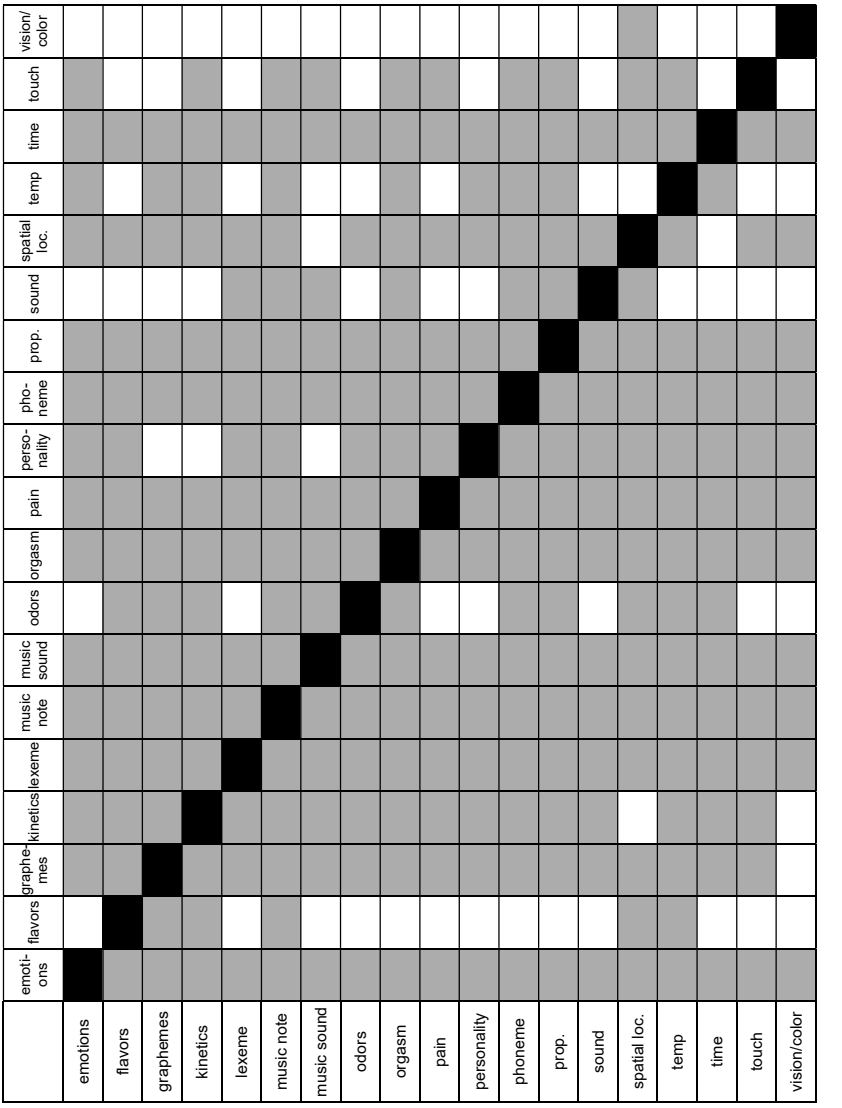
These two charts, which give an inkling of the vast array of overlapping sensations which may be present in synesthetic experience, was compiled by the researcher and synesthete Sean A. Day.[3]

1 See Stern, Daniel: The Interpersonal World of The Infant: A View from Psychoanalysis and Developmental Psychology, London: Routledge 2018 [*1985]. See also the more recent work by Stern: Forms of Vitality: Exploring Dynamic Experience in Psychology and the Arts, Oxford: Oxford University Press 2010, that focuses attention on the implications of intermodal perception for aesthetic experience.

2 The first testing of synesthesia prevalence with sampling that did not rely on self-referral took place in 2006, using objective tests to establish genuineness. The results suggested it was up to 88 times more prevalent in the general population than previously estimated (it had been previously held that it was extremely rare at 0,05% of births) and equally distributed among men and women. See Simner, J. et. al.: "Synesthesia: The Prevalence of Atypical Cross-Modal Experiences," in: *Perception* 35, no. 8 (2006), pp. 1024-1033, https://doi.org/10.1068/p5469

3 See Sean A. Day's listserv The Synesthesia List, http://www.daysyn.com/Synesthesia-List.html. Day has operated a form of this List since 1992 to enable self-reporting and collection of data from synesthetes worldwide, which has been an important source of information for synesthetes, who often are not aware that their particular form of perception is unusual or even called synesthesia. He has compiled a list of at

Chart 1: intermodal perceptual experience and triggers



least 75 types of synesthesia from that data, which lays out the complexity of overlapping sense perceptions.

