The questions which one asks oneself begin, at last, to illuminate the world, and become one’s key to the experience of others. One can only face in others what one can face in oneself. On this confrontation depends the measure of our wisdom and compassion. This energy is all that one finds in the rubble of vanished civilizations, and the only hope for ours.

James Baldwin, Nobody Knows My Name

In this chapter, I examine approaches of design strategy that initiate and support embodied learning and knowing within nuanced moments of individual experience, and consider how impact might be defined in light of these approaches. My discussion also examines design strategies in relation to learning and knowing, as these events perform as transitions through the various scales of a system.

What we discover and come to know through embodied learning shifts our perspectives and motivates our actions. Let’s consider a simple game I have been playing for many years: Ask a question that almost everyone in the room can answer. Who taught you how to ride a bicycle? When was your first kiss? What was the first record album you bought with your own money? For me, it was Pink Floyd’s Dark Side of the Moon. I walked about a mile and a half to Kmart on a sunny afternoon in 1976. My anecdote goes on with delicious details regarding how I had acquired the money in my pocket, my walk to make the purchase, the unwrapping at home, and, of course, the moment of dropping the needle on the record. Alone in my bedroom, I possessed an embodied ownership of this event. Feelings surrounding a particular kind of agency are inextricably bound to this collection of signifiers. This experience is how I learned something particular about music and myself. My experience was an active event, not simply a passive part of growing up. This energy – a visceral dialogue between head and heart, is both harmonious and confrontational. To experience is to experiment with the unfamiliar – to risk, and confront the perils of the new (Yi-Fu Tuan). This casual parlor game of inquiry is not simply a means of extracting information, but rather an invitation for individuals to visit sites of knowing within themselves, revealing a rich constellation of experiential detail contributing to the impact of learning. Design for impact is an invitation.

Recently, I have been asking a question that usually not everyone in the room can answer: Who has been present with someone as they took their last breath and died? At casual, social
gatherings of around a dozen people, usually two or three (depending on the context) offer accounts of such an experience. These are always rich in detail and cast a particular gravity in the space. Just before it becomes too heavy, I ask: How many have experienced mediated and constructed images of dying? Movies, TV, stories in books and articles? Certainly everyone. How many images: dozens, hundreds, thousands, tens of thousands? These are rarely nonfiction, moving images at the moment of active dying. Returning to the two or three people who shared their account of being with dying, I ask: How might you compare such mediated images to those of your firsthand experience? Apples and oranges, I am told, over and over again. Mediated experiences and visceral firsthand experiences produce different kinds of learning. What can we know about being with dying from each experience? What can we know about dying from each experience? These are thorny and complicated questions. What can we learn from them about generating meaningful experiences through design interventions in order to shift perspectives? What do they tell us about the impact of knowing in other spheres of culture and society?

“We perceive our lives, up here, in our head, in our ego,” tapping his head, Ram Dass, the spiritual teacher and author of the seminal book *Be Here Now*, tells me during a long exchange a few years ago while I was conducting research for a film project about experiences at the end of life (Figure 3.1). Ram Dass continued, moving his hand from his head and tapping the center of his chest, “it is in our hearts where we hold what we learn from our experiences, where the resonant effects of learning create meaning.” As humans, our mortality is a clear fact held in our consciousness, yet our conscious mind also works to keep us from knowing about dying. Distance, or systems delay, allows for a confusion of cause and effect. Distance (sometimes in the form of time), conveniently complicates relationships among the elements within a system. Humans, especially in the West, decouple information regarding our mortality from how we might know about dying in ways that impact how we live together. Separateness – of the mind from the body, of individuals from themselves and each other and the planet, of gender and race and nation states, and so on – signals the distances we create that maintain gaps in our capacity to
learn and to know. No matter what sphere of impact – issues related to sustainability and beyond, the affect of design relies on strategies that bridge separations. Conjunction is the desired goal for design strategies for impact as a means for the exchange of meaning. Connection, as differing from conjunction, requires the capacity of entities to fit together within known signifiers of understanding. Conjunction requires participatory engagement – sharing, co-creating, reflecting, and allowing for emergence. Franco “Bifo” Berardi states in *And: Phenomenology of The End*, “conjunction, therefore, can be viewed as a way of becoming other. Singularities change when they conjoin, they become something other than what they were before, in the same way as love changes the lover,” (Berardi 2015, p. 18). The process of conjoining is an experiment and experience of risk within the unknown – an opportunity to learn (unlearn and relearn), and to know.

