Article

Sensibility, Narcissism and Affect: Using Immersive Practices in Design for Embodied Experience

Jocelyn Spence * and Steve Benford *

Mixed Reality Lab, University of Nottingham, Jubilee Campus, Nottingham NG8 1BB, UK
* Correspondence: jocelyn.spence@nottingham.ac.uk (J.S.); steve.benford@nottingham.ac.uk (S.B.)

check for
updates

Abstract: 'Embodiment' need not focus on isolated individuals or group interactions. This article articulates the potential for designs that prompt participants to bring relationships with other people to mind. These can be fleeting relationships between participants and unknown others, or remembered relationships with romantic partners, family members, or close friends who are not physically co-present or digitally represented. In either case, it is possible to generate affective responses that profoundly shape participants' emotional and physical reactions to, and co-creation of, the designed interaction. This article presents existing practices of immersive theatre to frame our exploration of this phenomenon. It introduces three theories—*mise-en-sensibilité,* narcissistic spectatorship and affect—through which we illuminate both the internally felt and the externally designed experience, whether or not it is explicitly framed as theatrical performance. Through analysis of two immersive performances (one-on-one interactions that could easily be understood in terms of experience design) and two designs of our own, we argue that the affect generated by personal relationships in immersive experiences can both shape and drive participation, and we offer a three-point guideline by which one can design for the affective consequences of bringing relationships to mind.

Keywords: immersive; relationships; performance; interaction design; sensibility; embodied interactions; affect; narcissism; gifting

1. Introduction

Although the term 'immersive' has become something of a buzzword in theatrical performance, user experience design and many other fields, a careful study of immersive theatre practice can drive productive new research into embodied approaches to interaction design—whether or not the design has an overtly aesthetic intent. There is little, if any, disagreement within the theatre and performance studies literature (and this is a rare opportunity to make such a claim!) that immersive performances attempt to draw the spectator into deeply affective and absorbing situations. These can act as 'experience machines' that 'place audience members in a thematically cohesive environment that recourses their sensuous, imaginative and explorative capabilities' [1] (p. 2). While interactive experiences have received attention from both researchers and practitioners in interaction design, HCI, theatre and performance studies, these disciplines have overlooked one small but, we believe, potentially powerful element: the relationship between a participant and another person brought to mind by the event. People experience immersive works as individuals but always in relation or potential relation to others—performers, fellow audience members, even people they know who are not physically co-present. As such, those relationships act upon them and can profoundly shape the affective dimensions of the experience.

This paper looks specifically at the ways in which immersive practices can shape and enhance technologically mediated embodied interactions through attention to the participant's relationships with others. We begin by reviewing the interaction design and HCI literature for evidence of works

that at least point towards the importance of designing for individual relationships. We then introduce three theories drawn from the performance literature that act as lenses to make sense of a participant's embodied experience of an immersive performance, or an experience drawing from immersive practices: *mise-en-sensibilité*, narcissistic spectatorship and affect. Here we refer to affect as a viscerally felt and entirely embodied experience that has immediate physical and emotional implications for design (explained in more detail below). These theories are used to explore four cases studies, two from the immersive performance literature and two of our own design research projects [2]. In the two immersive performances, *Cold Storage* (2011) and *Wondermart* (2009), our analyses reveal mechanisms for deepening an immersive experience by bringing relationships with other people to mind. Analyses of the two experience designs, *The Rough Mile* (2016) and *GIFT* (2017), show the impacts of bringing these relationships to mind outside the realm of immersive theatre. Based on these analyses, we argue for the primacy of each spectator's affective experience in driving not only their response to a given interaction but also their affective participation and their drive to participate further. We also argue for the importance of designing opportunities for participants to contribute their own autobiographical content, including personal relationships, whether these are articulated in public or simply remembered and felt. This argument is followed by a three-point guideline of possible relationship types and how they might be incorporated in design practice. Overall, we extend the discussion of immersion to include relationships with other people as constitutive elements of the spectator's embodied experience. Despite the human-human interaction focus of this argument, we demonstrate that digital technologies are extremely well positioned to contribute to this shaping of experience.

2. Design Background

A number of researchers have for decades developed a rich tradition of investigation into embodied interaction within the interaction design and human-computer interaction (HCI) communities, sometimes overlapping with research into the intersection of technology and the arts (e.g., [3,4]). Naming just a handful of prominent examples, the Tangible, Embedded and Embodied Interaction community takes embodiment and interpersonal relationships as key research topics, as for example, Caroline Hummels and Jelle van Dijk [5] use phenomenology to derive design principles supporting embodied sensemaking, or Scott Klemmer et al. [6] derive five themes from theories of embodiment for interaction designers of any stripe to work with. Thecla Schiphorst has, for many years, used somaesthetics as a framework for understanding and designing aesthetic embodied interactions (see e.g., [7]). Kristina Höök et al. [8] have combined embodiment and an interpersonal perspective when they use embodied interaction theory to drive work on affective systems for emotional communication, an approach that has generated a number of outcomes for them and their colleagues, including the Lega, described below. The emerging fields of wearables and e-textiles rely implicitly or explicitly on embodiment and most often on interpersonal relationships as well (see e.g., [9,10]).

Whereas these lines of research focus on the interactant's physical engagement with the technology, a substantial part of interaction design focuses on interactions undertaken by multiple interactants who have existing or emerging relationships with each other. For example, computer-supported cooperative work (CSCW) centres on technological extensions to human relationships, though often in the context of a problem to be solved or a technological novelty to be understood: for example, James Herbsleb et al. [11] seek to illuminate difficulties in distributed collaboration; Bonnie Nardi et al. [12] explore relationships between bloggers and their (known and unknown) audiences; and Rebecca Grinter et al. [13] investigate ways in which pairs of people use museum audio guides that are generally used by individuals. Interaction design research into media sharing tends to take a more granular and nuanced approach to the interpersonal relationships that form the backbone of these practices—Martijn ten Bhömer et al.'s *4Photos* [14] and Jocelyn Spence's *Collect Yourselves!* [15] are explicitly designed to shape conversations at parties or similar gatherings, while Robyn Taylor et al.'s *humanaquarium* [16] puts the interaction designer directly within the

interactive device, performing music just inches behind the clear glass touchscreen that lets audience members control elements of the audio and visuals. These and similar projects look closely at the effects that people have on others within the context of the interaction, but according to our understanding of embodiment and relationships, none take the imbrication of the two as the main focus of their discussion.

A handful of projects begin to address this imbrication, though perhaps not directly. Jon Back et al. [17] (p. 29) find that designing for embodiment in the context of immersive experience is similar to designing for open-ended play and playful art installations in public spaces, both of which require designers to place relationships with other players or interactants at the heart of their concerns. Helena Mentis and colleagues [18] designed the Lega device to offer a metaphorical window into the activities of others, but participants focused more on their own experience than on those of others. Their analysis points toward a need to understand 'how to design for social embodied interaction' [18] (p. 1). And, of course, the fundamental concerns of John McCarthy and Peter Wright for more than the past decade have underpinned our own interest in how relationships feed into experience design. Their recently published work develops the line of reasoning that took them from the hugely influential exploration of felt experience (including the explicitly embodied) in *Technology as Experience* [19] through their examination of empathy [20], interpersonal interactions in participatory art [21] and the values underlying designed experiences [22]. This latest work specifically suggests the possibility of evaluating interactive works according to their facilitation of 'persons acting in settings, or *people relating with one another* through a medium' [22] (p. 150, our emphasis). We interpret the main thrust of their research to indicate at least a tentative support for the argument of this paper regarding the integral and easily overlooked element of the affective traces of human relationships.

Previous collaborations between the University of Nottingham's Mixed Reality Lab (led by author Benford) have raised the possibility of designing for embodied interactions focused on human relationships even when one of the people in that relationship is not physically present—for example, in the mixed-reality performance *Can You See Me Now?* (2001), participants were asked for the name of a friend they had not seen in a long time. When they completed the game, a performer called out that name, jolting participants from their present reality into memories of a past relationship. Many of Blast Theory's other works draw similarly, though less blatantly, on relationships between participants and non-co-located others, relying on some form of emotional connection between the two (e.g., *Rider Spoke*, 2007; *You Get Me*, 2008). We ask ourselves: what is the nature of these types of connections and how might they influence a participant's affect? Given the lack of direct research attention to questions of designing for such interactions, we used technologically enhanced practices of gift-giving and gift-receiving (here collectively referred to as 'gifting') as a mechanism by which participants could bring to mind people they knew in a familiar way. With this easily understood instrumental goal in place, we could commence the design process. However, along with so many who devote their efforts to embodied interactions, our research interests tend to focus on emotional, affective, and/or aesthetic engagements with others through technological interventions [15,23,24]. In order to develop a gifting process with the potential to impact on our participants' relationships beyond the simple creation or reception of a gift—in other words, to move our participants on an affective level through their engagement with our gifting technology—we turned to a discipline that also explicitly seeks to design interactions that impact their participants on an affective level to create memorable experiences, often using digital technologies. The discipline is theatre and performance studies.