"Table 0.1. Seventy-five types of synesthesia. The left-hand column is inducers, the top row is concurrents. White indicates the type has been documented; red indicates no case of this type has yet been recorded; black signifies that this would not be a type of synesthesia. This is not to say that the other types—perhaps all 262—might not also exist; but, if they do, they are apparently extremely rare."[4]

Chart 2: distribution of varieties of intermodal perception

emotions -> flavors	0.26%
emotions -> odors	0.35%
emotions -> sounds	0.09%
emotions -> visions	3.24%
flavors -> musical sounds	0.09%
flavors -> sounds	0.53%
flavors -> temperatures	0.09%
flavors -> touch	0.53%
flavors -> vision	5.78%
general sounds -> vision	16.21%
grapheme personification (OLP*)	4.65%
grapheme -> sound	0.09%
grapheme -> touch	0.09%
graphemes -> vision	61.26%
kinetics -> personality	0.09%
kinetics -> sound	1.05%
kinetics -> vision	0.53%
lexemes -> flavors	2.89%
lexemes -> odors	0.61%
lexemes -> temperature	0.09%
lexemes -> touch	0.44%
lexemes -> vision	0.70%
mirror speech	0.18%
mirror touch	*****
musical notes -> vision	7.80%
musical sounds -> flavors	0.44%
musical sounds -> personality	0.09%

4 Ibid.

musical sounds -> spatial coordinates	0.09%
musical sounds -> temperatures	0.09%
musical sounds -> vision	18.05%
non-graphemic ordinal personification	*****
number -> flavor	0.26%
object personification	*****
odors -> flavors	0.09%
odors -> sounds	0.44%
odors -> temperatures	0.09%
odors -> touch	0.70%
odors -> vision	6.13%
orgasm -> flavors	0.09%
orgasm -> vision	1.93%
pain -> flavors	0.09%
pain -> odors	0.09%
pain -> sounds	0.09%
pain -> temperature	0.09%
pain -> vision	5.43%
personalities -> flavors	0.35%
personalities -> odors	0.70%
personalities -> sound	0.09%
personalities -> touch	0.09%
personalities -> vision (“auras”)	6.49%
phonemes -> flavors	*****
phonemes -> vision	7.54%
proprioception -> flavor	0.09%
proprioception -> vision	0.09%
sounds -> flavors	5.00%
sounds -> kinetics	0.96%
sounds -> odors	1.58%
sounds -> temperatures	0.53%
sounds -> touch	4.38%
spatial sequence (number form)	*****
temperatures -> sounds	0.09%
temperatures -> vision	1.84%
ticker-tape	*****
time units -> flavors	0.09%
time units -> sounds	0.09%

time units -> spatial coordinates	*****
time units -> vision	22.96%
touch -> emotion	0.26%
touch -> flavors	1.14%
touch -> odors	0.35%
touch -> sounds	0.35%
touch -> temperatures	0.09%
touch -> vision	3.94%
vision -> flavors	2.98%
vision -> graphemes	*****
vision -> kinetics	0.09%
vision -> odors	1.14%
vision -> sounds	3.07%
vision -> temperatures	0.35%
vision -> touch	1.58%

"Data is based upon files on 1297 individual synesthetes. The numbers given are the percentage of synesthetes who have the given specific type, not the percentage of the general public. About 3.7% of the general public has some form of synesthesia. Thus, for example, the ratio of people with 'graphemes to vision' synesthesia to the general population is about 1 out of every 44 people; or, there are currently about 162 million people in the world with 'graphemes to vision' (e.g., 'colored letters and numbers') synesthesia."[5]

Furthermore, as demonstrated by the complex and specifically unidirectional overlap of perceptual qualities and cultural technologies in both of these charts, a broader array of cross-modal perceptual experiences has been found to exist than the 20 that would be presumed possible if the modes were limited to those made available via the five conventional senses. Contemporary research suggests a greater number of cross-modal perceptions—in fact up to 73 experiential combinations of perceptual triggers and resulting sensory impressions including the overlap of emotions and scents, kinetic experience and sounds, temporal perception and flavors, sounds and the experience of a temperature change, etc.

