



Article Augmented Reality and the Dematerialization of Experiential Art

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Abstract: One of the most compelling effects of digitally enhanced and digitally enabled immersive exhibitions is their paradoxical dematerialization of "analog" experience. What leads exhibition visitors to accept that immersion is a state achieved only through technological mediation? Are we not already perceptually immersed in the world, as the phenomenologists asserted? This essay explores how digital enhancement disengages self-awareness by masquerading as immersion. In contrast, contemporary artists Karin Sander, Janet Cardiff, and Chris Salter employ desynchronizing and dislocating tactics to challenge naïve notions of what comprises an aesthetic experience, in order to requaint viewers with their own perceptual and ethical agency.

Keywords: perception; spectacle; dematerialization; sensorium; phenomenology; immersion

1. Introduction: The New White Cube

Augmented reality. It is a curious phrase, implying a capacity to take the measure of reality and top it up, like a cup of coffee "augmented" with a spoonful of sugar, but only if we also existed within that cup of coffee, immersing ourselves in it. Or, perhaps it is more apt to think of ourselves as now living in our computers, even as though we are our computers, whose experiences are constantly updated, augmented, and extended, not only by new technologies themselves but, through them, by experiences or content produced by others. What rich and diverse lives we can lead!¹ This technologically determined self-image is hardly far-fetched, or even very new. Indeed, for decades we have adopted, adapted, and internalized such a computational, or cybernetic, metaphor, in the process recognizing communications technologies as extensions of humankind and, reciprocally, that human experience is in some sense programmable (Wiener 1948; McLuhan 1964). These compelling, if problematic, models have contributed to significant advancements in military planning, goods distribution, neuroscience, as well as arts and humanities research. But somewhere along the way we inverted and internalized them, digitizing our selves—or self-images masquerading as selves—in the process (Fedorova 2020).² If technological advancements in the 1960s contributed to a dematerialization of the art *object* (Lippard and Chandler 1968), today's art subject is dematerializing into an atemporal and perpetually displaced representation of itself³. By isolating visual phenomena from the circumstances in which they arise and replicating them in decontextualized and decontextualizing virtual space, artists and technicians working in the new experience economy can achieve an alltoo-effective simulacrum of formalist aesthetics—an ersatz presentness in lieu of presence, realism posturing as reality.

Some may note that this problem dates to at least the Renaissance, when artists applied perspectival geometry to produce what Anne Friedberg describes as a "virtual window" on the world (Friedberg 2007). But commercial spectacles like "Van Gogh Exhibition: The Immersive Experience" now employ augmentative technologies and advanced graphics to enable an illusion of stepping through the frame and occupying the visualized space so depicted.⁴ What is missing, even repressed, is a critical awareness of the phenomenology of



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Copyright: © 2023 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). such an experience, including how one's perceptual faculties are engaged to effect meaning and, therefore, how one's individual analog reality might differ from that of another. Again, these are not new questions. But mid-twentieth-century debates about sculpture, when "pure form became pure experience", in the words of Jack Burnham, are instructive for a new generation of artists now grappling with similar concerns and pushing back against the dematerializing effects of the experience economy.

Sixty years ago, technophilia promoted the novelties of connection over an embodied understanding of aesthetic experience and in the process produced a hyper-visualized yet predominantly passive viewership.⁵ Art historian Kris Paulsen rightly challenges the "strong tendency in media theory and media art to stress the radical 'newness' of contemporary technologies and effects", in light of the fact that artists and engineers employing cutting edge technologies such as closed-circuit television and analog video recordings as early as the 1960s "foreshadowed the ethical and phenomenological effects of today's networked actions" (Paulsen 2017). But this effect cannot simply be ascribed to technological advancements in visualization, which evolved in concert with the ocularcentric aesthetics of twentieth-century formalism that also privileged spectatorship over presence (Jay 1988).⁶ "Who is this Spectator, also called the Viewer, sometimes called the Observer, occasionally the Perceiver?" He (very much "he" when Brian O'Doherty wrote this in 1976) is a curiously passive creature, "a dark-adapted wanderer", "the vivant in a tableau" (O'Doherty [1976] 1986). The description befits a resurrected phantom Spectator, one now occupying the "immersive art" environments of today and somehow still standing in for us all. Collectively, we have produced a new white cube, one even less obtrusive and much more capacious than the idealized space O'Doherty describes, capable of housing everything from NFTs to "Jurassic World". Filled to the brim with content but stripped of context, this is a "reality" that fairly begs for augmentation. But popular transhumanist dreams of singularities and mind uploading notwithstanding, we cannot evade the underlying physicality of the world and our experiences in it, though we can and do persist in disregarding these facts at a cost to self-awareness and, by extension, to our relationships with others.

