Experiential Design

Rethinking relations between people, objects and environments

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INTRODUCTION

Volume 1: Engaging with Architecture, Design, and Art

In January 2020, Florida State University hosted the international AMPS conference Experiential Design – Rethinking relations between people, objects and environments. The keynote speakers were Chris Downey from Architecture for the Blind, and Angela Spangler from the International WELL Building Institute.

> The conference reflected a confluence of ideas and methods derived from two discrete calls for proposals – the first we directed to designers, artists, and architects, and the second to health, wellbeing, education, and psychology professionals. Although there were many confluences between the concepts addressed by these esteemed scholars and practitioners, we have structured   the conference proceedings to reflect the original proffers. This first volume emerged from the following:

> Where once design and the arts may have been confined to the 'straightforward' creation of objects, places and similar elements, today we have the knowledge to transcend mere physicality. The experience economy challenges us to move from reactionary to initiatory modes, moving us from questions of problem solving and object making to our potential to serve as catalysts, releasing potential energy, activating thought and affecting change from those who engage with the objects and spaces we design and make.

> Experiential design, situational design and Xbd (experience by design), are all examples of this expanding reality for the art, design and spatial sectors. Within this context, it is clear that art, design and space influence, reflect, react to and sometimes distort life experience. This is evident across sectors and scales making the relationship between designer-maker, designed object and user or client complex and varied.

Each paper in this volume centers upon the premise of active engagement. We have arranged them thematically based upon a range of experience types—with people; with objects; within distinct spaces, buildings, or complex environments; within our thoughts and perceptions. We learn how these engagements may be facilitated through design interventions, be co-designed with communities, or track individual memories or experiences. Of particular note is the breadth of perspectives, which came from art, graphic and environmental design, interior and product design, architecture and urban planning, architectural theory, design history, and cultural studies. The volume ends with a thematic unit incorporating papers that discuss the role of design in bringing existing states of being into questioning and in supporting user agency. Ultimately, all reveal the extent to which design can be a catalyst for change in peoples' views of environmental stewardship, history, social equity, and equality.

We thank all of the participants for their engaging contributions to the growing discourse on the manifestations and meanings of designed experiences and experiences of design.

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Tallahassee, Florida

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IN PRAISE OF INCONVENIENCE: RETHINKING FRICTIONLESS EXPERIENCE

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My experience is what I agree to attend to.[1]
William James

Convenience decides everything.[2]
Twitter co-founder Evan Williams

INTRODUCTION

On the leafy suburban outskirts of Sydney sits the heritage-listed Rose Seidler House. Designed in the late 1940s for his parents by arguably Australia's greatest modernist architect, Harry Seidler, the house has all the hallmarks of an International Style machine-for-living: white free-standing planes raised on *pilotis* sheltering the driveway and entrance below. But perhaps the house's most striking feature is not architectural, but its collection of domestic appliances. What now seems quotidian—fridge, dishwasher, waste disposal unit—were unheard of luxuries at the time and it is claimed that the fit out of the kitchen cost more than the rest of the house combined[3]. The idea of convenience it promises is of a life quarantined from the Sisyphean drudgery of domestic chores. This is one version of convenience, the reduction of difficult and unnecessary labour. However, in the more than half-century since the house was built convenience has shifted from the physical to the cognitive realm. Digital technologies have refigured our social, domestic and work lives, transforming many activities that were once solidly corporeal into mental action. Contemporary convenience strives not only to reduce the burden of such actions, but to vanish them altogether and withdraw such experiences from conscious awareness. Convenience has come to be quantified not just as an absence of toil, but as frictionlessness interaction.

This paper argues that this version of convenience is antithetical to human experiencing in its fullest sense, what Dewey called "heightened vitality… (an) active and alert commerce with the world."[4] As digital technologies move from the interior space of the screen to increasingly supplement our physical environments, and as more of our social, domestic and work lives are engineered by such technologies, it is incumbent on designers to take stock of the kinds of experiences and interactions such technologies afford. Dewey posited aesthetic experience as non-dualistic, residing not in human-made artefacts but emerging from the "interpenetration of self and the world of objects and events."[5] In such a reckoning the objects that populate our lives are not passive receptacles that compliantly yield to our demands, but rather the co-authors of our human lifeworld. As we strive to make interactions ever smoother and more effortless—ever more convenient—it is worth pausing to ask what may be lost in such transactions. Just as the reconfiguration of the built world around principles of ease has led to obesogenic environments that fuel rising levels of global obesity[6], mental

convenience and its culture of automised and habitual patterns of interaction posit challenges to our mental well-being.