Clearly, the interaction between subjects and objects, or rather between all the things of this world, is more complex than it might look at first glance.

My goal in highlighting the two realms of research into multimodality, both on the side of the objects and phenomena that are perceived, as well as on the side

5 Ibid.

of the perceiving being or subject, is that approaches to immersion have thus far limited themselves in large part to single aspects of the phenomenon, producing to my mind an excessively simple and limited definition of immersion that is only suited to a single context while ignoring all others. How can we hope to communicate with one another as scholars of immersion if we stick to these limited perspectives?

As immersion becomes an ever more important buzzword in our day, appearing in ever more contexts, the goal of working toward a broader understanding of that phenomenon becomes ever more important. But what do we mean when we use the word immersion? Is there a consensus? Obviously, I would argue that there is not. And even if there were consensus among 'us'—that 'us' including such diverse fields of inquiry as games studies scholars, literary scholars, psychologists, neurologists, film studies and media scholars, sound studies scholars, philosophers, or art historians, to name only a selection of the fields occupied with the word—what is to be made of the relationship between immersive object and immersive experience? I seek in my research to highlight the ways in which any discussion of immersion must be sensitive to the complexity of the interrelationship between research object and human/perceiving subject.

DEFINITIONS OF IMMERSION

There is, in fact, a wealth of semantic perspectives inherent in the word immersion. This turn to the lexicon is no empty scholarly exercise—the specific manner in which subjects and objects are brought together here and are mingled is significant—and I will soon return to this aspect. First, from the German perspective, the term immersion hails from the late Latin *immersio* and points, according to the German *Duden,* in practical usage to four possible contexts:

1 In the field of microscopic observation, in physics, for instance, or in microscopy in general, immersion signifies the placement of an object into a fluid, to enable a precise study of the characteristics of that object, such as one might, for example, find when a crystal form is submerged in a light-refractive fluid.
2 In the realm of astronomy, one speaks of immersion when, for example, a moon moves into the shadow of a planet, and thus, from the perspective of the one observing, seems to merge with the disc of the planet itself.
3 As a method of foreign language instruction immersion makes reference to an instructional strategy that prohibits the use of other languages than that of

instruction in the schoolroom and thus creates something like an artificial cultural habitat, that encourages fluency. And finally,

4 "[Submersion] in a virtual environment"[6] is referred to as immersion, although through the additional reference in brackets "(EDV)" Duden sets this experience explicitly and exclusively in the context of *elektronische Datenverarbeitung* (or EDV) and thus exclusively as an effect of electronic and interactive media.

However, it is in particular as a loan word from the English language in this latter semantic context that immersion has enjoyed popularity in German language games studies as well as film and media studies. However, this reduction of complexity common to German usage has resulted in a tendency to overlook some of the additional semantic detail of usage of the word in the English language context.

Besides the first semantic entry in the *Oxford English Dictionary*, (namely, "The action of immerging or immersing") a second is listed which has essential importance for a description of aesthetic experience, namely:

"Absorption in some condition, action, interest, etc."[7] This typical usage, already noted in 1647, points clearly to the multiplicity of possible usages in the English language, which are completely independent of a particular cause or a specific medium for the experience in question (whether it be a medium of virtual reality, a novel or only the concentration on the solution to a mathematical problem), and simply describe a specific form of intense engagement with an object or a phenomenon.

The definition in *Duden* in contrast brings immersion and aesthetic experience together solely through the influence of electronic media. Furthermore, in usage the term immersion in German is not rarely associated with a minimally challenging form of distraction, one brought about—passively and indeed unavoidably for the viewer—by radical proximity to an aesthetic object. These are obviously rather negative connotations. If one does encounter a definition of immersion in German that offers more detail it is nonetheless often included in an implicitly judgmental dichotomy, which is meant to explicate the characteristics of immersion but does nothing of the sort: it merely sorts without explanation. They are nonetheless prevalent and go something like:

6 *Munzinger Online/Duden—Deutsches Universalwörterbuch;* 7. überarbeitete und erweiterte Auflage, Bibliographisches Institut GmbH (Mannheim, 2011), s.v. "Immersion". Web. 20.11.2014.