Historians of technology have long established how modernization came to be defined through devices that modulate visual perception, shifting control away from the viewer-user to the device through which content is communicated (Crary 1990, 1999; Weibel 2007). A sensory hierarchy, one that privileges sight, is evident in the way we continue to shorthand studio art-making, including sculptural and interactive art practices, as the "visual arts" (as distinct from music's aurality, for example). Arts practices that combine sensory modalities become the exceptions that prove the rule when we describe them as "interdisciplinary", implicitly reinforcing disciplinary primacy (Jones 2005). To date, virtual (VR) and augmented reality (AR) technologies remain overwhelmingly visual in nature, in keeping with entrenched pictorial practices that conflate aesthetic experience with spectatorship (Halpern 2014). Perhaps the most compelling evidence of AR's dematerializing effects is that, having uncoupled visual attention from bodily awareness and dimension from location, developers are now working to supplement this illusory or virtual form of reality with artificial re-incarnation or "a realistic sense of presence" (Oculus 2021). Not presence, mind you, but a "sense of it". Put another way: "In a seemingly slightly desperate attempt to integrate its users' bodies into its simulations, VR has been recast to create a believable sense of bodily presence and that *ironically can only be achieved in the virtual world by* artificial perceptual machinery: sensors, high-resolution displays, and computers processing millions of high-polygon graphics" (Salter 2022)⁸. The presence phenomena still excluded from this equation are not potential add-ons, but the (problematically unquantifiable and messy) fundamentals of practical knowledge and human connection that are repressed in favor of producing more visual content. Our fascination with these seemingly elusive phenomena, writes critic Hans Ulrich Gumbrecht, "is based on a longing for presence that in the contemporary context can only be satisfied in conditions of extreme temporal fragmentation" (Gumbrecht 2004). In an era of synchronous uniformity, exacerbated by a

pandemic-induced retreat to our screens, his words resonate. But presence, in its latency, cannot and need not be manufactured; it only wants coaxing, to be prodded into conscious-ness from the asynchronous, dislocating perceptual borderlands where virtual reality and reality (or "life") coalesce.

In this essay, I explore the work of three contemporary artists whose work foregrounds the constitutive role of presence to aesthetic experience. Each artist takes as a given that experience is—still—produced by (physical, fragile) bodies in (actual, temporally bound) space. All exploit the paradoxically unsettling potential of perceiving ourselves perceiving, that is, experiencing ourselves as bodies rather than through our bodies. In practice, this intentional experience, as the phenomenologists describe it, involves scrutinizing a given situation and making an experience of it, rather than the obverse (Husserl [1913] 2012). An experience, writes Dewey, is not passive: "We must summon energy and pitch it at a responsive key in order to take in" (Dewey 1934).9 In this phenomenological sense, the aesthetic realm is one of openness to the world and to others, "a question mark opposite the solipsist sphere" (Merleau-Ponty 1968).¹⁰ Not one of these artists—Karin Sander, Janet Cardiff, and Chris Salter—is a luddite; indeed, each has made their mark by embracing and employing new technologies as a means of heightening perceptual self-consciousness, facilitating feedback, and promoting understanding. Most notably for the present context, their work interrogates the habits and conventions that might lead viewer-participants to conclude uncritically that virtual immersive states are somehow materially different from or offer more than bare "reality". While certain "augmentations" masquerade as presence by disengaging self-awareness, Sander, Cardiff, and Salter employ AR and VR devices so as to challenge naïve notions of aesthetic experience as mere visual enhancement. In so doing, they reacquaint art audiences with their own perceptual and ethical agency.

2. Visibility and Presence: Karin Sander

"Art allows you to understand something non-verbally because you can place what you see in a context that you yourself create".

