Artefacts with agency: Fostering resilience through practice-led research

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Bio

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Abstract

As inhabitants of a rapidly evolving planet we are confronted with the impacts of change, including the intensification of natural disasters on the foreseeable horizon. With this awareness, our personal sense of vulnerability has increased and this, in turn, has exposed us to a uniquely contemporary breed of anxiety. As a pervasive condition, the growing apprehension experienced in the context of our precarious relationship within nature is understood to have potentially negative repercussions on our emotional well-being. While design works towards adapting to our contemporary ecological challenges, alternative approaches that prioritize the needs of our psychological condition require exploration. This paper outlines an inquiry into this subject, and introduces a case study that proposes the development of artefacts designed to foster psychological resilience in the context of pending disasters. Through rigorous engagement in practice-led research with the supportive application of a critical design strategy, the design outcomes introduced are imbued with a primary function as agents of change. Within this study, the role of the designer and the objects they create are examined in regards to their capacity to mitigate psychological stress and their function as catalysts in support of a more consequential approach to design.

KEYWORDS: Resilience, artefacts, critical design, agency

Introduction

The contemporary world is fraught with trepidation and anxiety. Amongst the many challenges that we face, our growing unease around the tenuous stability of our ecosystem and the subsequent increase of natural disasters is perhaps one condition for which design is uniquely prepared to confront. Design, after all, is understood to play an instrumental part in this condition. In their book, *Ecological Design* (2007), Sim Van der Ryn & Stuart Cowan note that, "In many ways the environmental crisis is a design crisis" (p. 24). It is in this context that we find ourselves braced for the projected consequences of our long-term, untamed, and non-sustainable industrial development. While the changing forces of climate change, scarcity of resources, and potential collapse of social and cultural systems loom in the future, massive impacts to our ecosystem are being negotiated in the present day. With these changes comes the rising threat of disasters which, although defined as "natural", have arguably anthropogenic origins. Disasters, by definition, are inherently unpredictable and understood to entail exposure to a hazard, the conditions of vulnerability presented by the hazard, and insufficient capacity or measures to reduce or cope with the resultant potential negative consequences. According to the United Nations International Strategy for Disaster Reduction (2013), as human society's population, assets, interconnectedness and activities increase over time, disasters resulting from the societal impact of Earth's natural systems are increasing in frequency and intensity. These are trepidatious times indeed. It is through this lens, with impending disasters on the horizon, that design strategies, propositions, and solutions require creative and critical development.

The fear and apprehension experienced in our rapidly changing world necessitates alternative approaches in mitigating negative stressors and, in turn, promoting psychological resilience. The term "resilience" has positioned itself as a central concept in climate change and crisis-related developmental affairs (Merk, 2017). The concept of resilience refers to the capacity of people "to absorb the impacts of... system shocks without losing the ability to function, and failing that, to cope, adapt, and recover from those shocks" (Tierney, 2014, p.6). A process rather than an outcome (APA, 2014), resilience denotes the ability to bounce back in the face of adversity, trauma, tragedy, threats, sudden shocks, significant sources of stress, and/or extraordinary demands. In the scope of disasters, the concept can be thought of as spanning both pre-event measures that seek to prevent hazard-related damage and losses, and post-

event strategies designed to cope with and minimize disaster impacts (Bruneau et al, 2003). The need for psychological resilience reflects a heightened sense of vulnerability, and this notion is particularly relevant in the context of impending natural disasters and their related consequences:

> *The concept of vulnerability represents the potential for experiencing damage and loss; that is, vulnerability represents a condition or state that may or may not be actualized. Two obvious reasons why this is the case is that a hazard may not be present, or a disaster event may not actually occur that exploits preexisting vulnerabilities (Tierney 2014, p. 166).*

Accordingly, the feeling of emotional vulnerability may be experienced before, during, or after potential events, or, depending on the level of anxiety, on a continual basis. As disasters are projected and yet, conversely, inherently unpredictable phenomenon, psychological resilience has arguably become a necessity in our everyday contemporary lives.