7 *OED Online.* Oxford University Press (September 2014), s.v. "immersion, n.". Web. 20.11.2014.

- Immersion *vs.* contemplation
- Proximity *vs.* distance
- Defenseless abandon *vs.* reflection

I am keen to break down these dichotomies and look with more attention to the variety of ways in which immersive experiences have come about in various medial contexts at various moments in time in various cultural contexts. For although immersive effects are particularly often associated with video games and virtual reality, immersion is by no means exclusively the product of an exchange with the so-called new media, or even contingent on the availability of electricity. One might recall having read a novel as a child or having played a role-playing game during which one was so overwhelmed that one had to physically distance oneself, in order to withdraw oneself from those overwhelmingly frightening or pleasurable scenarios. This is an experience that we, as adults, may re-encounter in aesthetic experience.

The plurality of semantic contexts and tonalities that are all contained by the term, immersion, force the question, which type of experience is suggested by the word. A definition of immersion is thus not to be arrived at in a single go: indeed, its plurality is a key source of its contemporary cultural usefulness. It is a ubiquitous phenomenon that comes about in a wide variety of contexts and is taken up by an equally wide variety of disciplines.

To situate the term, immersion, within these contexts somewhat lets us return to the original definition offered by *Duden*: while in the first semantic context an object is prepared via an immersion for an examination under the microscope (something becomes visible), the second semantic context points to a process of obscuration or concealment in astronomy (something becomes invisible). In these first two cases immersion acts upon an object. In the last two semantic contexts however it points to a transformation in the subject: In foreign language instruction immersion pushes the students to cognitive achievements in foreign language acquisition of which they otherwise would not be capable (one lets oneself be transformed); and with immersion that is inspired by the electronic and interactive media that create simulative virtual reality settings, an ostensible transposition of the subject into a fictional space (one lets oneself be transported). I want to highlight that several or even all of these shades of meaning which can be found in the lexical entries for immersion, may be operative and indeed potent aspects within the broad spectrum of immersive phenomena—to varying degrees.

What role do "media" play in all of this? Expanding Marshall McLuhan's hypothesis from *Understanding Media: The Extension of Man*, Elaine Scarry (1994)

argued in a technological and medially inclusive fashion that "If our artifacts do not act on us, there is no point in having made them. We make material artifacts in order to interiorize them. We make things so that they will, in turn, remake us, revising the interior of embodied consciousness."[8] With Scarry's long-term view of this matter in mind, one that allows for a complex intermingling of past, present, and future media and texts in our desires and projections, I would like to consider one contemporary encounter with media, mediatized environments, and other complex, multi-layered aesthetic interactions. Specifically, I am interested in exploring how the overlapping of texts, media, technologies, and cues—and thus also the affordances of each—highlights the ways in which our past experiences can significantly shape and intermingle with present ones, highlighting the presence of networks of possibilities within each of those texts, media, technologies, cues, and affordances.

I would like to briefly look at one single example of immersive entertainment to highlight the complexity of immersive experience. This example, the "immersive" theater experience of *Sleep No More,* has become a permanent phenomenon in the New York City theater landscape similar to what Agatha Christie's *The Mousetrap*, which has been performed continuously in London since its premiere in 1952*,* once represented: it has been running continuously since 2011 and no doubt attracts repeat local visitors and tourists alike. To my mind, this complex form of engagement renders any definition that is suited to a single type of affordance (for instance, a 360-degree environment, interactivity, or highly detailed—4K resolution—illusory images) primitive and selective.

DISSOLVING ORIENTATION

Recently a number of media scholars have argued that our contemporary sense of space (and time) is increasingly represented through aesthetic strategies defined by "post-continuity."[9] Within this aesthetic paradigm, exemplified, for instance by Michael Bay's explosive blockbusters (including the BAD BOYS and

8 Scarry, Elaine: "The Merging of Bodies and Artifacts in the Social Contract," in: Gretchen Bender and Timothy Druckrey (eds.), *Culture on the Brink: Ideologies of Technology*, Seattle: Bay, 1994, pp. 85-97, here p. 97.