3. Performance Lenses

We now turn to the intertwined disciplines of theatre and performance studies, which offer any number of useful theoretical and practical avenues for understanding and designing affective interactions (see [25]). A handful of publications discussing works of Live Art (a type of performance practice) refer obliquely to audience members bringing other relationships to mind during performance [26] and Deirdre Heddon discusses the ethics of implicating other people in

autobiographical performance [27], yet any techniques they discuss tend to revolve around human co-presence. In fact, Lian Loke and George Poonhkin Khut have taken what we consider to be a parallel approach to ours, using Live Art performance to derive a means of structuring non-autonomous interaction designs, using 'intimate aesthetics' to understand the nature of the interaction [28]. However, we found that the literature around another genre—immersive theatre—provided sustained discussions on how to develop affective responses to other people, not actors performing in a demarcated area 'over there' but people intermingled with the spectators in such a way that physical interaction could be imagined, invited, or even demanded. We suspected that these practices might encompass affective responses to, and physical interactions based on, people brought to mind but not physically or telematically co-present. Rooted in this reasoning and in successful prior experience [25], we turned to immersive theatre to explore the visceral impact of holding in mind a relationship with a friend during a performance or performance-inflected interaction.

We found in the performance literature on immersive theatre three theories, rooted in practice, that allow us to focus our design efforts and then make sense of what our findings revealed. Given our interest in visceral, emotional impacts, we chose '*mise-en-sensibilité*' [29] as a way of understanding works that place the participant at the centre of a multisensory experience. *Mise-en-sensibilité* has been developed to describe the aims and strategies of twenty-first century performance practice, within which immersive theatre plays a dominant role. We then describe 'narcissistic participation', a theory created specifically in response to immersive theatre. This theory complements *mise-en-sensibilité* by examining how a participant experiences a work that can be described in terms of *mise-en-sensibilité*: in other words, a work 'that commands spectators to read, feel, analyze and identify with what they witness onstage *through their own bodies*' [30] (p. 407, emphasis in the original). Informing both of these theories is the concept of affect as used in theatre and performance studies, which we understand as the key to embodied interaction in our four case studies: these two performances and two experience designs provoke physical and emotional responses in participants, responses that influence their choices and thus shape their overall experience. Together, these three theories offer a novel and useful way of creating and understanding designs aimed at affective experiences.

3.1. Mise-en-sensibilité

Andy Lavender [29] has assessed commonalities among what he sees as the most compelling performances of this new century, many of which can be described as immersive. He sees a shift from *mise-en-scène* to what he terms *mise-en-sensibilité*. *Mise-en-scene* is a long-established term referring to the placement of the physical elements of a theatrical piece to create a context and space for physical interaction. However, he argues that such a concept belongs primarily to works of previous centuries, where the aim was to present an event for spectators to view and listen to. No matter what style the creators wished to achieve, they did so by delineating and populating an area within which performers could be seen and heard. Lavender argues that a new term is necessary to address performances that place the spectator at the heart of the performance event. In a sense, this requires a shift in perspective that permits all spaces from every spectator's point of view to be considered as a potential focus of attention, but more to the point, it requires the spectators themselves to become the target of the performance's creative energies. It is their experience that needs to be transformed for the duration of the performance event. His term *mise-en-sensibilité* refers to 'sensibility', which he understands more in terms of feelings or affect than sentimentality (see [29] pp. 97–100 for a detailed examination of the use of the term in and since the 18th century). As with the term 'affect', Lavender notes how the uptake of interest in phenomenology immediately preceded a renewed interest in sensibility [29] (p. 99). He uses 'sensibility' to delineate the ways in which performances of the 21st century, including immersive performances, shape the spectator's affective engagement within the event [29] (p. 100). It is not enough to theorise *that* immersive performances create, valorise and aestheticize affect; it is necessary to theorise *how* performances do such a thing. Lavender's *mise-en-sensibilité* provides an initial insight into the importance of rejecting notions of arranging people and things 'over there',

instead creating situations that stand a chance of altering affect and thereby allowing the spectator to engage as a constituent element of the performance event.

3.2. Narcissistic Spectatorship and Participation

Keren Zaiontz created the term 'narcissistic spectatorship' to refer to 'the consumption of self through interactive and immersive performance' [30] (p. 407). Narcissistic spectatorship is completely dependent on a physical engagement with an immersive performance, as that kind of engagement 'absorbs' the participant into the performance event, making the participant's felt experience part of the event itself. Zaiontz argues that in demanding or accommodating agentive participation, a spectator will 'fully engross' herself 'in a way that highlights her own singular relationship to the piece' [30] (p. 407). Zaiontz analyses both a sprawling work where spectators can choose their own routes and a one-on-one piece in which the performer simply describes each spectator in turn. In both cases, she argues that the spectator's attention is drawn to his or her own affective response to being part of the performance event. In narcissistic spectatorship, the self is not simply the point from which a performance is perceived or felt but a driving force for the spectator to accumulate and pay attention to experiences, even to compete with others for more or better experiences: in Zaiontz's terms, narcissistic spectatorship is 'a mode of reception that valorizes uneven experiences as proof of distinct artistic encounters' [30] (p. 408).

Citing Zaiontz, Adam Alston refers to a similar phenomenon found in immersive performance, which he terms 'narcissistic participation.' Here the audience member's attention is directed inward towards the 'deeply personal, involving, intrusive and richly experiential product' and projected onto the immersive environment in 'its relation to an audience member's perceived or prospective involvement' [1] (p. 35). Narcissistic participation is made up of two mutually reinforcing parts: the participant's internal experience *and* his or her participation (or potential participation) with the objects, spaces and people that shape that experience. Thus the 'affective experience' generated by immersive performance 'takes on aesthetic significance' such that '[a]ffect then implicates the audience not just as a judgemental and potentially empathetic observer of a fictive world and its inhabitants but as an essential part and co-producer of that world' [1] (p. 36). Given the emphasis on the internally perceived experiences of narcissistic participation (and spectatorship), we understand Alston to refer to an affectively perceived co-production as much as a physically embodied co-production. Moreover, as read alongside Alston's observations about an individual's autobiographical contributions to his or her affective responses, we detect a missing element in his construction of narcissistic participation. We believe that relationships with others must contribute to the autobiography that may profoundly impact a spectator's affect and therefore his or her experience. Rather than existing as a physically co-present or digitally conjured 'actor' taking part in each performance (and as such part of the performance environment), the people with whom a participant has an emotionally powerful relationship may exist solely within the mind of that participant at that time, but mentally conjuring their relationship involves far more than a dry act of cognition. Given an appropriate prompt or felicitous situation, an existing relationship might be brought to mind and thereby materially alter that individual's affective response. According to concepts of narcissistic spectatorship and participation, this relationship would form part of the autobiography that the spectator brings to the performance event and which then may draw the attention inwards and provide the impetus for pursuing further experiences, ultimately forming part of the performance event itself.

Theories of narcissistic spectatorship and narcissistic participation also help to clarify an apparent conflict that might, if left unaddressed, steer designers in an unhelpful direction. Without an understanding of the central and productive role that a participant's experience of his or her own affect plays in an immersive experience, it might be assumed that the experience into which an individual is being immersed is made up entirely of the fictional world constructed by the performance-makers. Yet for all that those worlds can enchant the senses and shape expectations (see [2]), immersion ultimately takes an audience member into the self. According to Gareth White, immersive theatre

engenders 'the feeling that if we work hard at our role in them and pursue the action and the performers, we will gain access to the interior of the drama itself' [31] (pp. 229-230), especially if 'we' have one-on-one access to a performer (see also [30] p. 414). White speaks from the experience of achieving the pinnacle of another Punchdrunk performance—an improvised, private, one-on-one encounter with a performer—and asserts that there is no 'interior of the drama itself' [31] (p. 230). His viscerally felt experience was not one of actually being the character he was improvising but of being intensely aware of his own process of improvisation in line with the expectations of the professional performer. His experience is similar to others in the performance research community, as evidenced by this description of a spectator's experience of being approached by a naked performer:

> 'I tried to be cool and interact naturally. ... I did my best to respond in the way expected of me, and there was a lot of enjoyment in the effort to play my role and play it well. However, the total experience was very mixed and extremely strenuous at the moment it happened, although in retrospect I was very grateful to have gone through it. The proximity of Weaver's erotic body and her ambiguous gaze made me fully realize Ubersfeld's "cleavage" of experience, or—to use Blau's more mystical, but reverse-perspective, term—the "horror" of it.' [32] (p. 34)

In other words, at the peak moment of emotional intensity, with the participant the sole focus of the performer's attention and with nothing to distract the participant from immersion in the world brought into being by the performer, their attention is utterly dominated by self-awareness, internal debates on how to act and the extreme awkwardness of relating to the performer. The participant's affect responded to the actual experience of encountering a naked actor in the context of a performance, rather than the fictional experience of an encounter between these two characters. Lavender's analysis of Punchdrunk's *The Drowned Man* agrees that for audience members, '[a] drive to interiority is at play, over and above a drive to dramatic performance' [29] (p. 181), though he holds out the possibility that a stronger narrative might lead to immersion in the fiction. Using theories of narcissistic spectatorship and participation in the context of immersive theatre, the aim of bringing spectators fully inside a fictional world becomes only one possible aim (and, in the minds of some theorists, an impossible one). Instead, even immersive performances based in fictional worlds can aim to achieve powerful affect in their spectators and, perhaps paradoxically, leverage this internally oriented drive to discover more experiences to heighten their engagement with the designed experience.