Artefacts with agency

As a designer and a maker of things, this challenge invites an exploration of the potential capacity of objects in supporting the cultivation of emotional buoyancy. In capitalizing on the rich qualities of meaning afforded by our interactions with material culture, the objects that surround us have the unique opportunity to play central roles in mitigating emotional distress. It is well established that objects exert a powerful presence in human experience (see for example, Csikszentmihalyi & Halton, 1981). Although excesses of mass-production and consumption have meant that the majority of today's products lack intrinsic value and enduring memory as material objects, the things we surround ourselves with in our daily lives have the potential to be imbued with meaning that surpasses mere practical utility (Walker, 2014). As Csikszentmihalyi observed in his seminal essay *Why We Need Things* (1993), "Our dependence on objects is not only physical but also, more importantly, psychological. Most of the things we make these days do not make life better in any material sense but instead serve to stabilize and order the mind" (p.22). Although most consumer products are arguably devoid of meaningful and emotionally- endearing qualities, the objects with which we have meaningful relationships – our favorite teddy bear, arm chair, or mobile phones for example – can be quite effective in facilitating psychological refuge from the chaotic world. By

leveraging the power instilled in our intimate relationships with things, designers have the opportunity to manifest objects intended to function "to serve as pacifiers for the self-induced helplessness we have created" (Csikszentmihalyi & Halton, 1981, p. 230). Functionality, in this context, carries an expanded understanding. The notion of designing artefacts that have the capacity to stave off trepidation and anxiety requires a more consequential notion of design, one that considers alternative functions for the objects that feature in our everyday life.

Expressions of the complex interdependent relationships between culture, technology and identity, artefacts have the capacity to encourage us to think in tangible ways about our relationships with the intangible forces that give shape to the world. Through our regular interaction with objects, we embody and reflect a transformational perception of self through the artefacts that surround us. While the impact and resonance of commonplace objects may be understood as a passive function, objects that are intentionally designed to promote a psychological condition (such as resilience) can be appreciated as agents of change. Imbued with agency, the object takes on a performative role as a synthesizer for socio-psychological transformation. This form of socially responsive design may be best defined as critical design. A young sub-discipline and medium of design, critical design functions to address wicked problems, such as design's role in environmental instability. Unlike social design, however, "critical design does not offer practical solutions to everyday problems; instead, it seeks to meet peoples' emotional and intellectual needs" (Malpass, 2017, p. 46). In their book, *Design Noir: The Secret Life of Electronic Objects* (2001), designers Anthony Dunne and Fiona Raby outline the practice of critical design, arguing that design too often unquestioningly reinforces the status quo of industrial and technological progress, and that its purpose is, uncritically, "still to provide new products – smaller, faster, different, better" (p. 58). They advocate using the medium of design to provide "a critique of the prevailing situation through designs that embody alternative social, cultural, technical or economic values" (p. 58). While the broad purpose of critical forms of inquiry may be understood to support "the enactment of social and cultural change" (Sullivan, 2010, p. 103), critical design practice is used as a medium to elicit provocation and debate as a means of igniting this change. In his recently published book, *Critical Design in Context: History, Theory, and Practices,* Matt Malpass offers the following succinct explanation:

Critical design practice is used as a medium to engage user audiences and provoke debate. It does this by encouraging its audiences to think critically about themes engendered in the design work. Operating in this way, critical design can be described as an affective, rather than an explanatory practice in so much as it opens lines of inquiry as opposed to providing answers or solutions to questions or design problems (p. 41).

Accordingly, critical design "facilitates a way of knowing, exploring, projecting, and understanding the relationship between users, objects, and the systems they exist in (Malpass, 2017, p. 43). Critical design practice operates in two directions: inwards towards disciplinary concerns, and outwards toward broader social concerns (p. 88). As a form of disciplinary inquiry, critical design challenges the pragmatic understandings of 'function' as it is applied to design by embracing a scope of possibilities beyond mere optimization and efficiency (p. 125). The alternative roles applied in this context extend beyond practical utilitarianism that typically define commercially orientated mainstream design practice. The provocative outcomes manifested in critical design practice, which commonly take the form of designed objects and speculative products, engage users as a means to cultivate discussion and promote the discovery of new insights and knowledge (p. 43). The development of new knowledge contributes to the advancement of the discipline by expanding the purview of what design *is and can be*. As a practice that operates outwards, critical design is a medium of both critical reflection and social agency. Through the facilitated engagement with conceptually-derived artefacts, new meanings and possibilities are disclosed on an individual level, as well as in the public sphere. As agents of change, the artefacts have the opportunity to undergo iterative development in form, function and context, and often have extended lives through the production and dissemination of supportive narratives, documentation, and scholastic articles.