-Karin Sander (2002)

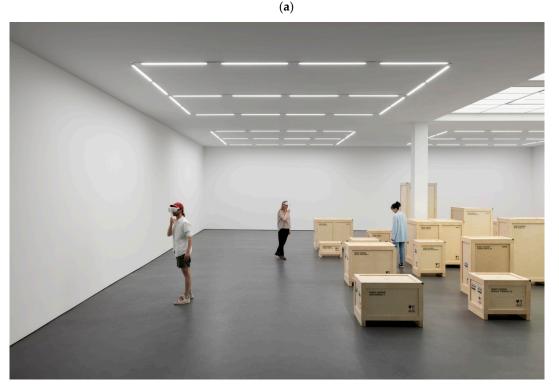
Since 1986, Berlin-born Karin Sander has been burnishing painted gallery walls to an almost obsessive degree and making art of it. The resultant glassy-smooth surfaces have to some extent become signature pieces, epitomizing an elegant simplicity that characterizes Sander's work both visually and conceptually. On occasion, Sander has polished an entire gallery but more often she simply demarcates a portion of the white wall, preparing it as one would for a small mural or fresco and then buffs it to a reflective gleam.¹¹ One such work, a glossy rectangle measuring 180×140 cm, was included in a 2021 exhibition at Copenhagen Contemporary and shown alongside works by an earlier generation of Light and Space artists, most of whom contributed to an etherealizing turn in the phenomenology of American minimal sculpture predominant in and around Los Angeles.¹² The formal relationship of the wall piece to works by the Californians is readily evident, as with Mary Corse's white paintings, which variously reflect, refract, and emit light, or Helen Pashgian's translucent resin sculptures that are polished to evanescence, at once revealing and containing their reflected circumstances. These works do not reproduce well as images, despite their seductive appeal: you simply have to be there (Schuld 2022). Likewise, Sander's wall pieces do not command attention; they elicit it on the sly, in a glint, a reflection, or even in a glimpse of one's own likeness. In this context, the perceptual immediacy of one's encounter with Sander's work was foregrounded by its historical resonance (Clark 2011).

There was an added poignancy to this particular iteration of Sander's wall piece: opening in late 2021, in the wake of worldwide lockdowns due to the COVID-19 pandemic, the exhibition became a reunion of sorts—for the gallery with its public, for visitors with one another, and for spectators with themselves as perceiving bodies, newly released from the incorporeal confines of FaceTime and Zoom. "Being there" was an imperative but it was also an occasion for renewal. What visitors encountered was not the world of Light and Space as historical phenomena but a rediscovered world of quotidian perceptual marvels.

At around the same time, in June 2022, a retrospective of Sander's work opened at the Esther Schipper Gallery in Berlin. Directly and indirectly, the exhibition addressed the effects of COVID-19 restrictions on art viewership that included travel restrictions, a learned aversion to physical copresence for fear of contagion, and the corresponding relegation of social encounters to online platforms where experience was digitally re-formatted.¹³ In these circumstances, Sander had the artworks from twenty-two previous exhibitions carefully packed in their transport crates along with corresponding materials lists and installation instructions, labelled, and shipped to the gallery, where they were arranged, unpacked, like minimal sculptures throughout the space. To "see" the works encased in their containers, visitors employed hand-held viewing devices through which they could virtually encounter the work as it had been exhibited elsewhere. Entitled "What You See is Not What You Get (22 Exhibitions)", the presentation generated a contradictory tension between seeing the work and being there (Figure 1). One could either encounter the work in its present-but-hidden state *or* view the work as seen elsewhere at another time. The reunion of visibility and presence that marked the Copenhagen exhibition remained emphatically unavailable to visitors in Berlin.