9 See Shaviro, Steven: *Post-Cinematic Affect*, Winchester: Zero 2010; and Denson, Shane: "Crazy Cameras, Discorrelated Images, and the Post-Perceptual Mediation of Post-Cinematic Affect," in: Shane Denson and Julia Leyda (eds.), *Post-Cinema. Theorizing 21st-Century Film*, Falmer: Reframe Books 2016, pp. 193–234.

TRANSFORMERS franchises),[10] narrative cohesion is not entirely disrupted. However, the cohesion of time and space certainly is. This latter cohesion was once considered a hallmark of continuity editing's "human" perspective on the world, guided by a particular conception of the manner in which attention operates.[11] A decisive shift has taken place that has done away with an overarching need for a cohesive spatial-temporal narrative thread to guide one's movement through cinematic space. According to Steven Shaviro's account of this shift:

"In classical continuity styles, space is a fixed and rigid container, which remains the same no matter what goes on in the narrative; and time flows linearly, and at a uniform rate, even when the film's chronology is scrambled by flashbacks. But in post-continuity films, this is not necessarily the case. We enter into the spacetime of modern physics; or better, into the 'space of flows,' and the time of microintervals and speed-of-light transformations, that are characteristic of globalized, high-tech financial capital."[12]

But as the success of Bay's blockbusters suggests, we continue to assimilate these shifts in some fashion, despite the change to the "space of flows" cited by Shaviro, which is implied by this recent evolution away from editing strategies based on a classical continuity that privilege psychological and spatial coherence. Indeed, these new strategies have quickly become the template for spatial and temporal navigation, now as familiar as continuity editing was in the past.

If, as Vivian Sobchack has argued, "cinematic and electronic screens differently solicit and shape our presence to the world, our representation in it, and our

10 Michael Bay is known for fast-paced action films. The BAD BOYS franchise was initiated in 1995 and was followed by a sequel BAD BOYS II directed by Bay in 2003. The TRANSFORMERS Franchise was initiated in 2007 with the film TRANSFORMERS and was followed by four sequels directed by Bay and several subsequent sequels directed by others.

11 From Hugo Münsterberg to Christian Metz, that is from the 1910s to the 1960s, classical film theory was long occupied with revealing the psychological logic of classical forms of film narration. See particularly Münsterberg, Hugo: *The Photoplay: A Psychological Study and Other Writings,* New York: Routledge 2002, and Metz, Christian: *The Imaginary Signifier: Psychoanalysis and the Cinema,* Bloomington: Indiana University Press 1986.

12 Shaviro, Steven: "Post-Continuity: An Introduction," in: Shane Denson and Julia Leyda (eds.), *Post-Cinema: Theorizing 21st-Century Film,* Falmer: Reframe Books 2016, p. 60.

sensibilities and responsibilities about it,"[13] what effect does our increasing exposure to the digitally facilitated post-cinematic, post-continuity strategies of negotiation in time and space have on our movement through other environments, mediated or (apparently) unmediated? Reminding us of the pertinence of Heidegger's point that "the essence of technology is nothing technological,"[14] Sobchack emphasizes the need for an examination of the complex parameters at play beyond the merely "technological" aspects of any phenomenon. Indeed, the assumption and examination of a reciprocal relationship between technology and the human body is an absolutely central aspect of Vivian Sobchack's project. With Heidegger's postulation in mind, she highlights precisely this readily neglected reciprocity, which occurs due to the contextual qualities of technologies in use and thus counters the inclination to understand technology as a static force exerting unilateral influence on a human body. She describes technology as:

"[Historically] informed not only by its materiality but also by its political, economic, and social context, and thus it both co-constitutes and expresses not merely technological value but always also cultural values. Correlatively, technology is never merely used, never simply instrumental. It is always also incorporated and lived by the human beings who create and engage it within a structure of meanings and metaphors in which subject-object relations are not only cooperative and co-constitutive but are also dynamic and reversible."[15]