Situated firmly within the scope of practice-led research, the design, production, and active implementation of artefacts play a leading role in critical design practice. A critical design approach entails a re-orientation of the designer's skills "from a focus on practical ends to a focus on design work that functions symbolically, culturally, existentially, and discursively" (Malpass, 2017, p. 72). The objects, or 'probes', employed in critical design practice facilitate a high degree of engagement with the public, and serve as instrumental tools of research. The stylistic treatment of the objects tend towards the familiar in their reference to commercially

available products, thus taking advantage of established understandings and expectations regarding how we relate to and interact with 'things' (p. 43). As Malpass explains, "For associative, critical, or speculative design to work, the objects designed must be seen as design objects. Put simply, too odd and they will not work, too strange and the designs will not engage the user" (p. 124). In subverting the aesthetic and traditional functionality assigned to product design, the objects developed within critical design practice invite commentary and reflection on the limits of "orthodox" commercial design as a discipline (p. 46). As performative artefacts, the forms created often entail tactile or technologically interactive qualities that elicit meaningful audience-object engagement. Subsequently, the accessibility and intimate experience afforded in these interactions promotes critical reflection and dialogue.

Case study Overview

Earthquakes are a compelling and accessible metaphor for the distressing natural disasters associate with climate change. The experience of an earthquake can be traumatic and enduring, extending far beyond the period of the tremor as an ever- present source of anxiety. In the face of inevitable and unpredictable disasters such as earthquakes, the sense of vulnerability experienced may be heightened by traumatic stressors that result in adverse effects on an individual's expectations about the future, triggering negative cognitive and emotional reactions (Cherry, 2009). Although earthquakes are not the result of man-made intervention (with the exception, perhaps, of engineered seismic blasting and fracking-related events), their capacity to impact upon our psychological health parallels climate change-inspired trepidation in immediate and identifiable ways. Of the six basic emotions – happiness, sadness, fear, anger, disgust and surprise – *fear* is the predominant emotional reaction "no matter what people's behavioural response is to earthquake shaking" (Lindell et al, 2015, p .21). While earthquakes impose immediate physical threats, the psychological implications of both the direct experience and the subsequent anticipation of further seismic events (such as fear and anxiety) often result in long-term challenges to emotional well-being. Furthermore, when an earthquake occurs, those who suffer from anxiety must live with the fear of recurring aftershocks, as several earthquakes often occur in succession. This prolonged exposure to stress is translated into negative impacts on one's psychological health and the instigation and/or perpetuation of a strained relationship between people and the environments that they inhabit.

The case study outlined in this paper employs a focus on earthquakes as a similitude for all stress-inducing natural disasters. Most easily recognized as objects of "furniture", the body of work presented consists of a series of speculative artefacts that are designed to support the development of psychological resilience. Perceived as furniture, these objects are designed to seamlessly co-exist with the user by inviting emotional accessibility through scale, sensory engagement, and aesthetic appearance, and to operate as psychological intervenors within people's everyday lives, domestically or in the workplace. Rather than aiming to protect people from physical trauma, the objective of these furniture objects is to foster resilience by targeting the psychological distress experienced in pre- and post- event conditions, namely *anticipatory stress* and *residual stress*. Anticipatory stress may be understood to impact

individuals as a result of concern for future issues or events, while residual stress may be understood as the consequential affect experienced once a crisis event has concluded (Doherty, 2010). As furniture, they function as performative interfaces between human experience and the built world, and subsequently the world around us. In proposing a shift to the prioritization of psychological function over the physiological demands traditionally attributed to furniture, the artefacts outlined below employ psychological, scientific, and aesthetic knowledge in the elicitation of emotional responses such as empathy, humor, and pleasure.

Figure 1: Tectonic Probes (Tonya Sweet, Ben Jack, & Morgan Barnard 2017)

Tectonic Probes

The earth's surface is continuously in flux with over 90% of the world's earthquakes occurring along the continents that hug the Pacific Ring of Fire (USGS). Within this restless semi-circle of continents are interconnected rhythms of seismic activity that are at once too vast to comprehend, yet often too subtle to feel. *Tectonic Probes* makes visible the real-time data collected from five regions situated along the Circum-Pacific belt – New Zealand, Japan, Alaska, the West coast of North America, and the West coast of South America. Tremors detected by geological data platforms (such as USGS) are translated into animated "targets" on miniature OLED screens nested within the five boxes, each corresponding to a specific region. According to the magnitude of each new quake, the respective box sounds an audible alert and the pulsing heartbeat-like "target" changes in intensity, colour, and scale.