"We are all literalists most or all of our lives. Presentness is grace". So wrote Michael Fried in 1967, in an effort to distinguish two types of experience: aesthetic and commonplace, or absorptive and theatrical. In so doing, he was critiquing the obdurate empiricism of minimal art, which valued art's actuality over its virtuality, or its atemporal potential. As others have noted, the various meanings of "virtual" are often contradictory. Its meaning here as "potential" predates interpretations of it as meaning "identical" (Paulsen 2017). Minimal art was and is actualized in the here and now, whereas technological innovations provide the means to be "both here and there", further complicating what we ascertain as the given features of the work of art (Ascott 1991). Sander, an attentive student of art history, clearly references the aesthetic and the language of the artists Fried described (or dismissed) as "literalists": "[The] apparent hollowness of most literalist work—the quality of having an *inside*—is almost blatantly anthropomorphic. It is ... as though the work in question has an inner, even secret, life" (Fried 1967). By presenting her own artworks simultaneously *in* their shipping crates and *as* shipping crates, Sander similarly hints at the art object's hidden life. In this, the crates bring to mind the minimalist cubes of artists like Tony Smith, who averred: "I don't think of them as sculptures but as presences of a sort" (Fried 1967). Blocking visual access to the work paradoxically heightened one's awareness of its physical existence in the present, while the VR goggles projected its dematerialized past. The exhibition title, "What You See is Not What You Get", is not only a riff on Frank Stella's pithy axiom, "What you see is what you see" (Glaser 1966), but is exhibited in a font that calls to mind Christopher Wool's "word paintings". The stenciled lettering (in Sander's work and in Wool's) evokes shipping labels, like those stamped on the transport crates, reinforcing a semiotic feedback loop from cargo to artwork to cargo. Wool's conceptual influence is also evident in the axiomatic nature of the title, particularly a painting from 2000, "THE HARDER YOU LOOK THE HARDER YOU LOOK". Wool's tautology is also a nod to Stella, but substitutes the minimalist claim for factuality with one of futility: if seeing is knowing, looking becomes an act of perpetual estrangement between the object/word and the viewing/reading subject (Brinson 2013).

WHAT YOU SEE IS NOT WHAT YOU GET



(b)

Figure 1. (a) Karin Sander, "What You see is Not What You Get (22 Exhibitions)". Image: © Karin Sander, büro uebele. (b) Exhibition view: Karin Sander, "What You See is Not What You Get (22 Exhibitions)". Esther Schipper Gallery, Berlin, 2022. © Karin Sander/VG Bild-Kunst, Bonn 2023. Photo © Andrea Rossetti.

This sense of estrangement arose in concert with one's awareness that the transport crates were not the only inscrutable presences in the gallery. With their faces hidden behind hand-held VR glasses, viewers disengaged from their physical circumstances, their attention directed towards a dematerialized elsewhere. Photos of visitors to the exhibition show individuals aiming their devices and bodies at blank walls or seemingly nowhere at all. The technology not only isolates the visual modality from other sensory information (in this case, virtual reality is purely visual, albeit with the added illusion of dimensionality), but also the person, whose experience is no longer shared with others in the gallery. Indeed, visitors could be "attending" up to twenty-two different exhibitions while nonetheless occupying the same physical place.

Friedrich Meschede notes that Sander's work since the late 1990s has a "new narrative quality", one that challenges and complicates the earlier work's emphasis on immediacy by showing how history is both bodied in the work of art and iteratively embodied by the perceiver (Meschede 2002). If the Copenhagen Light and Space exhibition invoked a Zenlike imperative to "be here now", the de-synchronizing maneuvers of the Berlin exhibition offered visitors irreconcilable iterations of "here" and "now". Sander's explicit separation of visibility from physicality at the same time cleaves past from present: simultaneity does not produce synchronicity. And if Copenhagen proffered a joyous reunion, Berlin pointed to the states of disunion that we often assume in order to have our experiences visually mediated and augmented. What separates her work from earlier environmental art and from the immersive spectacles of the 2020s is Sander's insistence on foregrounding the price of engagement.

3. Localization and Dislocation: Janet Cardiff

"I started these recordings as a way to remember, to make life seem more real. I can't explain it".

-narrator, "The Missing Voice (case study b)" (Cardiff 1999)

In 1980, the Sony Walkman freed music lovers to take their personal soundtracks with them and released an urban public from the impositions of the boom box. The device encapsulated the listener in her own audio sphere, her body navigating a physical environment augmented by the self-selected (or "curated") soundtrack she carried in her head. The "walkman effect", wrote Shuhei Hosokawa, is one of dislocated or "deterritorialized" listening "It intends that every sort of familiar soundscape is transformed by that singular acoustic experience coordinated by the user's own ongoing pedestrian act, which induces an autonomous 'head space' between his Self and his surroundings in order to distance itself from-not familiarise itself with-both of them" (Hosokawa 1984). In the crowd but not a part of it, the walkman wearer signals her autonomy and, in so doing, asserts the plural nature of an urban populace comprising countless individuals walking about to the tune of their own private hisories and fantasies. Unlike VR headsets that forestall engagement with others, headphones enable what Hosokawa describes as "secret theater": though the music or recording is unheard by others, its expressivity is evident in the affect of the wearer, in her facial expressions, and in the nature and cadence of her walk