**What is impact and how is it measured?**

Impact is a word like force. It implies strong movement and change. Impact can have a covert relationship to the site of creative intervention responsible for instigating resultant change. Leverage points – places to intervene in a system – might be located at various scales within a system in which we seek to shift the perspectives of individuals and motivate behavior. When we consider leverage points at a human scale within a system we must also consider other hierarchies of elements – geographic, physical, social, psychological – that inhabit the levels of scale smaller than and greater than the human scale. It is critical to question the particular and potential sites where design initiatives might take place in relationship to the various scales within a system and where impact might be desired. A design approach for impact at a particular scale can be trickier than simply adding up humans and considering the larger scale of the group, community, or society. Or, inversely, considering the images, words, ideas, personal moments, organs, cells or atoms of the mind and body. Contemplating movement between scales might offer the most critical insight to how and where design strategies might have impact. A holon, a word not commonly used outside of the academy, refers to something that is simultaneously a whole and a part (Koestler 1967). As a design strategist, it is more insightful for me to consider the complexity of dynamic relationships through the idea of holons. Rather than looking at situations as being composed of known things and processes, holon theory allows for the analysis of and imagination for a wide variety of perspectives and data points – cultural and scientific, about psychological and social realities.

Sustainability is a word I often avoid using. I prefer other language in order to get at the countless ways in which design can impact fields from environmental sustainability to economic and social benefit when it is rooted in *knowing*. I began teaching at Parsons School of Design in 2012, leading a course titled Ethics and Economics of Sustainable Design. It was a respectable course name, exuding a particular gravity, especially given that it was a required course for undergraduates of the Strategic Design and Management program. Most students arrived thinking the class would be about recycling and being nice to workers. My predecessors had been teaching it with the usual doom and gloom brought about by the industrial revolution, followed by how to “green things up.” This wasn’t a terrible approach, and one that was familiar to me having earned my MBA a few years earlier at Pinchot – an experimental graduate program focused on sustainable systems founded by Gifford Pinchot III and Libba Pinchot. During my time as a member of the sixth cohort of Pinchot, in the early 2000s, I was still abuzz with the notions proposed in *Natural Capitalism*. For me, these were radically new ways of seeing the world in terms of defining resources and value (Hawkin, Lovins, and Lovins). Encountering the work of Donella Meadows, I was introduced to a formal understanding of thinking in systems and contemplating the full range of human emotions impacting our decisions and actions. Alongside Maslow’s hierarchy of needs, Gifford Pinchot III shared what he called the *HappoDammo Ratio*
Pinchot’s approach for charting a path forward began with considerations of the pursuit of happiness – \textit{Happo} – and its relationship to how much and what kind of damage this pursuit might bring about – \textit{Dammo}. Pinchot’s \textit{HappoDammo Ratio} was a light-hearted optimistic equation during a time when the endeavor of sustainable practices circulated with vernacular that was predominantly dire, earnest, and humorless. Pinchot (2010) stated, 

\begin{quote}
Given that most of happiness comes from relationships and most of consumption uses stuff symbolically rather than for its intrinsic value, it won’t be hard to make 1000-fold improvements in the ratio of happiness to stuff. These innovations will often be very popular, cost-effective, and profitable. In this direction lies hope and true prosperity.
\end{quote}

My interpretation of Pinchot’s idea is that motivations for behavior would not come from didactic narratives of “doing good,” and rather would emerge in the nuanced, personal spaces of understanding that resulted from the movement between head and heart during moments of visceral experience. User-centered design, having gained traction in the 1980s, is an approach relying upon the careful consideration of individual needs and desires. Bottom-up perspectives – in popular discourse as human centered design driven by empathetic ethnography – coalesce with top-down systems of infrastructure, intricately arranged and interdependent. A productive tension exists among the often difficult to map constellation of relationships held within bottom-up and top-down perspectives. Herein lies the work of the design strategist.