13 This very early text by Vivian Sobchack first appeared in a hugely influential volume *Materialities of Communication* edited by the German scholars Hans Ulrich Gumbrecht and K. Ludwig Pfeiffer, which was simultaneously published in English and German in 1988 by Stanford University Press in the US and Suhrkamp Verlag (as *Materialität der Kommunikation*) in Germany. The volume is a collection of writings by almost all figures from various interdisciplinary branches of German media theory and *Bildwissenschaft* who would become influential in the following two decades. Sobchack's text has since been reprinted multiple times, including in the author's own book: "The Scene of the Screen: Envisioning Photographic, Cinematic, and Electronic 'Presence,'" in: *Carnal Thoughts: Embodiment and Moving Image Culture*, Berkeley: University of California Press 2004, p. 136.

14 Sobchack, Vivian: *Carnal Thoughts: Embodiment and Moving Image Culture,* Berkeley: University of California Press 2004, p. 137. For the original citation, see "The Question Concerning Technology," in: *Martin Heidegger Basic Writings,* (ed.) David Farrell Krell, New York: Harper 1977, p. 317.

15 Ibid., 137.

Sobchack has taken care throughout her body of work to offer thorough examinations of very specific examples of the media texts and situations and their particular affordances. A key part of her project is underscoring that there are reciprocal processes[16] at work in those technologies of representation simultaneously serving as technologies of perception (such as photography, film, television, videotapes, DVDs, cell phones, and computers):

"[A] qualitatively new techno-logic begins to alter our perceptual orientation in and toward the world, ourselves, and others. Furthermore, as this new techno-logic becomes culturally pervasive and normative, it can come to inform and affect profoundly the socio-logic, psycho-logic, axio-logic, and even the bio-logic by which we daily live our lives."[17]

Examinations of the rise of hybrid space and spatial experience typically see the proliferation of mobile technologies and digital media as the source of that rise. The 1990's are generally identified as the decisive decade of shift, during which the borders between physical, material space, and the space of information became blurred.

We need to pay attention to the relationship between space and time, our physical situation, and our movement through space and time as generated through a complex layering: how can the spatial effects of navigation be isolated from a notion of time postulating a layered, or hybrid present or presence, which is rendered by the various kinds of templates and experiential layers at play at any given moment? What role does recollection or projection play in the experience of the multiple present? Whereas we are becoming rapidly accustomed to the integration and indeed imbrication of digital media into everyday routines, to the extent that we barely register their presence or influence, do contemporary forms of aesthetic experience train and shape experience in the material, unmediated world through a similar practice of layering? I argue that they do—by virtue of choice and trajectory.

KALEIDOSCOPIC (IMMERSIVE) THEATER

Upon entering at the ground floor door to the six-story building, which had long served as a warehouse in New York's Chelsea district (and after being obliged to turn over your cell phone, bag, coat, and ticket to attendants), you find yourself in

16 Ibid., 137.

17 Ibid., 137.

a series of hallways shaped by black-painted pressboard walls—much like a traditional funhouse such as those still in operation at the Prater in Vienna. Although these hallways suggest the jagged-edged trajectories of a maze there are still no choices to be made yet. They lead to a single destination (thus operating according to the principles of a uni- rather than multicursal maze):[18] the "Hotel McKittrick," which is, according to your ticket, the name given to this ensemble of rooms. It is from there that the multicursal pathways of this experience open themselves to you.

In the immersive theater experience *Sleep No More*, you are confronted first and foremost by the vastness of the space available and second by the task of negotiating this space consisting of over 100,000 square feet, covering six floors, and divided into more than 100 rooms.[19] These have been meticulously set-decorated with a mixture of props, period furniture, and fixed detritus to suggest the combination of the precise attention to detail of an art installation (or the equally peculiar contemporary *Wunderkammer* that is the "Museum of Jurassic Technology" in Los Angeles),[20] and the look of a video game (eerily reminiscent of the scenography of early interactive adventure games such as THE SEVENTH GUEST or the later horror game series SILENT HILL).[21]

And yet much of what has been written thus far about this wildly popular immersive theater experience limits itself to a focus on the structuring power of the

18 In his book *Cybertext,* Espen Aarseth revisits the notion of the labyrinth and points to the usefulness of Penelope Reed Doob's research from the 1990s, which identified the two distinct models of the labyrinth that may be found in classical and medieval culture, one of which has since been forgotten. While the multicursal labyrinth has dominated more modern conceptualizations of the searching pathway, the unicursal mode was a significant part of earlier physical and metaphorical notions of what a labyrinth is and does. Aarseth argues, this other notion can be very helpful in the conceptualization of the reading and experiencing processes enabled through cybertexts. See: Aarseth, Espen J: *Cybertext: Perspectives on Ergodic Literature*, Baltimore: John Hopkins University Press 1997.