Figure 2: Tectonic Probes: detail (2017)

Tectonic Probes functions in four capacities within this context:

(1)   Perceived as a "clock", it reflects the more-than-human quality of time expressed in the tectonic transformation of our planet's continental plates. As an instrument that records live data in real-time, this artefact functions to raise awareness regarding the continuous and congruent nature of seismic events on a semi-global scale in relation to our daily lives.

(2)   In giving form to the collective experience of earthquakes as a shared phenomenon, this object functions to unify lands, cultures and communities situated along the Pacific Ring of Fire. In her book *The Social Roots of Risk: Producing disaster*, *promoting resilience* (2014), Tierney explains that the shared understanding of disaster-related events is a key basis for collective sensemaking and is fundamental to cultivating resilience (p. 106). While earthquakes are experienced on the individual level with often alienating effects, *Tectonic Probes* aims to forge a sense of community amongst diverse seismically-prone regions of people.

(3)   The development of psychological resilience, as previously noted, is a process. It entails that individuals being exposed to sustained adversity or potentially traumatic events will experience positive psychological adaptation over time (Doherty, 2010). Promoting psychological resilience in the everyday context is important as vulnerability may be experienced in various conditions, either with or without a distressing event. In enabling exposure to the regularity of earthquakes, this interactive object serves as a constant reminder that the earth is, in fact, alive.

(4)   Lastly, through the considered juxtaposition of materials, attention to craft and detail, and delicate scale applied to *Tectonic Probes*, this object functions to effectively transform

the perceptual quality of seismic events. Larger-than-life earthquakes in this context are reconceived as pulsing lights contained in precious jewelry-like forms. The delicate quality instilled in this object, including the fine- grained articulation of fault lines and continental boundaries, is accentuated by the contrasting industrial steel cabinet that houses the boxes.

Through these four functions *Tectonic Probes* promotes resilience through the celebration of earthquakes as an important cultural and globally connective phenomenon, and serves as mechanism to generate awareness and acceptance of our ever-changing world.

Figure 3: Earthquake First Aid Kit (Tonya Sweet, 2016)

Earthquake First Aid Kit

There is nothing quite like a dram of spirits to sooth the nerves. In the case of disasters like earthquakes, research shows that the consumption of alcohol increases following major seismic events (CERA, 2014). The *Earthquake First Aid Kit* aims to foster resilience to both the anticipatory and residual stress associated to earthquakes through the functional application of critical humor. The contents within the *Earthquake First Aid Kit* cabinet– a set of single-serve liquor bottles and accompanying shot glasses – are only accessible in the event of substantial seismic action. Upon being triggered by an earthquake, a sensor releases the door of the cabinet availing the contents that are otherwise safely secured within.

The *Earthquake First Aid Kit* affords an endearing human-object relationship that is dependent on the elicitation of conflicting emotions. By design, this object instills a sense of desire that is supported by the alluring visual display of its contents that are secured out of reach behind the glass of the sleek cabinet. While this desire fuels anticipation, the user understands that their desire may only be fulfilled under adverse conditions, specifically an earthquake. The user may perceive the access to the liquor as a deserved recompense for the emotional trauma they are likely to sustain, or they may find psychological comfort in

knowing that they are prepared with the necessary provisions to aid them in a moment of crisis. According to resilience psychology, physiological mechanisms that promote reward and motivation may help to facilitate resilience (Wu et al, 2013). Although the play on reward may seem antithetical in the context of a serious disaster, as an object of critical design, the humor and play expressed in the function of this object is important as it effectively engages the user audience (Malpass, 2017). Ultimately the *Earthquake First Aid Kit* fosters psychological resilience by effectively translating negative perceptions into positive anticipations, and by supplanting distress with desire. As an artefact imbued with agency, the object adopts a performative role as a synthesizer for socio-psychological transformation.

