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Co-design for Community Capacity Building

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Abstract. This doctoral research will examine the use of codesign—a "democratic approach that is focused on the processes and procedures of design...[that] collaboratively engages, consults and develops solutions to problems" (Cook, 2011, p. 50)—as a mechanism to build the capacity of lay people and communities to develop or influence socially sustainable solutions responsive to their needs and aspirations. The engagement of lay people and communities and their empowerment are complex phenomena through which individuals formulate meanings and actions that reflect their desired degree of participation in individual and collective decision-making processes (Tritter & McCallum, 2005). Therefore, this research also seeks to identify co-design processes and procedures that recognize different relevant forms of knowledge and experience of both professionals and lay people, while allowing for varying levels of participation in different stages of the design process.

1 Overview

For many years, I worked for Cure Violence (http://cureviolence.org) a public health intervention developed in Chicago to prevent homicide among those at highest risk for being shot or killed. My interest in design research stems from creating the technical assistance services offered to the first set of national partners interested in replicating the Cure Violence model. Dayto-day work with 16 U.S. cities revealed a set of tensions about to how to bring the model to scale with fidelity in urban contexts similar to Chicago yet socio-culturally distinct, each with a different set of barriers and opportunities.

Many communities did not initially welcome, and some never welcomed, a solution that was not developed in their city, for their city. Therefore, establishing local ownership and tailoring the model to be responsive to local contexts was central to scaling it. The challenge my team and I faced was how to accomplish the latter while maintaining the theoretical constructs central to achieving results and building the capacity of the local community through specialized training.

Like Cure Violence, many social innovation initiatives, and the entities that support them, are concerned with social sustainability (Cook, 2011; Hilgren, Seravelli & Emilson, 2011; Manzini & Rizzo, 2011) and scalability (Mulgan, 2007; Starr, 2013). Dillard, Dujon, and King provide a satisfactory definition of social sustainability, borrowed from Harris and Goodwin:

A socially sustainable system must achieve fairness in distribution and opportunity, adequate provision of social services, including health and education, gender equity, and political accountability and participation (Dillard, et al., 2009, p. xxix).

Though social innovation initiatives work toward social sustainability, the individuals who most need access to innovative products and services often remain 'hard to reach' (Cook, 2011) or 'invisible' (Tritter & McCallum, 2005), and the communities that need them most often do not have the capacity to develop or identify and adapt, and implement, these products or services (personal communication, Kane). With each passing innovation cycle these individuals and communities are bypassed, reproducing social and economic inequities.

In response, this research will examine the use of codesign methods as a mechanism to build the capacity of lay people and communities to develop or influence socially sustainable solutions responsive to their needs and aspirations. Through my experiences at Cure Violence, and later social sector design projects, I have learned that user involvement in the co-design process requires dynamic structures and activities that are legitimate to both participants and non-participants. Therefore, this research also seeks to identify co-design processes and procedures that recognize the existence of different relevant forms of knowledge and experience of both professionals and lay people, while allowing for varying levels of participation.

2 Roles of non-designers in co-design processes

Within the area of participatory design, the conceptualizations and practice of codesign continues to grow, taking on varied manifestations depending upon the orientation and expertise of its practitioners. This section will explore a few examples of the inclusion of nondesigners in co-design processes across different sectors—industry, the public sector, the academy and the civic sector.

Co-design led by industry

Sanders & Strappers (2012) define 'co-design' broadly, referring to the creativity of designers and people not trained in design working together in the design development process" (p. 25). In this conceptualization the researcher shifts from the role of translator between users and the designer, to the role of a facilitator. As facilitator, the researcher is responsible for scaffolding co-design activities such that they engage people who possess varying levels of creativity. The facilitator is also responsible for incorporating applicable domain theories so the co-design team can use them to guide or inspire the design (Sanders & Strappers, 2008). This approach allows users to join the design team as 'experts of their experiences' given they are provided with the appropriate tools for expressing themselves (Sleeswijk Visser, Strappers, van der Lught & Sanders, 2005). The research team carefully develops generative tools, such as toolkits, that support research participants in predetermined activities such as recalling memories, imagining future experiences, seeing and explaining feelings, or making interpretations and connections (Sanders & Strappers, 2012).