3.3. Affect through Immersion

'Immersive' has become a buzzword in the past few years, in both the design and theatre communities. Often it is not clearly defined, but it can be interpreted as a synonym for 'engaging' or 'absorbing', descriptions that many designers (and theatre makers) would be happy to have applied to their work. Alston articulates the key difference between immersive and other forms of theatre as those that create an 'audience experience' that 'tends to be framed as the primary, aesthetically meaningful element', and that 'tend[s] to promote introspection, because in the heady heights of immersion and participation it is not art objects that take precedence so much as the affective consequences of an audience's own engagement' [1] (p. 7). In other words, immersive theatre aims to engross audiences in an aesthetic experience that is built around a visceral sense of their own involvement and therefore directs attention to that very involvement: 'It is introspection that ultimately gives rise to the aestheticisation of experience, as aesthetically constitutive audience attention is diverted ... to the experiences that arise from audience immersion and participation' [1] (p. 8). Seminal theorist Josephine Machon agrees that immersive theatre takes the participant's experience as part of the aesthetic of the work [33]. We note that Alston's and Machon's statements can be seen to align with David Z. Saltz's assertion that interactive art is defined by making the interaction itself an aesthetic object [34] (p. 123) and Erika Fischer-Lichte's work to establish the live performance event as an aesthetic 'object' independent of any of its static components, or any of the aesthetics related to static works of art [35], although arguments surrounding the validity of a given work's aesthetic

credentials lie far outside the scope of this article. Machon describes how immersive performances are primarily sites of embodied experience, regardless of the type or level of participation expected of the audience [36,37]. 'Bodies are prioritised in these worlds, possibly performing and always perceiving bodies—the latter belonging to spectators, whose direct insertion in and interaction with the world shapes and transforms potential outcomes of the event' [36] (p. 36).

Machon [33] does not provide a single definition of immersive theatre or cut-off point beyond which a given work of performance becomes 'immersive': it is important to note that for her (and other key theorists would almost certainly agree), immersivity should be gauged along a variety of spectra, with all types of performance falling somewhere between the extreme ends. Even the most traditional performance can, of course, appeal to an audience's affect, and some immersive productions fail utterly to achieve any such impact. Setting clear delineations for immersivity would also run the risk of polarising the roles of spectators, between 'passive' ones sitting still in front of a traditionally staged dramatic work and 'active' ones engaging in works of immersive theatre, many of which also use techniques of participatory performance. As Machon and many others agree, participation is not enough to guarantee immersivity. At the moment, there is little traction in the performance studies literature to argue against those who hold to a difference in degree but not in kind between passive and active spectatorship, usually rooting their arguments in Jacques Rancière's *The Emancipated Spectator* [38] (see e.g., [33] p. 71). Perhaps most importantly for a researcher or practitioner, though, this flexibility regarding definitions of immersivity and the role of the participant means that it is possible for immersive 'practices' to be applied to interactions that do not aim to become fully aesthetic works of theatre *per se*, as Machon explicitly states [33] (p. xix).

By putting affective involvement at the heart of the aesthetics of immersive theatre, the term can be applied to a wide range of theatrical sub-genres ranging from Punchdrunk's enormously large-scale, visually spectacular performances, which give participants free rein to explore a multi-story, many-roomed performance space alongside the performers (e.g., Punchdrunk's *The Drowned Man—A Hollywood Fable*, 2013), to intimate, one-on-one performances in which a single audience member might be cradled in silence (e.g., Adrian Howells's *The Garden of Adrian*, 2009), to public violations of privacy and ill-humoured personal attacks (e.g., Ontroerend Goed's *Personal Trilogy*, 2003–2010). Machon describes the 'central features' of immersivity in theatrical discourse as the 'framing' of experiences [33] (p. 68) to emphasise 'the involvement of the audience . . . a prioritisation of the sensual world . . . [and] the significance of space and place' [33] (p. 71). In fact, her text builds on her previous monograph, *(Syn)aesthetics*, which proposes that for any performance event, '[t]o experience synaesthetically means to perceive the details corporeally' [39] (p. 17). Machon makes clear that audiences engage with immersive experiences using physical and multisensory processes that are intertwined with, not subordinate to, cognitive sense-making ones [39] (p. 14). (The emphasis on affect in this paper is not intended to imply that there is no role for cognition in immersive theatre, but we agree with the theorists cited here that affect is not necessarily subordinate to cognition in immersive experience.)

Affect has become a key term in psychology, sociology, philosophy and other disciplines, including performance as a broad field of study ranging far beyond immersive theatre (e.g., the origins of performance analysis in semiotics shifting in the past several decades to include phenomenological methods, see [40,41]). Affect in performance studies tends to refer to the physically felt reaction to a stimulus, before or beyond our mental naming and categorising of its associated emotion. The degree of affect achieved by a given immersive performance is seen as a measure of the intensity of its immersiveness [33] (p. 68, also p. 70). While Machon offers a scale of immersivity against which one might measure a performance, this is not accompanied by a methodology for quantitative assessment of affect; rather, the scale is intended to emphasise her point that immersive performances differ only by degree from more traditional, proscenium-arch theatrical performances. Machon's focus on affect is shared by the most prominent studies in immersive performance to emerge since her seminal monograph. Affect is one of the key concepts in Alston's monograph on immersive performance, as it

provides a means of understanding the 'biopolitics' of participation in immersive theatre [1] (p. 43). For him, affect refers most pointedly to visceral (i.e., physical) reactions or interactions, but he is careful to avoid any implication of a mind/body split or causal relationship. 'The key to understanding the terms of this negotiation lies in what participants bring to the production of affect. . . . an important part of this process involves the inputting of autobiography into affect production' [1] (p. 43). By bringing 'autobiography' into the discussion of affect, by which he means individual learned responses that extend or complement basic, virtually universal physical responses, Alston opens up a space within which we can place an individual participant's experience where that design incorporates a relationship between the participant and someone who is not within the performance but who is deliberately invoked for the purpose of creating affect within the participant. This differs in at least one significant way from the way in which a play about fathers might bring an audience member's own father to mind. As with immersive theatre in general, the evoked relationship is made an integral, embodied, and—most importantly—constitutive element of the aesthetic event. A play that features a father-child relationship would still be intelligible, even moving, to an audience member who grew up in an orphanage, while an immersive performance that uses a participant's personal relationship would be significantly weakened if the participant had no comparable relationship to use.

3.4. Three Theories Together

Using affect as it is understood in the performance literature, it is possible to unpack the visceral responses of spectators or participants in an immersive performance or experience designed to incorporate immersive practices. Narcissistic spectatorship and narcissistic participation explain the ways in which immersion is heightened by designing for each individual spectator's reaction to the work, including designs that solicit memories or responses from outside the realm of the performance event (i.e., Alston's 'autobiography'). Immersion is driven by the individual spectator's desire to acquire and expand his or her unique relationship to the event, which in itself can drive the desire to participate. Where narcissistic spectatorship provides insight into how a spectator drives his or her experience, *mise-en-sensibilité* reorients a designer's understanding of how the event itself is structured, from 'over there' to 'in here.' The physical, technological, artistic and institutional components of a theatrical event are now implemented in a way that directly enables or constrains the spectator's affective and participatory reactions. This change in focus clarifies rationales in immersive practice that can inform experience design.

4. Case Studies

We now present two case studies from the performance studies literature—*Cold Storage* (2011) and *Wondermart* (2009)—in which we see participants bearing relationships with other people in mind in such that they at least potentially alter the aesthetics, or embodied experience, of the performances. We analyse these in terms of *mise-en-sensibilité*, narcissistic spectatorship and affect to examine how exactly these internally experienced relationships seem to be created and how they encourage affective experiences. These case studies are chosen in part because of the highly distilled views they offer of the topics at hand and in part because they share many characteristics in common with designs that might appear in research projects or events within the interaction design or HCI communities. In fact, while some performance theorists or practitioners might argue that they should not merit the label 'performance'—see Fischer-Lichte [35] or Phelan [42]—such arguments no longer form a substantial source of debate in the literature, and these types of projects are discussed in terms of performance with little or no preamble (see e.g., [43] arguing for the validity of performances without live, co-located performers).

We follow these two case studies with analyses of two experience design projects predicated on gifting: *The Rough Mile* (2016) and *GIFT* (2017). These projects share many characteristics of designs that appear without a murmur in the performance literature, yet they were not created with the primary purpose of being understood as aesthetic events. Instead, they were created using

practices of immersive theatre which, as Machon reminds us, can usefully be applied without aiming to be understood as theatrical performance [33]. And, in fact, one of our projects was led by the long-established and highly respected artist group Blast Theory—though they were more interested in exploring a technology-based interaction among participants than in creating a performance or aesthetic event *per se*. Our aim in these analyses is to use the lenses of *mise-en-sensibilité*, narcissistic spectatorship and affect to chart how relationships that manifest only within a participant's own mind can alter or even play an indispensable role in 'performance' designs.

4.1. Cold Storage (2011)

Alston [1] hints at the importance of human relationships in the co-production of a theatrical world in his discussion of a remarkably stripped-down immersive performance: *Cold Storage* by artist Ray Lee. In this work, the participant spends fifteen minutes alone in a cold, coffin-like box. Alston's experience was drawn to his own embodied sensation of being enclosed, alone, in a bitterly cold space, where the only thing he could see was his own face reflected in a small mirror. It would be hard to imagine a more solitary experience. However, Alston mentions but does not explore the key human relationship at play. Participants are not left to navigate this entire experience alone. Rather, an individual in the role of a 'nurse' leads participants in, one at a time and eventually takes them out. In Loke and Khut's terms, the nurse performs the function of 'Fitting and Induction' [28] (p. 97). Alston does not specify whether the 'nurse' explicitly lays out the risks of the piece or how the participant might opt out, but the simple fact that there is another person present in a public performance suggests that the risks should not be unmanageable and that there is likely a chance to opt out during the performance [28] (p. 97). Ever so briefly and anonymously, audience members form a relationship with a person with knowledge and, one might argue, authority—both as nurse and as performer/insider—to frame their relationship through the 'Ride' of the experience (the time spent enclosed and alone, see [28] p. 97) and to whom their minds can return. They know that they are not alone. They can remember the 'nurse' and imagine him coming to their aid, if they are as apprehensive as Alston was—or imagine him spying, or worrying, or anything else this 'nurse' might do. This performance operates almost entirely on the level of affect and directs participants towards their own narcissistic spectatorship. In fact, there is little else for participants to do than to become engrossed in their own affective responses, and their responses become the performance. According to Zaiontz [30], participants could be expected to pursue more and/or stronger experiences of being cold and alone; Alston [1] might strengthen Zaiontz's argument by focusing on participants' tendency to participate as well as experience. In the case of *Cold Storage*, virtually the only means of participation short of shouting for the nurse (and presumably thereby ending the performance) is to delve more deeply into the experience, which leads to heightened affect.