How might we consider personal motivations and embodied moments of learning and knowing in relation to collective actions and their accumulation toward the scale of movements for positive systemic change?

\textbf{Scale, movements through systems, and impact}

Strategic insight – seeing in systems, understanding how the experience of one person can be reproduced to affect many – requires an ability to comprehend potential movements through various system scales. It is no wonder that the iconic film \textit{Powers of Ten} by Charles and Ray Eames is so often used as a teaching tool for understanding scale and systems. It begins with an overhead, medium shot of a man and woman lying on a blanket in the grass, enjoying a picnic. As the camera zooms up and out we see the park, the neighborhood, the city, the state, the region of the United States, the North American continent, and the Earth. This journey continues outward through the solar system, and beyond. Reversing direction, the film zooms back to Earth and the park, and then plunges our view into one of the people on the picnic blanket – zooming into the skin, the cells, the atoms, and the subatomic matter. Scale is a much trickier idea than the connotations resulting from a capitalist perspective. Notions of size can fool us into believing that scale refers only to categories of hierarchy in units, especially in regard to populations, markets, and policy, as defined by boundaries and borders. It is important to reckon with the existence of scale as the consequence of connections (Latour 2016).

It is perhaps helpful to consider impact as reverberation. Acoustically, reverb is reflection (movement) of sound and the multiplying affect of these reflections absorbed by objects, most
Design strategies for impact

noticeable as the reflections continue after the source has stopped. Reverb relies on the generative capacities within an ecosystem to produce sustained presence of a sonic intervention. Similarly, embodied and experiential learning capable of transformation – knowing, relies on connections and conjunctions – energy moving in and through holons, to produce potentialities often not visible or recognizable in a current state view.

How might our personal decisions and actions connect us to issues regarding sustainability – climate change, economic and social equity, food and water security, urban living, political forces, access to education, and the like?

Individuals untouched directly (seemingly) by issues regarding sustainability are removed from experiential opportunities for learning. Distance and delay in system dynamics are gaps, barriers, filters, or baffles to learning and knowing that could otherwise shift perspectives and behaviors. Examples, albeit oversimplified, include: to throw away trash means it's out of sight, out of mind, and out of the range of responsibility; a good deal reflected by the price of a product that is produced far away obfuscates any notion of true cost and the people attached to the labor embodied in the product; to smoke cigarettes despite explicit warnings of illness or death is reasonable because death is at a distance that is impossible to grasp. Distances and delays also complicate the ways we might measure impact. Defining metrics without embracing the detailed complexity and nuanced moments of individual experience can dangerously result in binary equations of cause and effect, and thus metrics become goals that are unattainable, despite being desirable. And in turn, initial efforts can be blamed for failure to meet such unattainable goals, and abandoned for short-term tactics in attempts to yield measurable results more quickly. In this case, the tail wags the dog. Measuring the more complex sequences of learning and knowing – metrics focused on movements in and through systems – can produce better insights for informing generative iterations of design interventions.

Design strategy employs a number of approaches in order to gain insight to conjunctions at human scale. The persona – a typical tool in design strategy – is a composite character serving as a model of the stakeholders who will most benefit from the value of a design intervention. As a tool it is useful for considering a detailed potential journey of one person as she confronts the perils and thrills of the new, considering each nuanced moment of experience: the place of first encounter; the modes of engagement, exchange, and understanding; and the evolution resulting in an ideal outcome. It's an infuriating exercise at first. No one likes to limit the experience of their value proposition to one person and a singular set of circumstances with so many idiosyncratic details. Along with potential benefits, there are dangers in employing personas. A lack of rigorous research can allow for the creation of personas that are merely wishful thinking, and lead to what I call design magic realism. Personas are useful for insights into current state ecosystems, yet can fail to indicate potential invitations for experiences of embodied learning and knowing. Personas compiled from research focused on what is, rather than what could be, are another example of how easy it is to get caught up in thinking about complex situations as being composed of known things and processes – reliably performing characters, cultural trends, borders, established business models, and so on. Personas drawn from a distance are predictable as they move through convenient systems scenarios based on historical patterns. If one can understand why something worked so well in the past, one might be able to recreate a similar success. It's comforting to trust patterns and abhor black swans. Perhaps there is merit to the claim that 99% of all design is mimic. Like a safe bet with good odds, following a pattern is an easier strategic argument. Securing buy-in, or any kind of traction, ahead of a proven concept is a challenging endeavor if your narrative does not rely on an historical precedent. Much of design's mimicry is useful. However, the potential for design to affect genuine social value demands strategy beyond mimic.
How might design anthropology not only reflect but also participate in movements through systems scales of interdependent experiences as learning and knowing?