Co-design led by the public sector

In the United Kingdom (UK) co-design emerged as a method to promote social sustainability under New Labour, a period in the history of the British Labour Party lasting from 1997 to 2010 (Cook, 2011). Sensing a disconnect between individuals and the public sector organizations designed to serve them, UK politicians sought to redesign around the needs of users (Burns, Cottam, Vanstone & Winhall, 2006; Cook, 2011; Tritter & McCallum, 2006). New Labour was committed to empowering communities and citizens, wanting to find ways for the latter to take ownership of policy making and trying a variety of strategies to do so. For instance, new legislation was enacted, including Section 11 of the Health and Social Care Act 2001, which mandated more direct forms of user involvement by all National Health Service (NHS) organizations (Tritter & McCallum, 2006). Though New Labour initiatives were driven by the idea of social inclusion and public involvement, two factors led to the public engagement work that was supposed to drive the initiatives, being outsourced to private agencies, including design firms. First, the NHS, and other entities tasked with involving users to redesign public services did not have the skills to engage the public aside from holding public consultations (Cook, 2011). And, secondly, there was a "systematic failing in the attitudes, beliefs and behaviors of citizens in relation to democracy" (Barnett 2002) stemming from their mistrust in politicians. Once outsourced, some of the UK's most challenging social problems were addressed using socially-focused design approaches such as 'service design, 'social design', 'social innovation', and 'transformation design' by companies such Engine, live|work, Participle and Think Public (Burns et al., 2006; Cook, 2011).

Co-design led by the academy

In the academy there are many discussions and ongoing research about the relationship of participatory design and the involvement of designers and nondesigners in social innovation (Bjögvinsson, Ehn, & Hilgren, 2010; Bjögvinsson, Ehn, & Hilgren, 2012; Hilgren et al., 2011; Manzini & Rizzo, 2011). Central to these discussions is the idea of democratizing innovation by opening up new ways of thinking and behaving through 'infrastructuring' or rather by creating "sociomaterial 'collectives of humans and non-humans through whom 'matters of concern' or controversies are handled" (Bjögvinsson et al., 2010, p. 43), known as 'Things.' Drawing on the work of Suchman (2002) Things are imagined as: ...long-term relationships through artful integration in which continuous cocreation can be realized, in which those involved pay attention to and work with how technology connects to wider systems of socio-material relation in the form of collective interweaving of people, objects and processes (Bjögvinsson et al., 2010, p. 44). Manzini & Rizzo (2011) have connected the notion of infrastructuring to the desire to spark large-scale sustainable changes through the active participation and cooperation of citizens in small-scale social innovation projects. They suggest participatory design, "as a constellation of design initiatives aiming at the construction of socio-material assemblies where social innovation can take place" (p. 213). In this conceptualization the authors suggest four main design modalities relative to designer roles-facilitator, trigger, codesign team member, and design activist-that can be invoked depending on the context and available resources. Designers support design initiatives with 'design devices,' artifacts aimed at triggering or supporting design initiatives. These include, subjects of conversation (scenarios), tools for conversation (posters, slideshows, videos, possibility cards, etc.), and enablers of experience (artifacts, small-scale experiments, prototypes). Infrastructuring-related co-design processes appear to be open and vary by Thing. In the instance of Malmö Living Labs, Things tend to manifest as a continuum of smallscale ad hoc experiments involving a range of stakeholders, including non-designers, to explore how ideas could work outside the time-bound constraints of traditional design projects (Bjögvinsson et al., 2010; Bjögvinsson, et al., 2012).

Citizen-led co-design

Everyday citizens often collaborate in formal and informal ways to produce social change. Recently, Cathy Ho organized the exhibition *Spontaneous Interventions: Design Actions for the Common Good* on behalf of the New York nonprofit

Institute for Urban Design. The exhibit highlighted the growing movement of architects, designers, artists, and everyday citizens acting on their own initiative to bring improvements to urban contexts by creating new opportunities and amenities for the public. The exhibition calls out a certain type of 'urban interventionism' taking place in cities across the world. Central to the movement are individual responses to urban problems that transform problematic situations into new publicly shared amenities. Take for example the instance of 'guerrilla bike lanes' that have popped up in American cities. Cycling advocates frustrated with slow responses from city planners have painted bike lanes, share-the-lane 'sharrows' and other signage, frequently under the cover of night, to advance cyclist-centered solutions.

3 Limitations and opportunities for non-designer engagement in co-design

In the examples above the inclusion of non-designers in co-design processes varies across sectors. The above examples were chosen to highlight some of the limitations of existing co-design processes and to identify some of the ways we might reconsider the role of the nondesigner and begin to understand the implications that such reconsideration may have toward developing new processes and building the capacity of non-designers. These issues are discussed below. In the example of co-design led by industry as described by Sander & Strappers (2008, 2012), generative tools are carefully developed by the research team using a variety of types of ingredients-photos, words, symbolic shapes, puppets and systematic sets. Though the intention of these tools is to leave a free space for research participants to express intended meanings using a range of ingredients, the tools are imbued, consciously or unconsciously, with the socio-cultural values and mental models of the research team; thus, potentially limiting the expression of research participants. Instead, what if nondesigners, who may be potential or existing users, especially those who may be invisible or hard-to-reach, were included in the development of generative tools? Would this type of inclusion yield a more robust set of data from research participants? Would this co-design practice increase the social sustainability of solutions? A very brief exploration of co-design led by the public sector in the UK illustrates that government and public agencies are often unsure about how to engage the public in a way that empowers them. In the end, New Labour outsourced public engagement to private agencies. This decision could suggest New Labour's desire to shift to market relationships. Tritter & McCallum note that with respect to the NHS, the move to a: ...patient choice agenda... redefines the focus of health service provision and reframes health care providers as vendors. User involvement is then presented as