In 1999, visitors to the Whitechapel Library in London could check out such a device (updated to a Discman) to listen to a 50-min "audio walk" to Liverpool Train Station, narrated by artist Janet Cardiff.¹⁴ "The Missing Voice (case study b)", commissioned by British arts collective Artangel in 1999, introduces a fractured plot featuring a female character, "Janet", voiced by Cardiff, who picks up a mystery novel from the library shelf, only to get caught up in a dramatic plot of her own making. The tenor of her descriptions and the whispered warnings of a mysterious male figure, interwoven with a British detective's confused account, all evoke the suspenseful cadence of film noir. The audio was recorded binaurally, using two microphones spaced apart like ears, with the effect that the voice of "Janet"/Cardiff takes up residence inside the head of the walker-

listener in an eerily convincing manner, more immediately so than virtual imagery, which appears externally to the viewer's body. Importantly, the recording was made on site rather than produced in a studio, so that auditory incidentals, such as a bus pulling away or a conversation in Bengali, place it in the same streetscape as the walker-listener. The work is therefore doubly localized—internally, in the head of the speaker, and externally, in the environs of Whitechapel—while also doubly dislocating—in its personal nature as "secret theater" and in its multi-layered temporality.

Synchrony is the affective suture that lends the experience coherence, but it is also the agent of its unraveling. Unlike, say, the work of British artist Richard Long, whose "walking sculptures" bore the imprimatur of his presence, however lightly, on the landscape itself, Cardiff's walking sculpture imprints on the walker. The technology introduces an uncanny spatial dimension disturbingly different to the stereo recordings that constitute everyday personal soundtracks. The effects of binaural recording are introjective: because the technology localizes the voices we hear inside our heads, we internalize them, confusing them with our own real-time thoughts and perceptions. "Try to follow the sound of my footsteps" says the narrator, an impossible directive, apart from matching her tempo and following in the musical sense. More practically, she also provides cursory directions, citing street names and landmarks as navigational cues. But while the walk may have a fixed destination and duration, it is also open-ended, accommodating past and subsequent iterations and associations.

The neighborhood surrounding the library reverberates with personal and shared histories and diverse cultural associations. This was a particular challenge to Cardiff: how to incorporate these layers of prior experience without obviating the rich phenomenology of the present, indeed, to lend them presence. As she put it in a 2005 interview regarding her preparation for a similar "walk" in Washington, D.C., "I was fascinated by the layering of the past onto the present. It had a strange quality of creating a new world, blending together the physical and the virtual" (Gordon 2005). Historically, Whitechapel was a primarily working class community, characterized by ethnic and economic transience. Following the route laid out in the recording, the walker is accompanied by an auditory palimpsest of footsteps and voices-some actual, some recorded, some immediate, some distant—that evokes the London of Eliot's Unreal City (The Waste Land, Eliot 1922), replete with dead and living souls from the ancient to the recent past. At one point, the narrator quotes from Defoe's account of the plague year 1665, conjuring "hearses and coffins in the air" still hovering, however faintly, among the cars and the street vendors (Cardiff 1999). Whitechapel is also the neighborhood where Jack the Ripper found his victims amongst the local street walkers in the autumn of 1888. The audio walk takes place in and around the scene of these crimes but references them only indirectly: through the fictional narrative of a woman in some distress, and through intermittent accounts from a police officer who seems to be retracing her steps, picking up clues in the recording that in these moments loops in on itself. Cardiff acknowledges that the main character's nervousness echoes her own sense of paranoia as part of adjusting to life as a woman on her own in a strange city (Cardiff 1999). The paranoid state, exacerbated by the ambiguity and pacing of the narrative, is itself a secret theater with real-life effects: it defines the presence of others as threatening or reassuring, unbeknownst to them. This sense of vulnerability is only heightened when the narration ends and listeners are asked to return the device to the library, this time unaccompanied by their guide and left to their own thoughts and fears.