This paper begins with an overview of design's relation to convenience before examining how principles of frictionlessness and non-intrusion have come to dominate the design of technological objects. It outlines key arguments that challenge the logic that efficiency should be the key driver of interaction design, and offers an additional critique: that if we are to concern ourselves with the design of experience then we need to consider not just the outcomes of interactions but the quality of mind they encourage. To do this the paper draws on Buddhist understandings of mindfulness experience and shows how 'thoughtless interaction' is directly opposed to such mental presence.

DESIGNING CONVENIENCE

Notions of convenience have reverberated through definitions of design since Vitruvius set out his principles of architecture as *firmitas* (strength), *utilitas* (utility), and *venustas* (beauty), forever intertwining use and aesthetics.[7]

Modernism's functionalist agenda further entrenched the belief that things are designed best when designed for clarity of purpose and ease of use. Universalism, standardisation and rational order became leitmotifs of Modernist design and Sullivan's form forever follows function, Loos' ornament is crime and Corbusier's ascetic vision of an engineered world, imbued utility with a particularly moral turn. But it was Taylor and his rigorous systemizing of human labour that most forcefully linked convenience with capitalism's propulsive drive toward efficiency. His assigning of machinic impulses to embodied action shifted convenient and efficient operation from a characteristic of objects to one of humans.

Throughout the twentieth century this version of convenience became central to the application of human capital, seeing it migrate from the sphere of work to colonise post-war modes of living. Activities and interactions whose focus had once been social and cultural, in other words richly experiential—cooking, shopping, socialising, entertainment—came to be dominated by ideas of efficient tasking: fast food, drive through culture, vending machines, online shopping.

Convenient Interactions

But it is in the field of HCI and ubiquitous computing that contemporary ideas of convenient interactions have been most forcefully promulgated. In his pioneering article, *The Computer for the 21st Century*,[8] Mark Weiser put forth a vision of the modern computer seamlessly and invisibly integrated into the fabric of daily life. Weiser articulated a vision of distributed computing enabled by 'tabs', small electronic components that make smart the multifarious objects that populate our domestic, work and social environments. Railing against the arcane complexity of the personal computer, Weiser envisaged a time when, rather than us needing to bend ourselves to the requirements of technology, computing power and its informational affordances would imperceptibly fold itself around us.

Weiser invoked Heidegger's ready-to-hand as an ideal of technological function: "a good tool is an invisible tool", a tool that "does not intrude on your consciousness"[9] and notably introduced "seamlessness" into the conceptual vocabulary of electronic device design.[10] Smart objects would integrate with each other and our needs so smoothly that their operation would allow them to "weave themselves into the fabric of everyday life until they are indistinguishable from it."[11]

In many ways Weiser's vision has come to pass. Rather than spatially distributed, the smartphone has seen a unification of functions into a single device, but the Internet of Things has once again

foregrounded utopian visions of a world populated with 'intelligent' objects. Perhaps the real lasting legacy of Weiser's vision however is his language of seamlessness, invisibility and non-intrusion. As our interactions with technological devices spread out into multiple facets of life, it seems more vital than ever to take account of the nature of our interactions and the kinds of experience they ease us toward. Convenience, and its principles of usability, efficiency, invisibility and frictionlessness have come to be, at least in practice, a largely unquestioned objective of the way we interact with much of the material world. While on the surface these qualities might seem to be self-evidently good, invoking here Heiddegger's hammer as the paragon of the tool in thoughtless use, these kinds of interactions contort us toward technology's needs as much as the clunky operating systems of Weiser's time, just in far more subtle (and potentially pernicious) ways.

CRITIQUES

The Functionalist Agenda

Despite its name, the personal computer first established itself within the domain of work, and it is the concerns of the workplace—utility, productivity, task-orientation—that have come to be considered the primary criteria for the design of human/technology interactions. This elevating of usability also owes something to the software engineering origins of fields such as Ubiquitous Computing and User Experience Design. Overbeeke et al[12] argue that research and development in these fields has tended to emphasise cognitive and rational forms of interaction as these are more easily abstracted into the logical operations of code. This can be seen quite visibly in the linear and branching diagramming methods that are so central to UX design processes and that by their nature minimise opportunities for ambiguity and non-linear interaction. The proposition that interaction should pursue outcomes other than pure functionalism has been taken up by a number of theorists (Redstrom[13], Overbeeke[14], Dourish[15], Hassenzahl[16]).