19 For a series of photos of these rooms and information regarding the size of the space see: Goodman, Wendy: "First Look: An Unnerving Night at the Theater," in: *New York Magazine* (March 1, 2022), http://nymag.com/homedesign/features/sleep-no-more-2011-3/, (last accessed August 1, 2017).

20 See the website of this most curious museum for more details: https://www.mjt.org/

21 THE SEVENTH GUEST (USA 1993, O: Rob Landeros and Graeme Devine—Trilobyte); SILENT HILL (JPN 1999, O: Keiichiro Toyama—Konami Computer Entertainment Tokyo).

dramatic text that seems to provide the basis for the *Sleep No More* experience, namely Shakespeare's *Macbeth*. W.B. Worthen's examination of the significance of character in *Sleep No More* is a compelling and detailed analysis of the encounter with the space. I consider this as a *pars pro toto* example of a large body of recent theater scholarship addressing this work.[22] By choosing to summarize *Sleep No More* as "a meditation on *Macbeth* and a response to the function of Shakespeare in contemporary performance culture,"[23] Worthen situates the experience squarely within a single frame of reference, to which other experiences might perhaps be peripherally—and secondarily—added. However, just as Games Studies has struggled to position itself in relation to the demands of ludology and narratology in developing a fitting methodological strategy for revealing the specifics of the gaming experience,[24] any account of immersive theater necessarily struggles with the pluralities of space and time made available via this aesthetic form. Why *must* you seek out the threads that link the wanderings and wonderings of your allotted stay in the *Sleep No More* environment to *Macbeth*, or its human performers? Why would you not wander and wonder, as *World of Warcraft* players have often been wont to do as they pass through expansive digital landscapes, chatting online with the fellow travelers /gamers in digital space (although you are obliged by the "rules of the game" to remain silent in *Sleep No More*)? Why not simply check out the space itself, without undertaking any tasks or actions at all?

Despite the obvious relevance here of the multimedial implications accompanying the late German theater scholar, Hans-Thies Lehmann's influential *Postdramatic Theater*,[25] which highlights the mid- to late twentieth-century shift in theater, away from a textual to mediatized image and sound culture and the apparent automatism of "immersion" through the removal of the fourth wall in a theatrical setting—the kaleidoscopic specifics of the particular experience of

22 See Worthen, W.B.: "*Sleep No More* and the Space of Character," in: *Theater Journal* 64, no. 1, (March 2012): pp. 79–97. It is notable that Worthen's text announces on its first page that it "is part of a current project on Shakespeare performance studies," p. 79.

23 Ibid., p. 82.

24 For a very succinct introduction to this debate see Janet Murray's response to Espen Aarseth on her blog *Janet H. Murray: Humanistic Design for an Emerging Medium* entitled "The Last Word on Ludology vs. Narratology" (posted June 18, 2003) https://inventingthemedium.com/2013/06/28/the-last-word-on-ludology-v-narratology-2005/ (last accessed August 2, 2017).

25 Lehmann, Hans-Thies: *Postdramatic Theater,* Jürs-Munby (trans.), Karen, London: Routledge 2006.

make-believe[26] made available through *Sleep No More* can be easily excised from any written account of the experience via the insertion of an overarching narrative (*Macbeth*).[27] Upon arrival in the space of the performance, you might indeed choose to trot after the performers through the space as best you can, along with the rest of the crowd, while using the links to the narrative of Shakespeare's drama like Ariadne's ball of thread.[28] Such reliance on the *Macbeth* narrative, however, threatens to either rule your experience or, *ex post facto,* your account of that experience, of the navigation, the encounters, the juxtapositions, and the choices you make during your roughly three-hour inhabitation of the space afforded by virtue of the roughly $100 ticket you have purchased. The reliance on such a narrative thread carries an economic advantage: you can thus be assured of having seen a performance of *Macbeth* (a middlebrow to perhaps highbrow activity) and not just visited an expensive funhouse (a lowbrow activity).