Seismic Memory Boxes

Fear and anxiety are as intangible and uncontrollable as the natural forces that propel earthquakes. The *Seismic Memory Boxes* have been developed under the premise that "relative to other signs such as emotions, or ideas, objects seem to possess a unique concreteness and permanence" (Csikszentmihalyli, M. & Halton, E., 1981, p. 14). Intimate, interactive objects activated through a combination of digital and mechanical instruments, the *Seismic Memory Boxes* aim to provide emotional stability for unstable situations. The objects function simultaneously as alert systems for seismic events, and as generators and receptacles for the memories of these events. Each of the two boxes offers a distinct interpretation in its promotion of resilience:

Figure 4: Seismic Memory Box: Earthquake Keepsake Generator (Tonya Sweet, 2017)

Earthquake Keepsake Generator

Utilizing a live, internet-dependent data stream, the *Earthquake Keepsake Generator* alerts users to major seismic events within a specified local range. In the event that an earthquake strikes, the object prints a "receipt" of the account complete with textual information regarding location, time, and magnitude with a visual map indicating the origin of the earthquake. The receipt functions as a memento of the event, commemorating the moment and proximity of the disaster. The object doubles as a repository for the mementos produced, thus providing the user with the opportunity to store recallable memories of otherwise fleeting, immaterial events.

The artefact in this instance functions to challenge and illuminate new understandings between the user and the events experienced. As the psychologist Mihaly Csikszentmihalyi explains, "…objects reveal the continuity of the self through time, by providing foci of involvement in the present, momentos and souvenirs of the past, and signposts to future

goals" (Csikszentmihalyi, 1993, p. 23). The highly sensorial experience afforded in the interactive qualities of the *Earthquake Keepsake Generator* forces the user's attention to the present while also enabling them the opportunity to reflect on events past. The mechanistic printing and handling of the receipt offers an audible and haptic experience in the interaction between object and user. The inclusion of pleasurable stimuli entices the user to engage repetitively with the object, thus cultivating an emotional connection that reinforces the receptivity of psychological resilience. In regards to formal qualities, the "familiar" yet curious nature of the object invites engagement and supports of the notion that "resilience is fostered by controlled exposure to manageable stresses and adversity, rather than avoidance" (Rutter, 2013, p. 475). Designed to function non-obtrusively in an everyday domestic or workplace setting, the furniture-like form, scale, and presence of the *Earthquake Keepsake Generator* assures that the object will be seamlessly assimilated into the user's environment where a relationship between the user, the object, and seismic memories can be cultivated.

Figure 5: Seismic Memory Box: Seismic Candy Dispenser (Tonya Sweet, 2017)

Seismic Candy Dispenser

The *Seismic Candy Dispenser* functions to foster psychological resilience through playfully inciting delight in the wake of disaster. During a localized seismic event a jelly bean is dispensed, the magnitude of which is indicated according to the intensity of colour in the candy dispersed: white: 4+; cream: 5+, yellow: 6+; orange: 7+. The material evidence produced, an ephemeral and sweet treat to be enjoyed, is simultaneously anticipated and feared.

Satiric design is understood as salient and useful in critical design practice as it enables the designer to ridicule conditions that warrant reformation (Malpass, 2017). The ironic function of the *Seismic Candy Dispenser* exposes the user's psychological reservations towards

earthquakes and challenges their habitual response. Many users who have engaged with this object find themselves confronted by conflicting internal dialogues:

> *"I was hoping that I would get an orange jelly bean… but, you know, I didn't really want a catastrophic earthquake to occur." "I caught myself wondering: how much is an earthquake worth in terms of jelly beans?" "I feel guilty for anticipating a jelly bean when I know that it means an earthquake will happen."*

Conversely, some users indicated a positive emotional re-association to disaster by expressing giddy excitement each time a tremor occurred and a jelly bean was dispersed.

In the scope of practice-led research, artefacts have the capacity to wear many hats. The artefacts described in this case study have the advantage of functioning as material probes that can be engaged, evaluated, and tested in real world settings. They are designed to operate in transformative ways: to support the development of psychological resilience, and to inspire further inquiry into the complex relationship between humans, emotions, objects, technology, and nature. As critical objects they perform as provocateurs, speculative "products", material arguments, manifestations of theories and questions to be interrogated and explored, and vessels for embodied knowledge. While objects do not embody knowledge on their own, they are understood to require the engagement and interpretation of the audience to bring this knowledge to light. As practice-led researcher Maarit Mäkelä explains, "The crucial task to be carried out is to give a voice to the artefact. … In this process, the final products (the artefacts) can be seen as revealing their stories, i.e. the knowledge they embody" (2007, p.157). Artefacts are imbued with the particular capacity to act beyond the limited knowledge and intentions of the artist-designer and, in this way, can quite literally can take on their own lives as change agents.