In later audio walks, Cardiff and her partner George Bures-Miller have combined the binaural audio with visual recordings, some of which appear to be recorded personal ephemera, while others include snippets from a noir film. If the audio is introjective, the introduction of a portable screen (at first via iPods and now smart phones) is projective, directing attention from the here and now to recorded images of an event occurring there and then. Twenty years on, visitors can still check out a recording for "The Missing Voice" to retrace Cardiff's steps and those of other walkers across the years. The mise-enscène has changed and some of the landmarks are now gone, but this only increases the walker's awareness of the precarious relationships of story to place and place to memory. As Christine Ross has noted, the act of walking is itself affectively historicizing (Ross 2013). Neither a novelty nor a historical artifact, the work retains its contemporaneity but it is not timeless. Retracing the walk now is not only an affirmation of the past but an acknowledgement of change, as one incorporates the steps of prior selves into a continuously unfolding narrative.

4. Sensorium: Chris Salter

"I'm forever pulled between the tensions of immersion and artifice".

Chris Salter (2015)

In his work and writings, Salter explores experiential gaps between a persistent anthropocentric naïve realism—what we as individuals think we know of the world, presuming it to be universally applicable-and an emerging awareness of the world's alien vitality. A self-described "artist-researcher", Salter's form of "gonzo ethnography" is fundamentally hybrid, exploring the sensory mesh that unites human and nonhuman, mind and body, visual and nonvisual, observation and participation, technology and nature, science and art (Salter 2015). Defamiliarizing rather than dematerializing, Displace (Figure 2) exemplifies a type of exploratory new media art practice that produces "an amplified, connected, expanded but also disequilibrated corporeality-a new sensorium" (Jones 2006). The project was developed in collaboration with sensory anthropologist David Howes and artists and researchers from the Hexagram network based in Montréal, including audiovisual artist TeZ (Maurizio Martinucci), "aroma jockey" Jorg Hempenius, human-computer interaction artist Harry Smoak, "eco-gastronomist" David Szanto, and art historian Caro Verbeek. They set out to interrogate the nature and meaning of sensory perception as the crux of social and anthropological understanding and, in so doing, undermine a "bureaucratized" aesthetic that isolates one sense from another and one viewer from another (Jones 2005). Yet de-bureaucratizing is also de-stabilizing, and Salter's account of the making of *Displace* and the group's findings exposes gaps between the desire for the illusions of immersion and the anarchic potential of art-making.

Unlike Sander's and Cardiff's projects, which originated within art institutions and so challenge those boundaries, *Displace* is a "research-creation project" that has origins in but exceeds the research laboratory. Its participants are "human-subjects" whose involvement is regulated by a university Research Ethics Board, and the first public iteration of *Displace* in 2011 was at an anthropology conference rather than a museum (Salter 2015; Bertolotti 2013). Participants lay down on a shared platform in a relaxed but vulnerable state, akin to the anxious passivity we might assume in medical situations. The clinical ambiance was not merely coincidental, but reinforced by the presence of attendants monitoring the proceedings and, later, conducting interviews. As events progressed, passivity merged into receptivity and visitors "took in" the situation in a profoundly literal manner, especially after the performer-attendants circulated, offering hexagonal jellies of varying flavors to taste. The longer they remained, the more the sensory inputs intensified: the lights changed color and flickered, sounds rumbled into noise, the platform shook. Sensations intermingled, becoming confused and confusing, even agitating.

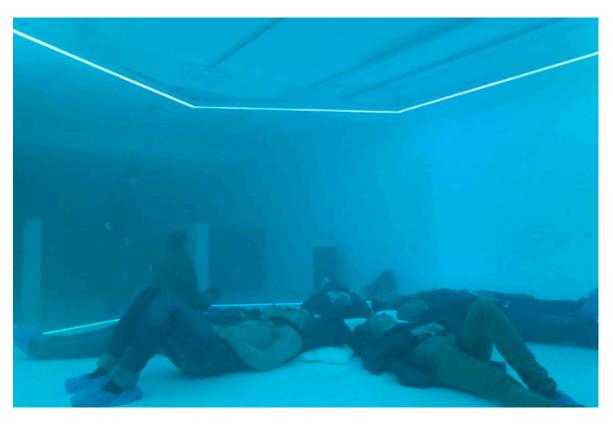


Figure 2. Chris Salter, TeZ, David Howes, Jorg Hempenius, Harry Smoak, David Szanto, and Caro Verbeek, *Displace 2.0*, 2012.