Prototypes, probes, and emergence

Design research borrows from traditional anthropology, attempting to gain insight into motivations and behaviors by analyzing and interpreting the present and the past “present” moments. Unlike most practices of social science ethnography, designers are less concerned with perfecting an understanding of historical scenarios, and work to leverage insights, even imperfectly, in order to project future possibilities (Hunt 2010). Design anthropology participates in the transformative process by making virtual experiments within the context of social realities, anticipating the existence of emergent qualities within ecosystems (Smith and Otto 2016). These experiments or interventions are particularly salient in how they might address distances and delay within system dynamics. A typical reductionist mistake when addressing gaps that might exist in systems is to imagine a complete puzzle image (ideal outcome) that is simply missing one of the puzzle pieces (Wheatley 2012). This is old-school design intervention: Identify the problem, and create the solution. Certainly, problems exist that beg for solutions. However, this is not an effective starting point for design research and strategy. Design research participates in generative knowledge through activities beyond capturing and analyzing existing information. The process is not simply observation and extraction of data. The potential of emergent qualities within systems provides opportunity for design research to experiment in the unknown, and participate along a fractal path of discovery to support “emerging, wavering, and ephemeral values” (Kilbourn 2013). In this way, the process can produce reverb, generative movements in and through holons. The provocation of emergence can yield critical insights as well as new value. Perhaps a more simple way to describe emergence: The essence of the ingredients for chocolate chip cookies – flour, sugar, butter, chocolate, etc. – is easy to understand, while the emergent value of these combined nodes of this system – the resultant cookie – cannot be known through the elements alone (Wheatley 2012). To embrace emergence demands that we avoid the reductionist approach where impact is viewed as a concretized and fully recognizable state of being to be reverse engineered in order to define strategic intervention. The future most likely looks like something we cannot fully imagine, and values supporting such a future are equally as mysterious as considered from our current state.

Prototypes can assume many forms and perform many roles in the design process, and are not limited to penultimate manifestations of the final design articulation. The probe is an effective investigative prototype method that I employed during the four years of my research in experiences at the end of life. Video resulting from my fieldwork was periodically shared with small, curated audiences in order to provoke their responses to imagery of intimate scenes of dying people, as our project wished to explore the power of proximity to dying as having the potential to shift relationships around mortality. Our curiosity centered on possibilities of reverberation for closing distances and speeding up delays in systems of knowing mortality in light of the impossibility of knowing the experience of death. The potential discursive power of art – the film – would eventually exist to play a role in a larger system of design intervention, including modes of engagement and utility through symposia and education. The film functions as an experience located at a certain, early stage along a spectrum of holistic awareness and interaction with mortality. Resonant effects of the project will ideally produce a constellation of benefits related to evolved behaviors of being more present with oneself and with others. Some of the images from our project were rendered and presented in ways that are perhaps not typical or expected within Western, entrenched ideas of dying from movies and television, as our process of
gathering and assembling images willfully resisted imposing narrative meaning onto the accounts of dying. All documentary filmmaking begins from a place of failure in that no document is objective or without inflection. In this sense, there is always some degree of mediation. The *End of Life* project is designed to minimize mediation while maximizing invitation for viewers to experience embodied learning toward knowing, in this case in a realm very much within the unknown. Our activities as filmmakers were motivated by cocreated experiences in context – in relationships – with the subjects of the project. We were not there to simply observe or extract information. I am present, along with my collaborator Paweł Wojtasik, in the film. We participated in what each person was able to do or not do, what they were able to say or not say. Our presence contributed to the environment and conditions of the subjects, serving as elements within a new realm of existence. We exchanged information, and also acted within events both mundane and extraordinary. Stylistically, as a film, the inclusion of our presence within the sound and image plane is slightly odd, as we are not interviewers, nor is our presence negotiated by any preexisting relationship – we are not old friends or blood relations. Our process attempted a form of mediation for collapsing distances and allowing intimate proximities, thus the images captured and presented produce affect to not only reflect a kind of learning and knowing, evolving for us the filmmakers, but also serving as an invitation for the viewer as their own visceral experience. Images from this fieldwork at times provoked a desire in viewers to turn away, or feel that their act of watching was a violation of privacy. Images of dying, and the associated issues of our own mortality, are uncomfortable. The act of the viewer to stay with the film, to remain within its durational episodes of sometimes awkward witnessing, corroborates the process of the filmmakers – transference of learning and knowing.