However, you might prefer not to follow but instead, to wait, wonder, wander, and appreciate the silent eeriness of the many, many heavily decorated rooms that you encounter (empty of any human presence other than your own) while asking yourself what are the peculiarities of the experience of space on offer here. Upon arrival, for instance, you are greeted with the actorly lasciviousness of a young woman dressed for a night out in the 1930's (as are all the performers) and are then led from the "Manderley Bar" (the name of Maxim de Winter's estate in Hitchcock's REBECCA)[29] of the "Hotel McKittrick" (familiar from Hitchcock's VERTIGO),[30] in which you are obliged to gather with other participants before being led toward and then released into the spaces that are part of the show. The general ambiance of the Manderley Bar is reminiscent of an amalgamation of

26 I will return later to the significance of Kendall Walton's examination of make-believe as a key feature of aesthetic experience in his *Mimesis as Make-Believe*, Cambridge: Harvard University Press 1993.

27 Interestingly, in his assessment of the role of audiovisual media in the concept of postdramatic theater Hans-Thies Lehmann also references an early version of Vivian Sobchack's "The Scene of the Screen: Envisioning Photographic, Cinematic, and Electronic 'Presence,'" (which was familiar to a German audience through its inclusion in the Suhrkamp publication in 1988) in describing the effects of multimodality and (digital) intermediality on contemporary theater.

28 It is important to note that the performances in *Sleep No More* remain entirely wordless throughout, and the performers move into and out of view through doorways that are often rendered inaccessible to the audience.

29 REBECCA (USA 1940, D: Alfred Hitchcock).

30 VERTIGO (USA 1958, D: Alfred Hitchcock).

David Lynch's films, due to the sense of temporal dislocation that is affected by the collection of signifiers at work in the bar (an experience also typically evoked by Lynch's oeuvre). What effect do all these signifiers (even if fictional) of multiple situations in time, space, and diegesis have upon the experience of space that is to come, when presented to the theatergoer upon entry to the *Sleep No More* venue?

I would argue the effect goes beyond a simple case of having other forms of intertextual reference superimposed onto the *Macbeth* narrative. Instead, we experience *Sleep No More* as an ergodic[31] encounter with a cybertext, which questions our ability to easily distinguish between the visual epistemes of presence discussed by Sobchack. Moreover, the merging of different sound references (audible are excerpts of Bernard Herrmann's scores from Hitchcock films, suggesting that we may actually be dealing with audiovisual epistemes) with an array of other verbal and visual fictional deictic markers places us functionally within the frame of reference of contemporary digital media experience, even though *Sleep No More* employs no electronic screens. We simply carry the neural pathways already formed by post-continuity with us.

POST-CONTINUITY AND THE DENSITY OF SPACE

I hope that through this example of experience in real space, which employs trompe l'oeil effects or illusions beyond the ostensible fiction of the actors' movements through the same space I moved through, one can see the need for further discussion of the term 'immersion'. There is much more at stake with this term than the discussion of single media, for which we have come to expect the confines of scholarship to allow. In *Sleep No More* there are no electronic or digital images employed and nonetheless, I felt as if I had entered into a space that was distinct from the one I had left outside, one that was eerie and solitary despite being one of several hundred guests let loose in the space. The form of immersion I experienced there had less to do with my breaking through a "fourth wall" or an engagement with the fiction provided by the actors' performances and any links that

31 The "ergodic" is a key term in Aarseth's study of cybertextual strategies employed by a wide variety of media. The word "ergodic" is a neologism of his own creation, derived from an amalgamation of the Greek *ergon* or 'work' and *hodos* or 'path.' It describes how texts such as those under study require non-trivial work on the part of the reader or user, in order to actively construct a 'pathway' into and through the aesthetic experience.

might have to my knowledge of Shakespeare's text (although that was also at play); it had far more to do with the sheer impact of the density of the space with which I was confronted and ultimately the intangible borders between fiction and fact, introduced by the plurality of modes at work in the presentation and my particular form of engagement with them.

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