the feedback mechanism for the expression of consumer views; an essential component of markets" (p. 161). Marinker (1996) states that, 'In contemporary Britain, citizenship is confused with consumerism and democracy with marketing" (Tritter & McCallum 2006, p. 161). Through the lens of fostering market relationships, service design approaches were well situated to create solutions that were practical and desirable for individuals and built the capacity to innovate into organizations and institutions, not necessarily the capacity of individuals or publics. By adopting an intermediary, both the government, and communities and citizens, lost the opportunity to build capacity toward understanding new ways to interact with each other in order to respond to complex social challenges. This begs the question: If public engagement and codesign processes were driven by citizens and publics, and occurred outside the constraints of existing government structures and service systems, would they yield a different set of solutions, embodied in different types of artifacts, relationships and systems? Which leads to the eternal question: How might publics be called to assemble around social sector problems and co-design solutions? In the academy infrastructuring represents an open and expansive approach to social innovation wherein the socio-material collectives of humans and non-humans can form and un-form to prototype new ideas without the objectives and constraints of traditional design projects. Infrastructuring allows for a range of actors to participate which could lead to the kind of compelling new relationships between individuals and groups that Mulgan (2007) states will contribute to the creation, embedding, and subsequent diffusion of the innovation. In the instance of infrastructuring as practiced by Mälmo Living Labs, collaborations between researchers, companies, and public and civic sector are initiated to develop technological services and products in real-world environments (Hilgren et al., 2011). And, though social sector participants such as Herrgårds Kvinnoförening (HFK) benefit from the exploration of service prototypes, it is unclear if infrastructuring activities allow social sector participants to build their capacity in meaningful and impactful ways that parallel the capacity developed by other Thing participants. Once their Thing comes to an end will HFK have built their own capacity to address the challenges they may face in the future? Some may argue this is beyond the boundaries of design to address. Poggenpohl & Sato (2009) have noted that, "Design has no particular collaborative process-collaboration is ad hoc. This lack of understanding and structure is detrimental to design collaboration" (p. 138). With respect to social sector actors and lay persons it seems that the development of structured processes for collaboration, that could exist alongside the infrastructuring of Things, could provide a way to ensure that the capacity of all partners is developed during infrastructuring. In the instance of citizen-led design initiatives, groups of people have co-decided and co-designed what to do, creating locallygrown social innovations. These represent powerful manifestations of creativity in

problem solving, however they risk letting government agencies off the provisionof-public-services-hook. Moving forward, how might we create public sector funding mechanisms to support and sustain citizen-driven design processes and solutions?

4 Research Questions

Information collected from the pre-research literature review has generated this primary research question:

How do we improve the effectiveness of design collaboration in building the capacity of lay people and communities?

Moving forward, the line of inquiry may be narrowed to focus on how the separation of public service delivery from the state though the use of service design intermediaries (private design agencies, foundations, and/or academic institutions) may hinder the ability of citizens and governments to develop the capacity to explore new ways of interacting and responding to complex social problems in a socially sustainable manner. This inquiry would explore different types of design Thing and their affect on capacity building outcomes.

5 Research Methods

To establish that this research is an original contribution to knowledge the author conducted a pre-research literature review.

A formal literature review is underway to explore the following topics: co-design and participatory design; community engagement and community development; problem framing and processes of participation and collaboration; capacity building, and cases of social innovation for social sustainability.

These topics will be researched in a number of distinct domains—architecture, community psychology, design, international development, liberal political theory, public health and urban planning. Once the literature review is complete, the research question will be refined and expanded.

Early research findings seem to indicate the development of case studies (Stake, 2008; Yin, 2014) may be an appropriate methodology to explore how different types of design Thing might affect capacity building outcomes for citizens and the state. However, further development of the research paradigm and theoretical framework are required before this can be determined. The goals and sampling

strategy for the case studies would be determined by the hypothesis generated from the literature review.

6 Status of current work

The author is in the process of synthesizing findings from the pre-literature review while undertaking the formal literature review.

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