As with affect and narcissistic spectatorship, *Cold Storage* offers a highly concentrated example of *mise-en-sensibilité*. Every element of this design, including the 'nurse', is constructed to direct participants towards their own perceptions and affects. Imagine that in the absence of the 'nurse', a crackly voice came over a distant speaker, instructing participants to shut themselves into the box and await further instructions. At the end of that instruction, there was the sound of a heavy door closing and the crackling of the speaker breaking, and the box shut with the sound of a lock clicking into place. At this point, only the implied contract between whichever faceless institution was offering the experience and the vulnerable participant would offer the promise of a safe and comfortable outcome. It would not be odd for a participant to physically feel a heightened vulnerability, if not outright fear. We argue that swapping out the human nurse for this collection of sound effects would radically alter the performance, shifting it from a somewhat disconcerting exploration of coldness and enclosure to an exploration of fear, abandonment and loss of agency. During the 'ride', the only difference between the two experiences would be the ability for participants to recall their fleeting encounter with the 'nurse.' In other words, based on Alston's analysis of *Cold Storage*, we hypothesise

that the human relationship that he could hold in his mind played a small but potentially significant role in his engagement with the performance.

The contrast between the real and the hypothetical versions of *Cold Storage* reveals the possibility for the mere memory of a human relationship to shape a participant's experience of the performance. Even a simple extrapolation of Alston's experience and a quickly sketched alternative indicate that there is more to embodied experience than movement or the perception of individuals.

4.2. Wondermart (2009)

Silvia Mercuriali's *Wondermart* is a half-hour audio performance for one participant at a time. Each engages with the performance by listening to an audio recording using an MP3 player. The piece takes place in whichever supermarket the participant chooses, as the performance leverages the generic layout and contents of this type of shop to underline its commentary on consumerism. The audio consists of directions telling the participant what to look at, where to go, what to do and what to think about. One instruction tells the participant to choose a fellow shopper—not just any shopper but one apparently more powerful than the participant—and follow them. Thus, the participant begins to form a hypothetical relationship with this other shopper in which he or she posits the ways in which the shopper might have the participant at a disadvantage. The participant is also instructed to scrutinise this shopper's choices, thereby placing the participant in a position of judgement and reflection. Another instruction tells the participant to imagine shoplifting and in this context, to locate the CCTV cameras and security guards. At no point is the participant asked to do anything more transgressive than to touch the interior of a refrigerator unit: in fact, Mercuriali explains that *Wondermart* participants are meant to move through the supermarket unnoticed, so that 'nobody would care about you' (quoted in [33] p. 191). Rather, the piece encourages participants not only to think about but also to feel viscerally how they relate to consumer-based norms of behaviour.

Wondermart manipulates participants' affect as they follow instructions to interact unnaturally in the entirely familiar space of a supermarket. While of course their physical movement through the space is necessary for them to access the piece in any meaningful or sensible way, the reports of the artist's intent, performance content and participant responses underscore the primacy of physically, viscerally felt emotions such as shame and fear. In describing her intention, Mercuriali explains that *Wondermart* 'preys upon precisely this [people's desire to conform] when it asks us to consider stealing an arbitrary item. Hold it, it teases; feel it; notice the cameras and security guards; perhaps put it in your pocket; imagine leaving. Now, feel the sweat pricking at your skin' (quoted in [44] p. 213). The aim is clearly no dispassionate, arms-length pondering on the nature of social mores. *Wondermart* wants skin-prickling discomfort to lead their participants' engagement with the ideas they introduce. In other words, 'by directing the performer to recognise the many surrounding cameras, Wondermart is prompting less a Situationist-like intervention than inviting an affective reaction from the performer's body' [45] (p. 8). And, according to reports in the literature, participants do indeed accept that invitation.

When the performance succeeds in its affective aims, participants become fully immersed in their own imbrication with the content, and they engage in narcissistic spectatorship. They are not merely responding to an exciting event that they see and hear occurring on a 'stage' of some sort at some distance. Rather, they are attending to their own physically felt responses as a vital element of the performance event itself. Indeed, in the case of *Wondermart*, Alston's 'narcissistic participation' may be the more relevant reference, as this theory also involves 'an audience member's perceived or prospective involvement' [1] (p. 35). As the performance unfolds, participants have no way of knowing that they will not be asked to do anything truly transgressive. The soundtrack invites them to behave somewhat unnaturally, to consider how they might appear to others, to judge others and even to contemplate theft. The simple fact that they continue to follow these instructions means that they are perceiving their own involvement and at any time might have to decide whether to involve themselves in an illegal act—which means that whether they agree or not, they would be participating

in a transgression (either by violating legal and social norms, or by violating the performance's stated expectations). Here, physical embodiment during the performance works with affective engagement to create narcissistic spectatorship and participation as a vital component of the performance experience.

Wondermart also invites another part of Alston's theory, namely autobiography [1]. On a general level, this performance (like so many others) seems to have a comfortably middle-class, law-abiding audience in mind. Surely some of its frisson would be lost if participants were drawn from a group of hardened prisoners who grew up stealing on a daily basis and regularly size up other people on the basis of how much stronger they may be. Even within the predominantly middle-class and law-abiding audiences that the performance surely attracted, though, not every participant would have the exact same relationship to these instructions as everyone else. Anyone who shoplifted as a teenager, even once, might feel actual remembered shame on top of the hypothetical shame anticipated in the performance, or perhaps not shame but triumph? Dread? Memories of getting away with it when their best friend was caught and punished? Memories of a family member going to jail for theft? These particular possibilities are the products of our own imaginations, but as Helen Iball notes, 'the devil is in the participant's personal daemons, whose idiosyncrasies practitioners cannot predict but whose manifestations might be accommodated . . . ' [44] (p. 210). *Wondermart* surely invites autobiography to take centre stage at least some of the time for at least some of its participants, and this can change the entire event.

The *Wondermart* performance is composed of the audio playing on an MP3 player, whichever supermarket the participant chooses to use and their own participatory efforts. Of these, Mercuriali could fully control only the audio, which could in no way respond to emerging situations. She could assume, but not know, that the fresh fruits and vegetables would be located closer to the entrance than the cleaning products, and she could assume, but not know, how exactly her participants would interact with their environs. *Wondermart* is in this sense a brilliant example of the importance of *mise-en-sensibilité*. Mercuriali let her entire performance hinge on the un-stewarded interactions of unknown people in an unknown location. We argue that this was possible because of the careful crafting of the participant's sensibility, or feeling. '[T]he people around you will look special or absolutely banal depending on how you feel. What we try to do with our shows is to make everything special, to connect with emotions, to make it into an epic landscape or into a secret, tiny-little thing that nobody else is seeing.' (Mercuriali quoted in [33] p. 191). Here, we understand Mercuriali to be describing her attitude towards *mise-en-sensibilité* before the term was first published. Her performance shaped her participants' feelings and connected to their emotions in a way that created a world around them—special or banal, epic or tiny—without even knowing for certain what their real world would look like. Iball makes a similar observation about *Wondermart*:

> 'Given that a primary focus of 'intimate theatre' is the participant's experience (and particularly when the performer retreats, in order to help liberate the participant's experience, that is, the move from inhibition to inhabitance), this disturbs the assumption that 'audience participation' refers primarily to exchanges between performer and audience member. Thus it is possible to consider participation in broader terms, overriding clear distinctions between interactions with people and interactions with things, to dislodge hierarchies of the mise en scène that privilege the performer over scenic property.' [44] (p. 213)

We do not wish to imply that physical objects or settings have no role in this or other performances: *Wondermart* would make little sense in a primary school or a forest. It would probably also go somewhat awry in a specialist supermarket or a hypermarket selling drill sets and garden furniture in the aisles just past the food. Our argument here is that it was possible to take the basics of the *mise-en-scene* for granted in this particular instance and focus instead on the *mise-en-sensibilité*. In fact, the driving force of this performance was each participant's internal negotiation with the situations presented against the backdrop of the supermarket, and this was achieved through the focus on affect that achieved narcissistic spectatorship and participation through the creator's focus on *mise-en-sensibilité*.

4.3. The Rough Mile (2016)

At this point we move from the performance literature to our own performance-inspired interaction and experience design practice, using the performance theories of *mise-en-sensibilité*, narcissistic spectatorship and affect to illuminate immersive practices in our work. *The Rough Mile* is a two-part locative audio experience created by the co-authors and colleagues Chris Greenhalgh, Adrian Hazzard and Sean McGrath. It guides pairs of participants through the process of making and then receiving gifts of digital music for each other. Locative audio projects take participants through an audio soundscape that reflects or is determined by their location, usually an outdoor, public space. Locative audio is identified as an 'important digital strategy often used in immersive theatre', where 'sonic media immersion then allows us to place the locative media experience of users centre stage, focusing on their situated experience . . . framed by . . . the social, physical, media and sound context and our embodied interactions with these' [46] (p. 292). Along these lines, participants of *The Rough Mile* undertake Part 1 equipped with a GPS-enabled smartphone running custom location-based audio software that interleaves spoken word, custom background music, ambient sound recorded in situ and real-time ambient sound made audible through the use of bone-conducting headphones that do not block the ears. They walk the mile-long city-centre route alone but with their friend undertaking the same experience nearby. The spoken word track consists of a linear narrative interspersed with questions posed directly to the participants, asking them to think of songs that they would like to give to their friend. The questions, narrative, music, ambient sound and location aim to create an affective response in the participants through multisensory thematic connections: for example, a section of the narrative describing a difficult situation in the main character's life is heard along with somewhat mournful music as participants walk uphill along a bleak alleyway; then as they emerge into an open space with a tram stop, they are encouraged to imagine the perfect fantasy location that the tram could take them to and then choose a song for their friend that would go along with that choice of location.