Probes for my research and film work concerning the end of life became increasingly complex. I would assemble sequences of various clips that juxtaposed different kinds of imagery, sometimes using video clips from sources other than my own fieldwork in order to create experimental contexts for probing sessions. One particular clip of Ram Dass featured a medium close-up frame showing him staring into the camera. During the actual recording of the video, Ram Dass was staring into my eyes as I kneeled alongside the camera positioned on a tripod at his exact eye level as he was seated in a wheelchair. There are no cuts or camera movements in this segment. Occasionally, Ram Dass tilts forward to reveal sunspots and skin growths on the top of his head. A small, round adhesive bandage is fixed to his nose. He strokes his beard once or twice, and sips a glass of water. There are several moments when he seems to be about to speak, and then does not. His expression changes slightly as the sound of an airplane passes overhead. Another moment the sound of chimes, with a slight shift in his eyes. As time passes, nearly seven minutes in total, the absence of typical actions in the video clip give way to a new set of actions – smaller moments that become much larger. After seven minutes of not speaking, Ram Dass finally says, “In our culture, almost everybody is afraid of death.” Some viewers of the segment were agitated. They expressed frustration around feelings of being manipulated. They demanded to know the exact prompt Ram Dass was given by me in order to produce such a performance. Other viewers reported becoming more aware of their own breathing, their own micro movements, and of small sounds in the viewing room that might have otherwise gone unnoticed. And even others shared accounts of initial anxiety giving way to a meditative release and eventual peacefulness. On one occasion, I showed the clip of Ram Dass after showing a five-minute video segment that was not from our fieldwork. The segment was professionally produced and featured a young woman, Brittany Maynard, who had elected to exercise her right to die with dignity as granted by the state of Oregon. This piece was a tear-inducing testimonial by the woman and her family. The video employed music and cross-fades to synthesize various locations and moods. The piece has an agenda. It wishes to make a point, convey didactic information, and motivate specific behavior.
The person and events are real, and policy issues surrounding death with dignity are in play. It functions as communication design to inform, while also provoking an emotional response. A narrative has been assembled so that the subject matter is relatable, albeit from a safe distance. The emotions produced might be intense, while there are no stakes for most viewers. This is not their situation, their mortality. Both videos address mortality through radically different forms of communication design: The piece about Britney Maynard details the context and events that will lead to the moment of her death; and the video of Ram Dass employs a single, durational moving image portrait presented with no introduction or information so that he could be any old man strangely hesitating to speak. The affect of the Ram Dass video resides within its ability to invite the viewer to experience a deeper awareness of their senses, test their ability to be present, and challenge the awareness of their own mortality. Both videos address mortality while employing radically different strategies for very discrete intended outcomes. For the purposes of my probe, it was useful to learn where the site of impact was located for viewers within their personal psychosocial ecosystems, and to hear their reactions to the probing experience. This example of probing as a form of prototype enabled my research work to inform the subsequent design of more refined media artifacts that would perform within scaled strategies for impact. These initiatives – an installation and a feature-length film, to date, are invitations for visceral engagement with consciousness of our own mortality and the ways we as a society serve the various stages of the end of life. Studio courses within the Transdisciplinary Design program at Parsons School of Design leverage our research in collaboration with external partners in health care, exploring ways to shift behavior and systems toward greater compassionate care for the ill and dying.