Gaver et al, for example, argue that ambiguity, normally considered an anathema in Human Computer Interaction, should be utilised as a design resource to create greater levels of engagement. Rather than passive scripted interaction, ambiguity opens up opportunity for interpretation and through active interpretation, personal investment and connection. When strategically deployed, ambiguity can evade user frustration to instead be interpreted as "intriguing, mysterious and delightful." [17]

Critical Design

Much of the analysis of interaction that has emerged from the field of HCI has tended to critique its overemphasis on ease of use as a design goal. Instead, it is argued, "interfaces should be surprising, seductive, smart, rewarding, tempting, even moody, and thereby exhilarating to use." [18] Dunne, writing from the perspective of critical design, has offered a more radical and ambitious rethinking of the role of designed objects. Rather than just pursuing alternative forms of user satisfaction, his project is "relocating the electronic product beyond a culture of relentless innovation for its own sake, based simply on what is technologically possible and semiologically consumable, to a broader context of critical thinking about its aesthetic role in everyday life"[19]. Rather than simply rethinking the ways that objects can serve the needs of the market in more engaging and 'satisfying' ways, Dunne's project reframes objects not as useful, but as propositional.

AN ALTERNATIVE CRITIQUE

Conscious Awareness

While undoubtedly profitable, the above critiques still frame interaction as purposive, privileging the *outcomes* of interactions: to either provide richer affective engagements, or a broader understanding of the cultural and critical value of design. Put another way, both take as their primary concern the *objects* of consciousness—what is held in the mind. In contrast, designers should also consider the *quality* of conscious awareness that interactions produce, that is, the experience of mind that happens when interacting with designed artefacts. This approach would constructively undermine the 'unconscious' or 'thoughtless' interactions produced by convenience focused design.

Experience emerges through attending. It arises from conscious choice. As James states: "My experience is what I agree to attend to."[20] Yet the culture of convenience that drives much contemporary design works against the sustainment of attention, either through unconscious and habitual interaction or encouraging what Linda Stone has termed "continuous partial attention"[21]. Dewey's previously cited description of experience as an "active and alert commerce with the world" is incompatible with artefacts that orchestrate passivity. His non-dualist dissolving of boundaries between the self and world sounds a lot like Csikszentmihalyi's flow;[22] this kind of immersion is often the intention when designing tools to be more 'usable'. However, the focused attention and merging of action and awareness that characterise flow are qualitatively different from the kind of distracted and thoughtless interaction afforded by many of the physical and virtual objects that populate our lives.

This paper argues that convenient designs work to reduce cognitive load by automatising decision making. While this provides ease it also disaffords conscious choice, the result being we often find ourselves directed along paths we may not otherwise have followed. Netflix and Youtube's embedding of autoplay are but one example that point to a larger tendency. Algorithms ease us along a predetermined path, first seducing us to keep watching, then choosing for us what it is we watch. At its most pernicious ceding consumption choices to software manifests in the filter bubble effect and the kinds of political manipulation seen in Russia's interference in the 2016 US elections and the work of Cambridge Analytica. But automatising choice also undermines the idea of abundance that unpins the democratising rhetoric of the internet, leading us into cognitive 'swim lanes', where convenience corrals our free will into tightly structured patterns of action and consumption.

As technical artefacts become increasingly central to the orchestration of contemporary life, the qualities of technology come to be the qualities of the social and cultural. Activities that were once conscious, complex and variegated—face-to-face conversation, preparing and sharing meals, maintaining relationships, being in the world in all its infinite variety—are increasingly captured by technological systems and efficiently streamlined into tasks whose purpose can sometimes seem little more than their own performance. To scroll through Instagram, or numerous other forms of social media, is to engage in activity that can at times seem to have no end other than its own reproduction. Susan Grenfield, a professor of synaptic pharmacology at Oxford University put it this way:

What concerns me is that the current technologies have been converted from being means to being ends. Instead of complementing or supplementing or enriching life in three dimensions… (the Internet) seems to have become an end in and of itself. [23]

Or to quote again from Evan Williams, co-founder of Twitter, "Convenience is all destination and no journey."[24]

Buddhist Ontology

To understand and question the implications of this transference of convenience from the work of physical to mental effort requires an examination of how experience unfolds in the mind. It is worth stating that mind is more than the thoughts passing through it. While Western psychological examination has tended to focus on the *content* of consciousness—on the meanings and origins of particular thoughts—Buddhist philosophy and practice takes as its primary concern the nature of mind.[26] Buddhist ontology considers "consciousness (itself) as the primary subject of introspective investigation… and, in general, as the source of all phenomena."[27]. As such Buddhism has developed a rich repertoire of practices for the observing of mental processes. Key among these is mindfulness.