The second part of *The Rough Mile* follows the same route but plays the songs chosen by each participant's friend along with audio recorded excerpts of their comments and rationales, such as which fantasy tram destination they chose and why. We drew on examples of locative audio performance to inform our approach. *The Missing Voice (Case Study B)* (1999) by Janet Cardiff led her audiences on a city-centre walk: her narrative was much less linear than ours, it made no use of location-detecting technologies (which were not easily available at the time), and her heavy headphones encouraged a different sense of connection with the area than our bone-conducting headphones did. *Radioortung—50 kilometres of files* (2011) by Rimini Protokoll used GPS to connect their audio directly with the participant's location and its content sought directly to activate their memories and imaginations, but they took a social rather than a personal approach. Finally, *Wondermart* used the intimacy of headphones to ask questions and make suggestions to audience members but in a constrained indoor location.

This project was designed primarily to be a mechanism for gifting non-physicalized digital music. As there are currently any number of mechanisms for casually generating and sharing playlists, we aimed to appeal to participants' gut reactions and emotion-laden memories in the hopes of soliciting affectively impactful songs above and beyond the compilation of a playlist. Any aesthetics it achieved were meant ultimately to serve this goal. To achieve the goal, though, we worked to make the locative audio walk as much of an aesthetic experience in its own right as possible. We felt that this was an achievable though perhaps lofty goal given our choice of approach, as '[i]mmersive theatre [. . .] can extend to sensual engagement via a clever use of intimate sound in headphones [. . .]. Where virtual or mediated technologies are employed they accentuate sensual involvement and playfully manipulate a visceral-virtual perception' [33] (pp. 67–68).

We conducted 'performances' of Part 1 on 13 pairs of friends (26 participants in total) in April of 2016; all 26 completed Part 2 at their convenience as their gifts were made ready, over the course of the following several weeks. Data were collected through three separate semi-structured interviews

conducted on individual participants immediately after Part 1, on pairs of participants immediately after Part 2 and via telephone on individuals two weeks after the conclusion of Part 2. These interviews were supplemented by questionnaires filled out after Parts 1 and 2. The topics covered focused on the reception of the locative audio experience, particularly whether the multisensory structure of Part 1 immersed participants in their experience and whether Part 2's audio walk felt like an actual gift. In probing these topics, though, we asked a number of questions relevant to the perception of personal relationships in the context of a designed experience. Their responses reveal the overall importance of physical movement through an audio-visually stimulating space *and* of the emotional connection to their friend as enabled and enhanced by that experience.

Affect played a significant role in shaping our participants' experiences in both parts. We had anticipated that they would perceive Part 1 as a performance-inflected mechanism for selecting songs and that only in Part 2 might they feel any affective connection to their gift. Instead, when participants were interviewed about their experiences of Part 1 and Part 2, their relationships with the friend they exchanged gifts with played far more than an instrumental role in directing song choice. The act of keeping their friend in mind during Part 1 strongly influenced their perception of the entire experience, manifested through affect and embodied reactions. Additionally, their experience of receiving the gift (or not-quite-gift) in Part 2 was to a great extent mixed up with how they imagined their friends' experiences. For example, seven participants (1A, 2B, 6A, 10A, 11A, 11B, 12A) revealed some level of worry during Part 1 about how their friend would like their choices; the friends of all but one reassured them after Part 2. All but one participant enjoyed their gifts, some describing their responses in terms of affect: one nearly cried (1A); two pairs were almost unable to contain their excitement at having picked the same songs (1A&1B, 7A&7B); and eleven (1A, 1B, 3B, 5A, 6A, 6B, 7A, 7B, 9A, 12A, 13A) started smiling or dancing without planning to, or caring, or even noticing at first. In these instances, their own affective experience was shaped by their relationship to an individual who was neither physically co-present nor digitally represented.

Because this project facilitated a gift of songs with accompanying snippets of commentary, the participant's friend was always (if not continuously) an active presence in each participant's mind. However, this did not shift participants from narcissistic spectatorship to some sort of altruistic spectatorship. Instead, some became deeply engrossed in their own relationships to Part 1 (see [30] p. 407). At one extreme, one participant described his experience of Part 1 as being 'like I was doing the walk with [his friend]' (7A). At the other end of the spectrum, when asked to describe their overall experience of Part 1, only seven participants explicitly mentioned their friend or the task of choosing songs for their friend (4A, 5B, 6B, 7B, 10B, 11A, 12A). The rest took that element for granted and focused exclusively on the elements derived from immersive theatre such as the audio content and its relationship with the locations. Most (22 in Part 1, 20 in Part 2) described themselves as immersed in the experience. Those who found their immersion interrupted, for example by the need to cross a busy road or by interactions with others, tried and succeeded at regaining their immersion, indicating the drive to acquire further experiences within the event [30]. In this sense, holding their friend in mind did not preclude narcissistic spectatorship. Rather, it provided a motivation for participants to engage in narcissistic participation, pushing themselves to select song choices that they felt to be satisfactory.

Another indication of the potential for emotional introspection brought on by participants' multisensory, embodied and in many cases affective engagement with *The Rough Mile* is the depth of emotional response that a few had. The content of Part 1 in no way attempted to probe participants' feelings towards their friends. On the contrary, it was constructed to accommodate any type of relationship, from married couples to co-workers. However, a few described how the experience altered their perceptions of their relationships with their *Rough Mile* partners: one realised how much she trusted her boyfriend (12A), one felt that she was 'bonding' with her friend (9A), and one had the realisation about his girlfriend that he 'may get married to her, so we should cherish every moment that we have' (2B). One participant (11B) was disappointed with his new girlfriend's attitude towards the gifting process, feeling that she had not been as personal in her selections as he would have liked.

He commented that Part 1 provided a good opportunity to reflect on their relationship, and after Part 2, he broke up with her for reasons that exceeded but included his experience of *The Rough Mile*. In these instances, opportunities for narcissistic spectatorship took participants in affective and/or emotional directions that impacted on their actual relationships.

Embodiment (walking a route while listening to audio crafted to suit that movement) and affect (physically and viscerally responding to the content while bearing a friend in mind, including how he or she might respond to their choices) were used to directly alter the participants' feelings with the aim of prompting affectively impactful music choices. This was not a backdrop for a separate performance event but a *mise-en-sensibilité* that shaped a performance-oriented event of its own. As would be expected, this work of locative audio was carefully crafted so that the various layers of the audio would interact dynamically with the location as participants moved through the space. The 'location' included both permanent structures and the population, traffic, weather and so forth, that we could guess at but not know in detail (much like *Wondermart*). Participants' engagement with the locative elements of the piece, and therefore with the piece as a whole, depended on their movement through space. Participant 2B conceived of the experience in terms of place: 'the story was in stages, depending on where you were.' During the design process we had pared down the audio to ensure that all elements would fit within the fastest walking pace, and we took advantage of GPS technology to make all tracks (spoken word, music and pre-recorded ambient sound) suit each participant's speed. Gratifyingly, a handful of participants asked us in some amazement how we managed to time the audio so accurately, not realising that the audio followed their movements. When asked to describe Part 1 in their own terms immediately after finishing it, 15 of the 26 participants referred specifically to noticing place or moving through space—but this was a rather blunt instrument for discovering their reactions to location and audio elements that were carefully intertwined. Therefore, we asked them whether, hypothetically, they would prefer a version of *The Rough Mile* that would not involve any walking but rather could be accessed online. Of the 26 participants, 23 stated that they would not, most because without embodied engagement, Part 2 would have little value as a gift. In fact, 15 participants stated that without walking the route, Part 2 would be 'just a playlist' (in the words of 13A and in words to that effect by the 14 others who shared this opinion).

Some related the sensation of walking to other elements of the experience such as engaging with the narrative or thinking of songs to give to their friend. For example, 12A connected walking to both song selection and an otherworldly experience overall: 'There were points where I stopped and points where I walked through. Again, it made me feel a little bit more observant of the world, a little bit like I was, what made me feel different this time was like I was an avatar in a game that nobody else knew [. . .] really involved in the process.' Participant 3B had a somewhat more quotidian experience that also directly linked movement to song choice: 'I think actually seeing where you were, as much as you might have passed the streets before, actually walking past them while choosing the songs I think helped.' Movement also inflected the experience of listening to the music gift in Part 2: recall the 11 participants who physically expressed their excitement in the middle of a busy city centre. Overall, embodiment was woven through the responses of many participants when discussing the most critical elements of the experience: choosing music for the gift, listening to the gift and the ways in which the overall experience was understood. These responses indicate that *The Rough Mile* worked by creating a sensory world that directly impacted participants' sensibilities.