Products and services in the marketplace can serve as probes for experiences of generative learning and knowing, functioning in ways far beyond their market value and utility. The Light Phone, released in the United States in 2017, is a credit card-sized phone that only makes and receives phone calls (Figure 3.3). I serve as one of the key strategists for the company. Talking on the phone is not the value of the product. The Light Phone is a probe into our 24/7, always on selves. Hyper virtual-connectivity has become a normalized way of life for many, and has accelerated the replacement of the “sequence of places and events associated with family, work, and relationships,” with “electronic commodities and media services through which all experience.

Figure 3.3  The initial Light Phone by Joe Hollier.
has been filtered, recorded, or constructed” (Crary 2013). Joe Hollier and Kaiwei Tang, the Light Phone creators, were driven by the idea of limited features in an era of ramped innovation relying on ever-increasing turbo-charged functionality. The Light Phone is, as an early tagline states, designed to be used as little as possible (Hollier 2016). During prelaunch, the discourse at cocktail parties revealed polarized reactions: “I want one, now” and “the last thing I want to do with a phone is talk.” The Light Phone is almost a joke: Why would anyone reinvent the telephone, and do so in ways dramatically reductive? And of course, many early opinions simply rejected the idea of any existence away from smartphone connectivity, ever. Certainly, the notion of a phone so limited in functionality – not even capable of text messaging – seems preposterous at a time when smartphone usage and participation in any kind of exchange, beyond face to face, are one and the same.

The initial Light Phone product is intended as a second phone, not a replacement for the smartphone. The form factor is completely matt white or matt black with no other surface texture, color or detail except for when it is powered on and the keypad illuminates. It’s something that one might expect to see slowly floating in the space station scene from the film 2001: A Space Odyssey. It’s monolithic, and wafer-thin. It’s the past and the future. The Light Phone is technology that addresses our relationship with technology (a term other than techne must surely be imminent to accurately reflect our contemporary condition). These relationships can include the overuse of technology, and can result in potentially harmful addictions. The Light Phone user, leaving their smartphone at home, determines through an app which calls are forwarded to their Light Phone. The value proposition is simple: Break the addiction to constant virtual connection and “checking,” and break free of distractions so that you can enjoy the present. The “do not disturb” feature of smartphones and simple will power are arguments against the Light Phone. However, the power of the object – the Light Phone itself – is palpable as a prompt (or talisman) for conscientious shifts in behavior. Untethering from the Internet leash in our pocket can be a fear-inducing act at first. It feels risky to step away from the pulse of instant information and to venture into the unknown expanse of limited connectivity. The Light Phone is an invitation to experiences that belong to the user, uniquely, and are free of any dictated experiences related to the product’s functional utility. Leaving one’s smartphone behind for an afternoon in the park, a romantic meal, or perhaps running an errand from the West Village to the East Village in lower Manhattan – a 20-minute stroll without scanning your inbox at every corner – these “Light” moments open spaces of opportunity to learn.

The impact of the Light Phone emerges as a result of space and time safe from smartphone distractions – a place of discoveries within the mystery of the present moment without the fear of missing out or the paralysis of infinite options. The value proposition is located within an unexpected reclaiming of conversation at human scale, newly adventurous and risky despite being mundane on the surface. Sherry Turkle (2015) speaks to these ideas in her book Reclaiming Conversation: The Power of Talk in a Digital Age:

In order to feel more, and to feel more like ourselves, we connect. But in our rush to connect, we flee solitude. In time, our ability to be separate and gather ourselves is diminished. If we don’t know who we are when we are alone, we turn to other people to support our sense of self. This makes it impossible to fully experience others as who they are.

