Capturing uncertainty in material culture

Abstract

Design has long been understood as the collaborative, hands-on process that takes an idea and forms it for a market (Lawson, 2006). ‘Design thinking’ in particular has emerged as the means to innovation and competitive advantage for businesses while also being espoused for resolving ‘wicked’ problems whether they be driven by systemic issues, or related to service and policy design or community development (Gero, 2010).

Di Russo says that Rittel and Webber in their seminal research on ‘wicked problems’ "shaped contemporary definitions of design thinking, with current definitions drawing examples from higher orders of design practice" (2016, p.45). This has influenced the uptake of design thinking as a tool of innovation and complex problem solving in business and organisations, and it has led to the proliferation of design thinking (aka design) as a means to solve wicked problems and tackle complexity. The perception for many of the contemporary wicked problems such as poverty, water and food scarcity, sustainability and climate change, is that design and design thinking are possible tools to create innovative, viable and desirable, yet environmentally sustainable, solutions (Kimbell in Engine, 2012, p.21).

Designing for tomorrows

According to Fry (2009 p. 12) “In increasingly more unsustainable worlds, design intelligence would deliver the means to make crucial judgements about actions that could increase or decrease futuring potential”. This could be adding to the notion that most often design’s agency is posited with those who hold the kudos (and ego) of ‘designer’ or ‘design thinker’ as well as in aesthetics or form, systems or things. Fry (2009) and Brown (2009) share a belief that design can equip people with knowledge and skills that they can use to shape the conditions of their lives. But in ignoring or skipping over foresight and futures thinking, the opportunity for people to ‘re-make’ a common good that is human-centred, is dramatically reduced.

Significantly, the more design thinking is used to innovate and solve problems across many professions, the more design itself is brought into significant conversations and decisions that shape our collective futures, yet only recently has the grounding consideration of whether design or design thinking has sufficient capacity or capability in futures thinking or strategic foresight emerged.

If designers are to comprehensively and consciously design for multiple alternative futures (Slaughter 2005) then it could be argued that they are required to have an understanding of both the interconnected causal mechanisms in the design process and how to anticipate the causal mechanisms in the values, beliefs and actions that determine whether those futures are created. Further, the anthropocentric stance and focus of design for ‘people-as-users’ perhaps needs to be reconsidered towards design that includes non-human life (Jain, 2018).

In 2016, Dan Lockton asked if design “needs to tackle ‘the future’ in a more nuanced and exploratory way, not the conventional approach of ‘trying to pin the future down’
in Dunne & Raby’s words (2013, p.2)” (Lockton, 2016). This follows the emergence of the theory of transition design (Irwin, 2015) an approach first outlined in 2013 for addressing ‘wicked’ problems (such as climate change, loss of biodiversity, crime, poverty, and pollution) and catalysing societal transitions toward more sustainable and desirable futures.

Design and designers are practical agents of visual imagination, creating the sensory blueprints for the objects and experiences of tomorrow. In short, they have skills, tools and experience to turn abstract future concepts and ideals into visible or tangible form. Designers/design thinkers are primary agents in bringing form to images of futures, and therefore in helping humanity see and negotiate (or refuse) the transition.

The challenge then is that whether designing or redesigning, from a building or a product, to a process or policy, design and design practitioners are proposing to anticipate a solution that caters to future needs or responds to futures issues – or if it remains tied to contemporary material culture. Di Russo states that “Design thinking and its core characteristics; multidisciplinary, iterative, rapid prototyping, human-centered, collaborative, visual and divergent thinking, are now seen as suitable for working with problems where the future is tangled and uncertain” however design thinking explicitly does not include futures thinking, strategic foresight and anticipation in its philosophy, tools, methods or frameworks (2016, p.50). Design methods, and not always with futures tools, are being used to form the bridge between current products, systems and practices and what it will be required and desired in the future.

More recently the work of Irwin (2017) and Wahl (2016) has focused on the challenges of creating and sustaining a viable future for humanity. This work acknowledges design as complicit in contributing to consumption and material culture, and that addressing our current state of an overpopulated planet in crisis requires all of us to collaborate, across generations, ideologies and nations (Wahl, 2017). The theories of both transition design and regenerative cultures transcend sustainability or innovation and even social innovation, and instead seek to inform design that influences social change and societal transition towards more sustainable futures.

But design – and designers – must be conscious of this. The material intentionality of design expressed through “the interactions and relationships formed by consumer products, transport systems, economies, systems of governance, housing and settlement patterns, and resource and energy use” (Wahl, 2008) is also the expression of the designer and design brief. Designing occurs within the complexity of a reality that includes social, technological, and aesthetic values spheres: a complexity that cannot be reduced to any one of these spheres (Wahl, 2008). This suggests the need for a design approach that challenges and enables us to hold multiple simultaneous perspectives and to address different levels of awareness across the spectrum of human development (Hayward, 2003).

Design is the way our worldview and value systems express themselves in our material culture, through the artefacts, systems and processes we create. Past design decisions—like the buildings and cities we inhabit—in turn shape
our worldview and value systems. Design is a conversation through which different perspectives are integrated into culturally creative action.

Wahl, 2016

Design has the tools for visualising complex, large-scale systems; the insights derived from it can be used to improve the quality of experience, the efficiency of the process, and offer benefits across the spectrum of applications (Hargadon, 2005). So is ‘bad design’ design that negatively affects our complex system of individual, social and cultural perspectives? Perhaps ‘bad design’ comes about because we fail to consider the design within the complexity of the world it is created in and the futures is might exist for?

The solutions to the world’s ‘wicked problems’ (whether linked to design or not) are more likely to be new processes, lifestyles and changes in meaning, rather than purely material or promotional artefacts. Sustainability is an emergent property of appropriate interactions and relationships among active participants in the complex cultural, social, and ecological processes that constitute life in this century. The necessary shift towards more appropriate and sustainable modes of participation requires that design and education contribute to a widespread increase in social and ecological awareness through transdisciplinary design dialogues.

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