Thinking, making, and practice-led research

Critical and creative research practice is an essential component in the development of artefacts capable of functioning with agency in the world. In order to fully appreciate the advantages and value of practice-led research, it is useful to consider how research in the general sense may be understood:

> *"...research is a practice that uses knowledge, experience, and inquiry structures to increase the human capacity to intervene, interpret, and act on problems, issues, and questions that reveal new insights and understandings about who we are and what we do." (Sullivan, 2010, p. 101)*

Practice-led research, on the other hand, encompasses this same definition while also affording the artist-designer to capitalize on the symbiotic relationship afforded by *thinking and making*. Thinking and making are integral actions in critical and creative research, and, as a *practice*-led inquiry, praxis plays a significant role. Praxis – the process of both impacting and being impacted upon in the enactment of practice – can be considered as "a way of thinking about action and a way of acting on thought" (Crouch & Pearce, 2015, p. 40). Practice-led design, therefore, entails a praxis driven by thinking as well as making, or what John Dunnigan aptly refers to as *thinking:* "Thinking expresses the symbiotic relationship between making and thinking in art and design, between object and idea. It connects critical making and critical thinking and relies on embodied knowledge, practice, and research" (Dunnigan, 2013, p. 95).

While critical thinking is "the ability to process and evaluate information while challenging assumptions and employing multiple ways of knowing", critical making is dependent upon critical thinking and can be understood as "the process of creating things by altering materials and giving form to ideas" (p. 98). The unified practice of 'thinking', therefore, "promotes engagement and reflexivity as part of open-ended exploration" (p. 115) and assigns equal value to the process of discovery as it relates to the investigation and generation of both tangible and intangible ideas.

The reciprocal play between thinking and making as it is applied to creative and theoretical discourse encourages the generation of new knowledge, and alternative perceptions of existing knowledge. Through this synthesized approach, the discoveries made in practice-led research are translated into increased opportunities for innovation. As this paper has demonstrated, practice-led research is characterized

by a focus on issues (wicked or otherwise) that are explored and manifested through the production of creative artefacts (Mäkelä, 2007). The resultant artefacts have tremendous

potential in engendering profound impacts on our environments, our perceptions, and our psyches. As the creative researcher locates thinking and making in the context of a dialectical engagement between ideas and the material world, design becomes part of the continuously changing socio-ecological environment (Crouch & Pearce, 2015, p. 37). When design is appreciated as an instrumental factor in its capacity to both support and challenge the well-being of this environment, the discipline of design will be better situated to address the wicked issues of today. In this context "the role of the researcher is not only to research the nature of design but also to contribute to the formation of ideas about what design is for" (p. 44). It is within this paradigm that the researcher is empowered to envision artefacts as catalysts for change.

Conclusion

For those who reside in high-risk regions, the anxiety related to the intensification of natural disasters will soon become part of everyday life. These events will become intertwined with the complexity of the everyday, including not just the highs and lows of human experience, but the objects that life is lived with and through. In the discussion and case study above I have sought to demonstrate the potential of artefacts in augmenting disaster-related distress through a design strategy that aims to promote psychological resilience. Central to this strategy is the employment of empathetical, humorous, and playful attributes that, through the facilitation of sensory-rich interactions, elicit positive emotional responses. The application of this strategy capitalizes on the intimate relationships that exist between humans and things, and relies on the strength of this relationship as a means to establish affirmative and favorable re-associations to what is commonly equated to a negative experience. By challenging the normative role of the objects that surround us in our everyday lives, an expanded understanding regarding the function of artefacts in addressing our emotional needs becomes possible. With consideration to our increasingly unstable environment and our awareness of a new breed of natural disasters on the foreseeable horizon (Lee, 2016), the reprioritization from physiological to psychological is perhaps not only conceivable, but necessary. As the anxiety resulting from our vulnerability within the changing world is elevated, the meaningful relationships that we have with the objects around us offer prime opportunities to devise new roles, understandings, and trajectories for creative practice and the artefacts that we produce. Artefacts, in the context of this new paradigm, have great potential to reconcile our trepidation in the world and inspire resilience.

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