Design not only adds new things of value, but also, and perhaps more profoundly, serves to take things away, affecting change for positive impact. Design interventions that support activities for learning can involve removing barriers, baffles, or filters that block or warp the agency required to move closer to moments of knowing.
Sustainability is a curious notion in regard to the Light Phone. The component parts of the initial Light Phone product include plastic and the usual electronics found in such devices, hence the material aspects of the product are not innovative in regard to environmental stewardship. At the same time, this tiny start-up, working with the manufacturing giant Foxconn, is stirring up lots of conversations around what it means to be human during our current state of vociferous engagement with technology. The reverb, even at very early stages of the Light Phone’s market presence, signals alignment and resonance with a wide variety of stakeholders dedicated to mindfulness and activism for evolving environmental and social consciousness toward a more enlightened future.

The trouble with identity, the productivity of being uncomfortable

All acts of organization, at any scale – an atom, an organ, a person, a business, a political party, or a nation – begin with identity formation. What might be determined to be inside the container of identity? What might be determined to be outside the container? Learning and knowing motivate these decisions. Based on defining characteristics, the organization assumes a position in relation to other things identified to be outside, whether near or far (Wheatley 2012). As design strategists, we attempt to understand context by defining ecosystems in order to frame our inquiry. We map the constellation of elements germane to the landscape of a project, and consider what might be shared among the elements within this bound environment. In what ways might the membrane of each organized node – the boundary of its identity – be permeable? Holons – things that are simultaneously a whole and a part – are bound nodes within a larger ecosystem. Anticipating the ways in which membranes might be permeable, and imagining not only the results of the shifts in criteria of identity but also the qualities of the rupturing process – the uncomfortable moments of displacement, disorientation, or even great groundlessness are critical for identifying potential leverage points in the system. Stated more simply, invitations to transition beyond boundaries – movements into the unknown or space of the other – are opportunities to affect change. Design for impact relies on provocations toward new experiences. Risk! And despite how much it is touted by political candidates as a shimmering goal, change is almost always an uncomfortable experience, as risk can be mysterious, unknown, and dangerous. We expect that our efforts for positive change will immediately result in feeling good. A prevalent cultural idea, especially in the West, is that happiness requires absolute comfort. If we are to face basic truths around situations less than ideal – the negative externalities of industrialization or hyper virtual-connectedness, social and economic inequity, our mortality, etc. – we must also accept accountability. Any such act of acknowledgement would require asking questions that provoke feelings of being uncomfortable. This kind of unpleasantness has come to be socially unacceptable, viewed as a threat to the unfettered happiness of those with enough power to deny accountability (Schulman 2012). Design for impact requires a keen understanding of the possible moments of being uncomfortable during movement through holons, and anticipating this journey with all its potential for delay in causal relationships and warps in perception.

Embodied learning might be spurred in a number of ways along the journey through a system of holons. The origins of the Japanese tea ceremony serve as an interesting case study for this kind of experience design. Historically, tea ceremonies have provided the context for a variety of social functions, including the meeting between the leaders of opposing forces at war. The entrance to the ceremonial chamber was constructed at a height of around three feet, and thus required guests to enter the space in a position of bowing. The affect was intended to generate both an embodied humbleness and a gesture of equality, at least in the moment (Sadler 2008). Design that employs elements of slight strangeness creates ways to be open to new experiences.
that might shift psychological and social dispositions. These spaces not only provide opportunity and support for new products or services, but also more importantly serve as pathways into unmapped territories where new value systems might emerge (Dunne and Raby 2001). Rather than a singular tectonic disturbance, a series of encounters with slight strangeness allows for several incremental shifts or small ruptures in the membrane of identity and belief. A more holistic, and perhaps insidious, transgression is an important goal of design strategy for impact.