Salter's descriptions of the collaborative process—the false starts, bureaucratic setbacks, and doubts—that culminated in the first iterations of *Displace* are reminiscent of a series of now (in)famous experiments conducted by Robert Irwin and James Turrell in the late 1960s alongside psychologist Ed Wortz, as part of the Los Angeles County Museum's Art & Technology program. Subjecting themselves and others to various sensory deprivation experiments, Irwin and Turrell were interested in learning how to "tune" experience as a means of fostering perceptual awareness. The most elaborate of their proposed projects (none of which were realized at the time) would have been intensely discomfiting, as it involved a sensory deprivation "cleanse" followed "sub-threshold light flashes and sound flashes", gradually increasing to "a point between hallucination and reality" (Livingston 1971).

This historical detour is instructive in the current context for several reasons: for the overt similarities and because of Irwin's and Turrell's influence on Salter's practice, but primarily because of the way the earlier project redefined artistic subjectivity as embodied and experimental. The Art & Technology group explored and combined extra-visual and synaesthetic perceptual phenomena, and their interest in "sub-threshold" stimuli corresponds to Salter's interest in "just noticeable differences" between what is and is not perceived at a conscious level (Salter 2018). In an interview with Douglas Davis, Irwin explained the significance of such experimentation to artistic development:

It is my contention that modern art has been principally involved for twenty years in a disengagement from literate thinking, to place an emphasis on sensate awareness ... We, in our project, started talking about developing spaces that are not going to tell you anything or lead you to anything or interpret anything for you, but are going to lead you into a situation where you are pretty much the *actor*. (Davis 1973)¹⁵

Irwin's use of the second person singular matters, as he is advocating for aesthetic agency and not just aesthetic effects. But these experiments were also isolating in the extreme, focusing on an individual subject with whom the reader and/or participant is meant to implicitly identify. Despite Irwin's shift from "literate" modernism to a more literal modernity, he is a modernist nonetheless, substituting pure vision with pure experience.¹⁶ Irwin's models, after all, are Mondrian and Malevich, who sought to reduce aesthetic experience to its essence—a "desert of pure feeling" (Weschler 2008).

This is where Salter and company differ significantly from Irwin, Turrell, and other "environmental" artists of their generation, even as they share an interest in promoting perceptual enactment. Irwin had trained as a visual artist but Salter's background is in theater, and he describes his role in producing *Displace* as dramaturgy. The goal was not to distill experience to its purest form (if such a thing is at all possible), but to emphasize its unsettling plurality—not sensory essences but "sensory otherness" (Salter 2015). Howes's involvement in the project is informative: a "sensory anthropologist", he explores how the senses are mediated by and through culture and modified socially. Rejecting the reductionism of Western experimental psychology, sensory studies "treats the senses and sensations as both object of study and means of inquiry" (Howes 2022). The sensory inputs introduced to the *Displace* environment derive from seemingly arbitrary and wideranging sources: Desana accounts of ayahuasca-induced visions, Thoreau walking in the woods, a Japanese tea ceremony. The ambition of the project was almost boundless, but its technical limitations were not. Anthropological accounts from the remote past and from distant cultures provided source material that was then translated into sensory stimuli by various artificial means-a color, a flavor, a sound. But the process of translating further displaced the sense experience from a localized, cultural specificity to a synthetic referent, one with sensory impact but dissociating rather than tokenizing. No wonder participants were discombobulated. More than once, Salter describes someone likening the work to a simulated drug trip, perhaps as a means of grappling with the work's strange and estranging effects.

More than anything, the work calls into question the hubristic presumption that we can know what someone else is experiencing, let alone prescribe that experience. In their recorded responses it is evident that participants were not experiencing some sort of empathetic experience with Thoreau or the Desana people; rather, they were confronted with the *limits* of sensory empathy. As Salter recounts: "This is *Displace* for me as a threshold, as a process of destabilizing sense and habit, of problematizing the localization of sense and perception and, with it, the very notion that culture contains fixed senses and a fixed sensing subject" (Salter 2015).

Salter and Howes's methodology brings to mind a popular description of people who came of age in the 2000s as "digital natives", which frames life online as a distinct culture and the experience of its users in anthropological terms. Since the 1960s, the lives of well-off individuals living in late capitalist societies have been increasingly mediated through communications technology, to such an extent that lived reality *is* virtual reality—the simulacrum has become the thing itself. In its emphasis on experiential differentiation (as opposed to essentializing cultural differences) sensory anthropology offers a means for evaluating this sensorily disadvantaged "culture" alongside that of other societies, as a means of returning us to our embodied selves.