4.4. GIFT (2017)

Seeing the potential of gifting as a framework for creating affect and influencing relationships even when the gifting partner was not present, we have brought gifting into another context: visits to museums and cultural heritage institutions. Along with the long-established artist group Blast Theory, whose work is regularly discussed in both the performance and experience design literatures, we are currently in the initial stages of co-developing a mobile phone app that enables museum visitors to make hybrid gifts for each other based on their experiences there. (The original version was actually

two distinct apps, one for building the gifts and one for receiving them; since then, the apps have been combined.) The hybrid gifts are composed of photos of individual objects from the museum collection, selected by the gift-giver with the recipient in mind, contextualised by the gift-giver's own written comments and 'wrapped' by writing clues or instructions on how to find the gift inside the museum. (More wrapping functions will be implemented in later versions.) All but one of the gifts were made up of multiple 'wrapped' photos; technically there was no limit to the number of components within a single gift, though a glitch meant that most gifts only displayed a single 'wrapped' photo. The app leverages the creativity of visitors to select locations and contribute their own small stories, as with Blast Theory's seminal work *Rider Spoke* (1999), and maximises this creative impulse by carefully crafting the language and layout of the app's interface, as with their projects *Karen* (2015) or *2097: We Made Ourselves Over* (2017). Although this project has not yet benefitted from a full-scale implementation and analysis, Blast Theory and the Mixed Reality Lab conducted an informal test on the first iteration of this app on 12 participants at the Brighton Museum & Art Gallery in July 2017. Two half-day sessions on the app itself were conducted and analysed: one in which individuals created gifts that other individuals received and one in which groups created and exchanged gifts for each other. We believe that the initial findings from these user tests reveal important insights around designs for experiences built around human relationships.

The physicality of the engagement emerged as a key means of engaging with and speaking about the experience. The first part of the gift-making experience was to identify objects to photograph, 'wrap' them and give to a 'friend' (the term we apply to gifting pairs: the actual relationships included romantic partners, friends and colleagues). Gift-makers browsed the museum for objects that caught their eye, either something that might amuse their friend or something they believed their friend would appreciate based on their tastes or interests. All agreed that the intention of locating a gift for a friend significantly altered their movement through the museum space and/or the numbers and types of objects they paid attention to. They tended to move faster, spend less time looking at the exhibition's full offering than they ordinarily would and yet engage in greater detail and often for a longer time than usual with the objects they chose as gifts. Thus it was not app *per se* that dictated their actions in the museum but the way they chose to interact with the app based on what they imagined their friend would like. To do this, participants kept their friend in mind throughout the process, and the desire to please their friend motivated their engagement with the experience, as afforded, constrained and inflected by the app. This, in turn, changed participants' engagement with the museum itself: the app 'directs you more, kind of it corrals you into a different sort of mind set, I think. It gives you a narrower focus. What I found was, choosing the gifts, it totally made me look at different parts of the museum that I've never looked at before, it makes you focus more on the museum and all the exhibits a lot more that you would as a general punter' (P1). The app did not add gift-making to an ordinary museum experience; rather, by putting a relationship with a friend who was not present at the heart of both gift-giving and gift-receiving, it provided a new type of museum experience.

It is worth noting that the physical, visceral nature of affect does not necessarily require sensory bombardment or extreme responses. Blast Theory took great care to create a 'voice' for the app through text, image, layout and interaction design. They wanted the app to be a distinct entity, separate from the 'voice' of the museum itself. Their aim was to facilitate a comfortable, intimate relationship between participants, the app—and, by extension, their friend, who would receive the results of their activities. As a result, we aimed to gently encourage our participants towards a positive affect when devoting their attention to their friend in the context of gifting. As one participant put it, her gift 'makes me laugh a bit, brought me a bit of joy' (P4). Another described his gift as 'quite personal' (P9), despite the research-oriented context in which it was given. The constraints of the testing situation worked against this aim, as five of our twelve participants brought up the stress induced by time pressure (without being asked). P2, for example, wanted more time to think about her choices and to add more parts to her gift, and P6 noted that there was 'always a sense of pressure to complete a gift and find an opportunity, not uncommon in gift shopping, by the way.' P6 went on to describe the effect of time

pressure on the quality of his engagement: 'I'm not sure I dwelled, may I would have had, given more time.' By 'dwelling' we understand P6 to refer to a deeper mental and affective engagement with the gifted museum objects in the context of his relationship with the gift-giver.

Although the *GIFT* app was not intended to be understood as a fully aesthetic immersive theatre performance, it is still easy to see narcissistic spectatorship and participation at work. In creating gifts, all participants made full use of the time allotted to choose the best gift for their friend and 'wrap' it with the most appealing text. Their contributions can be understood as narcissistic participation inasmuch as they co-produced their secret 'mission' among oblivious museum patrons (as in *Wondermart*) and as narcissistic spectatorship inasmuch as they consumed their own experiences of creating gifts. In all cases, autobiography was in play. Two participants relied on their own personalities and preferences: P8, who had not known his friend for very long, chose gifts that 'talked as much about my sense of humour as it did about what I knew about [him].' More altruistically, P6 chose gifts 'that were quite a lot more about me than [his friend]' because his friend was from a different country and P6 wanted to explain cultural references that his friend would otherwise miss. As a consequence, the choices that P6 felt were about him because they reflected his own background were actually made with his friend firmly in mind. P6 spent his time evaluating which objects would require knowledge of British culture. Six participants explicitly made their choices based mostly or wholly on their friend's tastes and interests, or 'that personal connection' between them (P11) including 'moments or references to things we've spoken about' (P10). For example, another participant (P2) who did not know her colleague particularly well chose a jug. 'I thought it was a biscuit tin, a biscuit thing, so I was just like oh, that'll be nice, [she] likes biscuits.' This participant had aimed for something more meaningful: 'a costume because you like theatre but then I just didn't.' In the absence of any suitable costumes, this participant 'compromised' with what she could find that had any relevance at all. Those who knew each other better tended to have an easier time. For P9, 'I chose something that I knew she'd like, so I drew on like what I already knew about her to make either funny gifts or to pictures of stuff that I knew she would like, or I hoped she would like.' The last two gift-givers combined the two: P1 chose objects based on a combination of his own preferences and what he knew his friend would like; P12 spent her gift-creation time 'trying to find things that appealed to me and to him.'

The relationships between participants and their friends profoundly shaped the ways in which participants pursued their own narcissistic accumulation of experience, in light of the impression they hoped to make. First and perhaps most importantly, every element of the embodied experience described in the paragraph above was altered not by the app itself but by participants' desire to create a pleasing gift *for their friend*. In other words, their attention was focused at least as much on their relationship with this individual and the reaction they anticipated seeing as on the object that the app directed them to find. As P8 put it, 'I suppose [the gift] told me more about [my friend] than it told me about the objects.' The app gave shape to the gift-making process but it did not (and could not) instil that desire to please a particular individual in the participant's mind. Rather, the experience of each individual—including their movement through the museum space—was formed by the personality and preferences of their friend.

The physical setting of the Brighton Museum presented an interesting background in terms of *mise-en-sensibilité*. Participants had no more access to the exhibitions than ordinary visitors would have, thereby precluding any touching, rearrangement, altering of the physical objects, or any form of engagement that would hamper enjoyment by other visitors. Neither did we have the opportunity to add content such as signage, QR codes, or near-field communication (NFC) technologies within the museum. And, because of their interest in experimenting with this app as their sole means of engagement, Blast Theory chose not to incorporate live performers. This meant that all efforts to modify participants' sensibilities needed to be channelled through the app itself.

Much of the impact of the *GIFT* app's *mise-en-sensibilité* can be seen in the different attitudes towards physical co-presence seen in two situations. Gift-receiving basically consists of receiving a notification in the app that a gift has been made, then 'unwrapping' the gift by finding it. Because the

app did not use any technical means of wayfinding or location identification, gift-receivers had to rely on the instructions the gift-maker wrote—clues that were sometimes not very detailed, or even intentionally cryptic. Thus the process of locating the gift was sometimes difficult, and for 5 of the 8 participants who responded, having the (knowledgeable) gift-maker present to witness their efforts caused some degree of embarrassment. In the absence of the gift-giver, gift-receivers exhibited much less stress in finding their gifts. On the other hand, 5 of the 6 responding gift-givers enjoyed sharing the experience of 'receiving' the hybrid gift (i.e., locating the gift so that the object and its associated text could be viewed). As many of the gifts were intended to be funny or to highlight an amusing object, this allowed for friends to share a joke, initiate a conversation, or exchange information about the object. Thus the app created the opportunities for both embarrassment and joyful connection as part of the gifting experience. While we would never claim from these small samples that we can predict future behaviour along these lines, the emotion and detail of some of these responses underscore the ability for even the simplest app to profoundly shape participants' experiences as understood through *mise-en-sensibilité,* narcissistic spectatorship and affect. From this initial foray into app design for museum-based gifting, it has become clear that each person's gifting partner becomes an affective presence for the other, one that remakes relationships to the museum space and its objects.

5. Discussion

Analysis of these performance case studies and interactive experiences in light of *mise-en-sensibilité*, narcissistic spectatorship and affect points towards an overlooked component of design for embodied experience: accounting for the individual participant in relation not only to the physical and digital elements of the design but also to relationships with people brought to mind. Thinking of these others brought to mind, with whom participants may potentially interact as a result of their engagement with a designed experience, can alter their affective and physical reactions to that experience. These reactions can be subtle (as the 'nurse' allows participants in *Cold Storage* to feel safe enough to focus their attention on their own shivering) or forceful (as *The Rough Mile* triggers public displays of smiling and dancing when participants feel a positive connection to their friend through music). While movement through space and the perception of one's physical self play important parts in all four of the case studies examined here, affect as a visceral and therefore embodied response is the means by which these experiences connect participants to a sense of their relationships with others.