Calculating the degree of how far an experience might stretch the trust and willingness of participants requires creative research and testing. For an installation version of the *End of Life* project (Figure 3.4), a meticulous script was written and rehearsed resulting in various iterations, as we designed elements of slight strangeness for the overall affect of experience. Rather than a white box gallery, the exhibition was installed in a suite on the 27th floor of the Equitable Life building – a modernist office high-rise in the Koreatown neighborhood of Los Angeles. No other tall buildings are in this part of the city, thus the views from the upper floors are dramatic, and somewhat unusual for most Angelenos. Rather than a looping media presentation for random visitation during typical gallery hours, the experience required a reservation with specified available times, only once per day at sunset. Upon making a reservation, guests were given instructions on where to park their car and where to meet an usher waiting for them in the lobby. Upon arrival, the usher, of gender nonspecific appearance and dressed in all gray attire in a slightly odd combination of styles, would check-in guests from a gold sheet of paper. His disposition was flat, almost stoic. Guests were asked to wait until all attendees for the evening – a maximum of 10, had arrived. The building's midcentury elevators operate with a velocity that gives passengers a slight rush of vertigo. During the ride up, the usher would nonchalantly hum, at a nearly imperceptible volume, Beethoven’s *Ode to Joy* at a slowed-down pace. After following the usher down a series of hallways, guests paused until the door to the suite was unlocked in a somewhat ominous manner. The walls of the small room were painted dark blue. Guests were invited to take in the view, as the sun was now setting, and also invited to use the restrooms if needed, before settling

![Figure 3.4](image_url)
into chairs. Finally, the usher would announce that the initial audio and visual elements might seem unusual, and to rest assured that these are not technical difficulties. This instruction was added to the script after lots of testing that revealed audiences of the video panicked due to the first six minutes of the piece having a black screen – no images – with audio only. Such panic was too disruptive to the experience, as viewers would assume the media or equipment was broken, and stop watching. Six minutes of a black screen proved to be too strange, unless released from assumptions surrounding such discomfort. Guests knew that they were attending an installation titled *End of Life*. They knew that it was a film based on people experiencing the end of life. As artists employing experience design, our curiosity involved an invitation for viewers to explore their own bodies and senses in regard to their relationship with their own mortality, and to move beyond the entrenched and unconscious distancing we so often assume. The design challenge demanded modes of unlearning and incremental acts of risk in order to arrive at a genuine place of personal exploration. Where might we go from here?

**Conclusion**

Sometimes I read backwards. Not each word or sentence. After reading the title, I’ll skip to the last paragraph of a chapter or article, looking for big ideas and keywords to hold as questions while I take in the rest. I’ll continue backwards from the end, a paragraph or section at a time, working my way toward the beginning. Sometimes I’ll halt my backwards march, move to the beginning, and proceed in a normal forward fashion. I don’t employ this method for pleasure reading, and especially not for fiction. I appreciate the labor involved in the writing of intellectually rigorous works. I mean no disrespect for the typical scholarly approach of presenting a hypothesis followed by a well laid out argument. At the same time, I cannot always adhere to the writer’s assumption that my engagement will be spurred within a certain order of elements, my understanding optimized by a linear sequence of revelations. There is a great deal of design in writing and reading. As a young painter, I’d turn my paintings upside down in order to experience their composition free of expected spatial narratives. When the canvas was too large, I’d turn myself upside down. How might we see ways to explore and take chances in order to discover, even when this results in the path being uncomfortable?

Design strategy for impact begins with iterative acts of inquiry. Designing great questions (and ways to “ask” them) is as important as the design of any product, service, or experience of creative intervention. Embodied learning that moves us toward new places of knowing relies on our curiosity being supported by carefully crafted invitations to experiment and take risks. Decisions motivating our actions appear to be activities of our conscious mind, yet involve the more holistic capacities of meaning-making potential that include our unconscious. Dynamic connections, as well as distances and delays, motivate movements through complex constellations of influences and opportunities. Scale, as a consequence of connections, supports the reproduction of impact as reverberations in and through psychological and social realities. Creative interventions are effective where design anthropology participates in genuinely collaborative investigations within ecosystems to provoke emergence and generatively shift perspectives, behaviors, and systems for positive change. Conditions for interventions rely on the permeability of boundaries that can allow for the disruption of defined identities. Design can disarm conservative acts of defending identity, and thus allow for supported moments of being uncomfortable – spurring an openness for new experiences. Sustainable design requires strategies that enable us to step into futures – to experiment and play in the unknown; and potentially to learn, unlearn, and relearn.
References