The last two decades have seen an explosion of interest in mindfulness within clinical settings to the degree that it is now one of the dominant modalities used in psychological practice. Growing out of Buddhist meditation practices, mindfulness' popularisation in the West is in large part due to the work of John Kabat Zinn and the mindfulness stress reduction program (MSRP) he developed at the UNC School of Medicine. Kabat Zinn describes mindfulness as a nonelaborative, nonjudgmental, present-centered awareness in which each thought, feeling, or sensation that arises in the attentional field is acknowledged and accepted as it is.[28] It is outside the scope of this paper to survey the literature on mindfulness' efficacy, but hundreds of peer reviewed articles testify to its benefits to mental health and its impacts on mood, emotional regulation and the neurological structure of the brain[29]. To understand the negative connection between mindfulness and the distracted and unconscious quality of mind afforded by convenience, it is worth unpacking how mind unfolds.

James coined the metaphor 'stream of consciousness' to describe the way thoughts sequentially advance through the mind[30]. Despite our interior sense of our awareness moving smoothly through time, in James' reckoning this 'stream' is in actuality a rapid, discontinuous progression of single mental events. Thoughts arise and are displaced in quick succession, often without our conscious awareness. This explanation of how experience unfolds bears strong similarities to that of Buddhism's. In their paper Mechanisms of Mindfulness[31], Grabovac et al outline a Buddhist psychological model of how the mind proceeds so as to elucidate the actions underlying mindfulness-based interventions. The following is a summary of their description.

An object enters our awareness when it either stimulates our sensory organs or arises in the mind as an object of cognition (a thought, memory or emotion). This awareness is transient. Mirroring James stream of consciousness, as multiple things cannot be held in awareness simultaneously, consciousness unfolds through the rapid appearance and cessation of these mental events. As each mental event arises it is accompanied by a 'feeling tone' or *vedana* (Pali). Vedana does not "signify emotion (which appears to be a complex phenomenon involving a variety of concomitant mental factors), but the bare affective quality of an experience, which may be either pleasant, painful or neutral.[32] Buddhism maintains that an essential human character trait is the desire to recoil from negative feelings and move toward positive ones, termed aversion and attachment respectively. As mental events arise in awareness we habitually react to their associated feeling tone through this attachment or aversion. These habitual reactions rapidly produce further mental events, which in turn have an associated feeling tone, generating further attachment or aversion. In this way an initial mental event and affective response can produce a cascade of mental elaboration that may have little or no bearing on the initial impetus for the chain of thought. In this way mental events may proliferate through the mind in a habitual and uncontrolled manner, creating incessant and unfocused mental chatter or what in Buddhism is referred to as 'monkey mind'. Mindfulness practices aim to dampen this disordered

progression by bringing awareness to thoughts as they unfold and patiently and non-judgmentally refocusing the attention. In contrast, a state of unconscious mental action—mindless interaction—is precisely what convenience design strives to produce. I argue that designing artefacts around usability principles of efficiency and ease explicitly work against mindful and engaged experiencing.

CONCLUDING REMARKS

In his study of more than a dozen Eastern and Western contemplative practices, Goleman reported that "the need for the meditator to retrain his attention, whether through concentration or mindfulness, is the single invariant ingredient in the recipe for altering consciousness of every meditation system."[33]

In their Science published paper A Wandering Mind Is an Unhappy Mind, Harvard researchers Killingsworth and Gilbert et al document their research investigating whether such philosophical and religious traditions have any verifiable basis. Their study was the first large scale study of happiness in daily life. It found that what people were thinking was a better predictor of their happiness than was what they were doing and concludes with the assertion that "a wandering mind is an unhappy mind. The ability to think about what is not happening is a cognitive achievement that comes at an emotional cost."[34]

It is therefore crucial that in crafting experiences—and all objects are ultimately experiential as they unfold through use—design must broaden its concerns to encompass not just the outcomes of designed interactions, but the quality of mind that such interactions afford.

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