We now return briefly to White's assertion that there is no 'interior of the drama itself' [31] (p. 230) in order to indicate the importance of each individual's pursuit of affect through participation in the context of immersive performance. In terms of what is commonly understood as 'drama', *The Rough Mile* included a spoken linear narrative for participants to follow; *Wondermart* provided a spoken monologue of sorts built around instructions for the participant to follow and at times to respond to mentally; *GIFT* offered participants the opportunity to create the 'narrative' (loosely understood) of their own content for a friend to receive; and *Cold Storage* presented participants with an unusual physical environment from which they could create their own 'narrative' meaning. These narratives all formed necessary parts of their respective performances (or performance-inflected interactions). However, the dramas created by these narratives were not the things into which the participants became immersed. Instead, participants immersed themselves through narcissistic spectatorship into their own individual, autobiographically informed, viscerally felt experiences of those performances. They did not enter any narrative dreamed up and represented 'over there' through ingenious *mise-en-scène*: instead, the careful crafting of *mise-en-sensibilité* surrounded them with stimuli (some of which were tied to a narrative) that helped them dive further into their own feelings. The concept of affect as used in immersive practice and articulated through narcissistic spectatorship and *mise-en-sensibilité* offers designers a solid starting point from which to consider whether or how to leverage a spectator's relationships with others.

Whether wondering about the implications of a handful of immersive practices or committing to create a fully immersive experience, the focus of the design process is always the internally felt

experience of each individual participant. In at least some instances, it can be useful to create spaces for participants to fill with their own autobiographical content, including relationships with others. Such relationships might simply inflect their perception of the experience, or they might drive the entire interaction, or anything in between. While the case studies selected for this article are by no means intended to represent the full spectrum of possible relationships that appear in the entirety of performance practice, we offer them as sketch of the types of relationships that designers might consider:

(1) Potential relationships with people (presumably) not associated with the design. The example for this type is *Wondermart*, set in a location that the performance's creator could not anticipate in any detail, as it was meant to be used in any supermarket, at any time of day. The audio refers to security guards (which some supermarkets might not employ), or to fellow shoppers who seem a bit more powerful than the participant (difficult, perhaps, for a tall and well-built individual in a small supermarket when few people are around). However, the fact that this performance has run for many years and is much discussed in the literature indicates that participants are willing and able to create potential relationships even when they have to be creative with the instructions given to them. *The Rough Mile* also included an instruction to look at a woman doing some shopping to the participant's left. We received a number of comments about how uncanny it was to always see a woman doing shopping to their left and never a word to indicate a failure there: we capitalised on the fact that the instruction occurred at a busy junction in a pedestrianised shopping area, with unobstructed views down three or four streets depending on how loosely they might interpret the word 'left.' In the tradition of Blast Theory's *Can You See Me Now?* and other mixed-reality games, consider possibilities for implying relationships with strangers and building on the potential for affective response and participation (or inhibited impulses to participation) that may emerge.

(2) Relationships with unknown people (presumably) associated with the design. The 'nurse' from *Cold Storage* is the key example here. This again is where Loke and Khut's categories of 'Welcoming' and 'Fitting and Induction' are particularly relevant [28]. Many interaction or experience designs can be adequately contextualised by their installation in a gallery or other designated space, using the larger conference or art event as their 'welcoming', and their 'fitting and induction' can be covered by an accompanying text. However, some interaction or experience designs require more detailed or hands-on involvement from someone knowledgeable about the design and the designers' intentions. We would argue that the more immersive a design aspires to be, the more likely it is to benefit from thorough consideration of how individuals might contribute to the design experience, especially before and/or after the experience itself (the 'Ride' in Loke and Khut's terminology, [28]). This does not necessarily mean that the most immersive experiences need to have the most involved interactions with other people. Bear in mind the subtlety of interaction that is only ever implied by using the 'nurse.' A similar process took place with *GIFT*. The members of Blast Theory played no active part in the 'ride' of the *GIFT* app, but they did personally introduce the aims and workings of the app with their participants, who would then understand their experience in an artistic context. We did not set out to compare this context with any other, so we can only note that they took this approach and speculate that it might have had similar effects. Consider the power inherent in potential relationships with others tangentially associated with the experience, or who might be recruited into the experience, or who are notably absent from the experience.

(3) Relationships with people known to the participant. Both *The Rough Mile* and *GIFT* made overt use of this technique by orienting their interactions around gifting. We expect that for at least some participants, *Wondermart* brought known people to mind as well, perhaps when asked whether they felt shame when they considered shoplifting. It must at least be possible that a participant who had actually shoplifted would think of a person associated with that experience, or that anyone feeling shame for a hypothetical transgression might think of a strict parent or authority figure. In *Wonderland*, being prompted to feel a strong emotion might have brought a relationship to mind, while in *The Rough Mile* and *GIFT*, bringing a relationship to mind certainly created affective responses in a good number of

our participants. The potential for imagination to work in either direction should be considered a resource. Consider obvious or subtle mechanisms for bringing close relationships to mind and using these to shape spectators' participation.

The particularities of relationships can alter a participant's embodied response: amplifying, dulling, or shifting the nuances of their felt engagement with the designed experience, even when the other member of that relationship is absent. For this reason, designs that make use of digital technologies are potentially potent means of triggering and exploring such relationships. *Wondermart* and *The Rough Mile* used spoken-word audio tracks to explicitly prompt participants to consider their relationships to other people, *Wondermart* through references to strangers and *The Rough Mile* through a consistent theme of creating a gift. *GIFT* used the textual content of the app plus the context delivered during their 'welcome' and 'fitting and induction' phases to create a similarly clear-cut mission for their experience. However, there is no reason that technological interventions might not deliver the same kind of subtlety as *Cold Storage*'s introduction and then withdrawal of a person with whom the participant has established a brief and utilitarian relationship that might be reactivated and extended. Of course, not all design projects will want to engage their participants in this way, and there is as yet no established means of judging the type or degree of embodied response to the invocation of personal relationships. In fact, if a design is successful in bringing relationships into a participant's fully embodied awareness, it risks invoking a painful relationship that causes harmful and counter-productive distress. Yet there must be almost as many examples of 'relationships' in design as there are designs, if examined through the lenses of *mise-en-sensibilité*, narcissistic spectatorship and affect. It only requires a slight change of perspective to notice these for what they can offer, better understand the risks involved and then begin to work with them as design elements in their own right.

6. Conclusions

Here we want to acknowledge the fact that virtually all of the recent research on immersive theatre either includes or takes as its focus a critique of consumerism or neoliberal ideology, including all texts on immersive theatre cited here. Our reluctance to engage with this aspect of the discussion is not meant to imply that we reject those critiques. In fact, for the most part, we embrace them, despite the fact that our work designing for gifting experiences could be seen to place us on either side of the argument, either inventing mechanisms for people to give without buying, or creating an experience out of a consumer-driven activity. It is simply too far outside the scope of this paper to us to engage with the politics of immersive theatre practices. However, we do want to note that while the aims of immersive theatre can be perceived as solipsistic in the extreme, we advocate attention to how relationships with others make people feel on a visceral level and how these relationships can inspire or shape interactions. We believe that the practices that performing artists use to engage audiences in these types of experiences can be a fruitful source of inspiration and guidance for those designing embodied interactions.

From our experience, we believe that digital technologies have enormous potential to intervene—hopefully in a positive way—in human relationships. Provocations that can be interpreted in any number of ways, plus a time and place in which one is 'permitted' to explore the affect generated by those provocations: these are entirely within the remit of interaction design *and* immersive theatre. Although designers work with technological, artistic and social parameters to create the experiences they want their audiences to have, the actual end result of the design process is no more that idealised 'experience' than the end result of an immersive performance is the idealised 'story' the artists have aimed to create. The ultimate subject of a design is the embodied experience of the person undergoing the experience, as shaped by its design. We argue that it is a mistake to ignore the possibilities that open up when that person's relationships to other people are factored into the design process. *The Rough Mile* and the *GIFT* app demonstrate the types of engagement that are made possible when a particular friendship is made the focal point of the experience, while the almost unnoticed roles of the nurse in *Cold Storage* or of the unknown fellow shoppers in *Wondermart* hint at the potential for even

the subtlest relationships to impact on an experience. The remembered or potential relationships with particular individuals can have a profound effect on embodied experiences and should be considered as valuable tools.

Author Contributions: Jocelyn Spence and Steve Benford wrote the paper.

Conflicts of Interest: The authors declare no conflict of interest. The founding sponsors had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript and in the decision to publish the results.