5. Conclusions

However much we may choose to enhance it, human experience remains a stubbornly analog enterprise, requiring cognizant subjects for its realization. Coupling "immersive" with "experience" implies that experience is generally something other than immersive. Perhaps that is so, if we think of immersion as a form of intense engagement, when we are wrapped up in reading a book perhaps, or in the thralls of a new love. In both of these instances, however, we are the agents of our own immersion, in phenomenological terms consciously bracketing out the rest of the world in favor of the object of interest or desire. One of the pitfalls of spectacular "immersive experience" is that it simulates empathy while foreclosing on the incongruities, bewilderment, and humility that seek understanding. The fact that we distinguish between "experience" and "immersive experience", "reality" and "virtual reality" is in itself illuminating and points to an extraordinarily stubborn Cartesianism that delimits aesthetic practices as epiphenomenal.

The artistic practices discussed here offer a path out of this cycle by asking visitors to invest themselves—their bodies and their time—in the production of experience rather than its consumption. As Caroline Jones notes, a more situational aesthetic outlook gives us options: "Aesthetic contemplation buys us time and space. Aesthetic practices locate how bodies are interacting with technologies at the present moment, and provide a site for questioning those locations" (Jones 2006). Maybe it is all too easy to mistake escapism for immersion, but when we seek to "augment" experience, it is worth taking a moment to consider how our experiences became so impoverished in the first place. Where and when did we leave our perceptual agency behind? Art that prods us into a state of self-awareness has an important side effect: it also prompts awareness that the experiences of *others* are similar but sovereign, deserving of our interest and respect. I do not know whether presentness is grace, but presence gives us pause. That is a start.

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Notes

- ¹ Meta's "Presence Platform", for example, "a broad range of machine perception and AI capabilities—including Passthrough, Spatial Anchors, and Scene Understanding", is described as providing "you" an opportunity to "build more realistic mixed reality" (Oculus 2021).
- ² As Fedorovoa explains: "A 'picture' of oneself generated through biofeedback is different from a mirror image and other forms of self-perception. The performances of the body, happening beyond the threshold of one's cognitive control, represent a type of cognition of their own".
- ³ For Lippard and Chandler, an art object was still seen as the likely end product of artistic ideating, though they noted that in 1968 it was already on the verge of becoming obsolete (Lippard and Chandler 1968).
- ⁴ See also: Kate Mondloch, "The Influencers: Van Gogh Immersive Experiences and the Attention-Experience Economy", in this issue.
- ⁵ As David Joselit points out, this is reflected in how the discipline of art history, with its emphasis on artists' lives and the objects they produce, has morphed into visual culture, with its focus on the viewer/consumer: "This emphasis on technologies of vision has helped to consolidate lively studies of specatorship in which meaning is associated as much with the consumption as with the production of aesthetic works" (Joselit 2010).
- ⁶ For an account of how ocularcentrism has "co-evolved" in humans and their machines, see (Hayles 2012).
- ⁷ Here I refer to popular futurist theories of artificial intelligence that invert the methodologies of computational neuroscience to conflate self with mind, and knowledge with information (Kurzweil 2006), and even anticipate "liberty from death via digital immortality". (Rothblatt 2014; Kurzweil 2006).
- ⁸ Emphasis in original.
- ⁹ See notes 8 above.
- ¹⁰ See notes 8 above.
- ¹¹ "Projects 46: Karin Sander", Museum of Modern Art, 26 April–6 June 1994: https://www.moma.org/calendar/exhibitions/3079, accessed on 28 August 2022.
- ¹² Light and Space, Copenhagen Contemporary, 3 December 2021–4 September 2022: https://copenhagencontemporary.org/en/ light-space/ (accessed on 2 September 2022).
- ¹³ Karin Sander, "What You See is Not What You Get" (22 Exhibitions), 10 June–16 July 2022, Esther Schipper Gallery, Berlin. https://www.estherschipper.com/exhibitions/1022-what-you-see-is-not-what-you-get-karin-sander/introduction/ (accessed on 28 August 2022).
- ¹⁴ https://www.artangel.org.uk/project/the-missing-voice-case-study-b/ (accessed on 2 December 2022).

¹⁵ See notes 8 above.

¹⁶ As critic Jack Burnham described this development in modern sculpture, "... the tacit concerns of abstract illusionism based on model theory have been challenged, if not already discarded. These have been supplanted by idealistic notions of phenomenal perception" (Burnham 1968).

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