References

1. Alston, A. *Beyond Immersive Theatre*; Palgrave Macmillan: London, UK, 2016; ISBN 1137480432.
2. Spence, J.; Hazzard, A.; McGrath, S.; Greenhalgh, C.; Benford, S. The Rough Mile: Testing a Framework of Immersive Practice. In Proceedings of the 2017 Conference on Designing Interactive Systems, Edinburgh, UK, 10–14 June 2017; ACM: New York, NY, USA, 2017; pp. 877–888. [CrossRef]
3. Palmer, S.; Popat, S. Dancing in the Streets: The sensuous manifold as a concept for designing experience. *Int. J. Perform. Arts Digit. Media* **2007**, 2, 297–314. [CrossRef]
4. Edmonds, E.; Benford, S.; Bilda, Z.; Fantauzzacoffin, J.; Malina, R.; Vinet, H. Digital Arts: Did You Feel That? In *CHI '13 Extended Abstracts on Human Factors in Computing Systems*; ACM: New York, NY, USA, 2013; pp. 2439–2446. [CrossRef]
5. Hummels, C.; van Dijk, J. Seven Principles to Design for Embodied Sensemaking. In Proceedings of the 9th International Conference on Tangible, Embedded, and Embodied Interaction, Stanford, CA, USA, 16–19 January 2015; ACM: New York, NY, USA, 2015; pp. 21–28. [CrossRef]
6. Klemmer, S.R.; Hartmann, B.; Takayama, L. How Bodies Matter: Five Themes for Interaction Design. In Proceedings of the 6th Conference on Designing Interactive Systems, University Park, PA, USA, 26–28 June 2006; ACM: New York, NY, USA, 2006; pp. 140–149. [CrossRef]
7. Schiphorst, T. Soft(n): Toward a somaesthetics of touch. In *CHI '09 Extended Abstracts on Human Factors in Computing Systems*; ACM: New York, NY, USA, 2009; pp. 2427–2438. [CrossRef]
8. Höök, K.; Ståhl, A.; Sundström, P.; Laaksolaahti, J. Interactional Empowerment. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, Florence, Italy, 5–10 April 2008; ACM: New York, NY, USA, 2008; pp. 647–656. [CrossRef]
9. Birringer, J.; Danjoux, M. Wearable performance. *Digit. Creativity* **2009**, *20*, 95–113. [CrossRef]
10. Giles, E.; van der Linden, J. Imagining Future Technologies: ETextile Weaving Workshops with Blind and Visually Impaired People. In Proceedings of the 2015 ACM SIGCHI Conference on Creativity and Cognition, Glasgow, UK, 22–25 June 2015; ACM: New York, NY, USA, 2015; pp. 3–12. [CrossRef]
11. Herbsleb, J.D.; Mockus, A.; Finholt, T.A.; Grinter, R.E. Distance, Dependencies, and Delay in a Global Collaboration. In Proceedings of the 2000 ACM Conference on Computer Supported Cooperative Work, Philadelphia, PA, USA, 2–6 December 2000; ACM: New York, NY, USA, 2000; pp. 319–328. [CrossRef]
12. Nardi, B.A.; Schiano, D.J.; Gumbrecht, M. Blogging As Social Activity, or, Would You Let 900 Million People Read Your Diary? In Proceedings of the 2004 ACM Conference on Computer Supported Cooperative Work, Chicago, IL, USA, 6–10 November 2004; ACM: New York, NY, USA, 2004; pp. 222–231. [CrossRef]
13. Grinter, R.E.; Aoki, P.M.; Szymanski, M.H.; Thornton, J.D.; Woodruff, A.; Hurst, A. Revisiting the Visit: Understanding How Technology Can Shape the Museum Visit. In Proceedings of the 2002 ACM Conference on Computer Supported Cooperative Work, New Orleans, LA, USA, 16–20 November 2002; ACM: New York, NY, USA, 2002; pp. 146–155. [CrossRef]

14. Ten Bhömer, M.; Helmes, J.; O'Hara, K.; van den Hoven, E. 4Photos: A collaborative photo sharing experience. In Proceedings of the 6th Nordic Conference on Human-Computer Interaction, Reykjavik, Iceland, 16–20 October 2010; ACM: New York, NY, USA, 2010; pp. 52–61. [CrossRef]

15. Spence, J. *Performative Experience Design*; Springer: Cham, Switzerland, 2016.

16. Taylor, R.; Schofield, G.; Shearer, J.; Wallace, J.; Wright, P.; Boulanger, P.; Olivier, P. Designing from within: Humanaquarium. In Proceedings of the 2011 Annual Conference on Human Factors in Computing Systems, Vancouver, BC, Canada, 7–12 May 2011; ACM: New York, NY, USA, 2011; pp. 1855–1864. [CrossRef]

17. Back, J.; Heeffer, C.; Paget, S.; Rau, A.; Lotta, E.; Pysander, S.; Waern, A. Designing for Children's Outdoor Play. In Proceedings of the 2016 ACM Conference on Designing Interactive Systems, Brisbane, QLD, Australia, 4–8 June 2016; ACM: New York, NY, USA, 2016; pp. 28–38. [CrossRef]

18. Mentis, H.M.; Laaksolahti, J.; Höök, K. My Self and You: Tension in Bodily Sharing of Experience. *ACM Trans. Comput.-Hum. Interact.* **2014**, *21*, 1–26. [CrossRef]

19. McCarthy, J.; Wright, P. *Technology as Experience*; MIT Press: Cambridge, MA, USA, 2004; ISBN 0-262-13447-0.

20. Wright, P.; McCarthy, J. Empathy and experience in HCI. In Proceedings of the 2008 SIGCHI Conference on Human Factors in Computing Systems, Florence, Italy, 5–10 April 2008; ACM: New York, NY, USA, 2008; pp. 637–646. [CrossRef]

21. McCarthy, J.; Wright, P. *Taking [A]Part: The Politics and Aesthetics of Participation in Experience-Centered Design*; MIT Press: Cambridge, MA, USA, 2015; ISBN 978-0-262-02855-4.

22. McCarthy, J.; Wright, P. Commentary: Making Interactivity Meaningful for Contemporary HCI. *Hum.–Comput. Interact.* **2017**, *32*, 148–152. [CrossRef]

23. Benford, S.; Giannachi, G. *Performing Mixed Reality*; MIT Press: Cambridge, MA, USA, 2011; ISBN 0-262-01576-5.

24. Schnädelbach, H.; Rennick-Egglestone, S.; Reeves, S.; Benford, S.; Walker, B.; Wright, M. Performing thrill: Designing telemetry systems and spectator interfaces for amusement rides. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, Florence, Italy, 5–10 April 2008; ACM: New York, NY, USA, 2008; pp. 1167–1176. [CrossRef]

25. Taylor, R.; Spence, J.; Walker, B.; Nissen, B.; Wright, P. Performing research: Four contributions to HCI. In Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems, Denver, CO, USA, 6–11 May 2017; ACM: New York, NY, USA, 2017; pp. 4825–4837. [CrossRef]

26. Heddon, D.; Iball, H.; Zerihan, R. Come closer: Confessions of intimate spectators in one to one performance. *Contemp. Theatre Rev.* **2012**, *22*, 120–133. [CrossRef]

27. Heddon, D. *Autobiography and Performance*; Palgrave Macmillan: Basingstoke, UK; New York, NY, USA, 2008.

28. Loke, L.; Khut, G. Intimate aesthetics and facilitated interaction. In *Interactive Experience in the Digital Age: Evaluating New Art Practice*; Candy, L., Ferguson, S., Eds.; Springer: Cham, Switzerland, 2014; pp. 91–108. ISBN 3319045091.

29. Lavender, A. *Performance in the Twenty-First Century: Theatres of Engagement*; Routledge: London, UK; New York, NY, USA, 2016; ISBN 978-0-415-59235-2.

30. Zaiontz, K. Narcissistic Spectatorship in Immersive and One-on-One Performance. *Theatre J.* **2014**, *66*, 405–425. [CrossRef]

31. White, G. On immersive theatre. *Theatre Res. Int.* **2012**, *37*, 221–235. [CrossRef]

32. Sakellaridou, E. "Oh My God, Audience Participation!": Some Twenty-First Century Reflections. *Comp. Drama* **2014**, *48*, 13–38. [CrossRef]

33. Machon, J. *Immersive Theatres: Intimacy and Immediacy in Contemporary Performance*; Palgrave Macmillan: Basingstoke, UK; New York, NY, USA, 2013; ISBN 1137019832.

34. Saltz, D.Z. The art of interaction: Interactivity, performativity, and computers. *J. Aesthet. Art Crit.* **1997**, *55*, 117–127. [CrossRef]

35. Fischer-Lichte, E. *The Transformative Power of Performance: A New Aesthetics*; Routledge: London, UK; New York, NY, USA, 2008; ISBN 0-415-45856-0.

36. Machon, J. Watching, Attending, Sense-making: Spectatorship in Immersive Theatres. *J. Contemp. Drama Engl.* **2016**, *4*, 34–48. [CrossRef]

37. Mitra, R. Decolonizing immersion: Translation, spectatorship, rasa theory and contemporary British dance. *Perform. Res.* **2016**, *21*, 89–100. [CrossRef]

38. Rancière, J. *The Emancipated Spectator*; Verso: London, UK; Brooklyn, NY, USA, 2009; ISBN 1844677613.

39. Machon, J. *(Syn)aesthetics: Redefining Visceral Performance*; Palgrave Macmillan: Basingstoke, UK; New York, NY, USA, 2011.

40. Fischer-Lichte, E. Sense and sensation: Exploring the interplay between the semiotic and performative dimensions of theatre. *J. Dram. Theory Crit.* **2008**, *22*, 69–81. [CrossRef]

41. States, B.O. *Great Reckonings in Little Rooms: On the Phenomenology of Theater*; University of California Press: Berkeley, CA, USA; Los Angeles, CA, USA; London, UK, 1985; ISBN 0520061829.

42. Phelan, P. *Unmarked: The Politics of Performance*; Routledge: London, UK; New York, NY, USA, 1993; ISBN 0-415-06821-5.

43. Balme, C. Surrogate stages: Theatre, performance and the challenge of new media. *Perform. Res.* **2008**, *13*, 80–91. [CrossRef]

44. Iball, H. Towards an Ethics of Intimate Audience. *Perform. Ethos Int. J. Ethics Theatre Perform.* **2012**, *3*, 41–57. [CrossRef]

45. Paterson, E. We are the fresh food people: The supermarket as a performance of happiness. *Perform. Paradig.* **2011**, *7*, 1–22.

46. Behrendt, F. The sound of locative media. *Convergence* **2012**, *18*, 283–295. [CrossRef]