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Shaking Up the Status Quo in Healthcare

Designing amid conflicting enacted social structures

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Abstract

There is a growing interest in how design can be used to spark change within incumbent social systems. However, the challenges of cultivating this change from the inside and how they might be overcome through design efforts have not been sufficiently addressed in design literature. This paper uses structuration theory and enactment of structures to reflect on the tensions that actors embedded within social systems face when designing. Through a case study of a service design initiative in healthcare, the authors highlight the role of design in enacting new structures that conflict with the status quo within social systems. The authors also discuss the importance of shifting mindsets to encourage systemic change. The paper concludes by outlining opportunities for future research that can help to better equip actors to enact change in social systems through design.

Introduction

Within research and the public discourse, there is increasing interest in how design can be used to catalyze change within social systems (Banathy, 1996; Metcalf, 2014). However, amid all the hype, there are also a few voices acknowledging the challenges of cultivating change amid the complexity of these systems (Norman and Stappers, 2015). These challenges and how they might be overcome through design efforts have not been sufficiently unpacked in design literature. Generally, when design is discussed in relation to social systems, there is an underlying assumption that actors design *onto* social systems, rather than *within* social systems. As such the constraints and nuances of designing while being embedded within the very social systems actors seek to change, have not been adequately detailed. This leaves designers and other actors, eagerly looking to realize change in social systems, somewhat ill prepared for the inertia they face. As such, the aim of this research is to delineate what it means to design the new amid the old, the conflicts this creates, and one way this might be overcome in social systems.

To accomplish this, we draw insights from a case study of service design efforts within the healthcare context. Service design is increasingly being adopted as a means of facilitating change within healthcare (Carr et al., 2009; Donetto et al., 2014). Yet, it has been recognized in design conversations that actors within healthcare experience a great deal of pressure to follow the entrenched rules and roles within the system (Dickson et al., 2011). As such, the healthcare context offers a valuable setting for investigating the tensions faced by embedded actors designing for change amid complex social systems. We begin by briefly presenting structuration theory, our main theoretical foundation for this paper, and the work of related authors that we build on. Next we outline our methodology and the case of Experio Lab that is used in this research. Our findings highlight the tensions experienced by actors between various enacted social structures as well as one way actors connected to Experio Lab are working to overcome this challenge. Finally, we discuss the implications of our findings in relation to discussions on design and social systems and highlight opportunities for future research.

Theoretical Foundation

While little has been written within design literature about the embedded nature of actors, this has been a vibrant discussion in a number of areas within social sciences. One premise for much of this conversation has been the work of Giddens (1984) on structuration theory – see Figure 1. Structuration theory articulates the duality of structure and action, noting that actors’ actions shape social structures and in turn, these structures enable and constrain actors’ actions (Lawrence, Suddaby, & Leca, 2009). Structures here are understood as sets of (often implicit) rules manifested in reiterative social practice. Structuration theory recognizes that in social systems all social phenomena are the product of both structure *and* agency (Jones & Karsten, 2008). There is recognition of dynamism and emergence in social systems as structures are rooted in ongoing human action. Within this dynamic, there is acknowledgement that actors face the challenge of embedded agency – the simultaneous tension between the pressure of existing social structures and the capacity of actors to engage in divergent change (Battilana & D’Aunno, 2009).

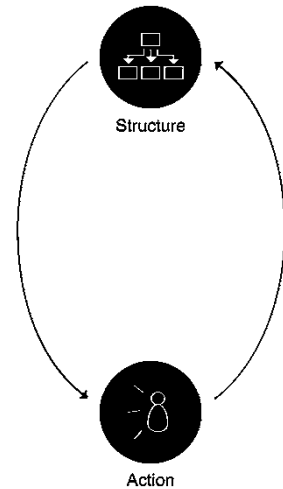


Figure 1: Structuration theory adapted from Giddens (1984)

The authors of this paper draw on the work of Orlikowski (2000) who employs a practice lens to explore how actors enact social structures. While, Orlikowski's work focuses on the use of technology, we apply her findings on the constitutive role of social practices to show how actors enact and construct structures through service design practice in a healthcare context. Orlikowski's view (as show in Figure 2) starts with actors’ actions and explores how these ongoing, situated actions enact emergent structures through recurrent interaction. Orlikowski's research highlights that actors don't enact social structures in a vacuum, but rather draw on their past experience and social context. In this paper, we take the work of Orlikowski further by examining the conflict between emergent and legacy structures in practice.

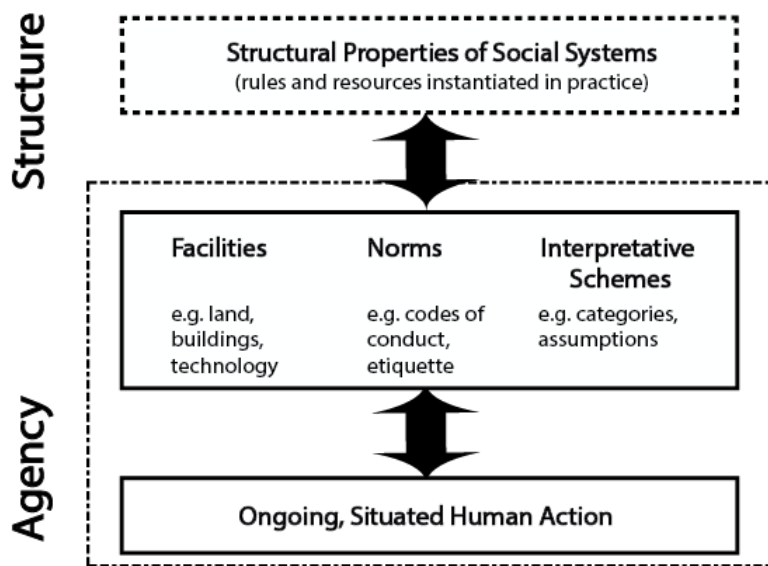


Figure 2: Enactment of structure in practices Orlikowski (2000), originally adapted from Giddens (1984)

Methodology

To investigate the embedded nature of designing from inside social systems, this research employs a case study of service design in the context of healthcare. Through over 80 hours of participatory observation and 8 semi-structured interviews with designers and healthcare staff involved in service design projects, we unpack the enactment of social structures and the difficulty faced by those looking to challenge existing structures. Each of the interviews was transcribed and an iterative approach of moving between theory and practice was used to identify the emergent themes related to structures-in-practice.

The context for this case study is that of Experio Lab, a national center for patient-focused service innovation in Sweden. Experio Lab employs service design approaches to catalyze change in a variety of healthcare services within the County Councils of Värmland, Sörmland, Västernorrland, and increasingly in other places in Sweden. The Experio Way involves curiosity and empathy for people's everyday lives, courage to dream of a better future and co-creation to make it happen. The authors investigated a variety of Experio Lab projects that ranged from: the creation of a new digital service to support young people with mental health needs, to re-designing the process of blood and tissue sampling, to a project focusing on engaging patients with chronic disease as partners in their own care. The focus of the interview was on understanding the actions of various actors, the challenges faced within their context, and strategies for overcoming these challenges.

Structures in Practice

Based on the analysis of interviews and observations, the authors were able to identify the structures enacted in practice through Experio Lab's design process and in the healthcare systems they worked within. The sections below provide an overview of these structures and the facilities, norms and interpretive schemes affecting them informed by the framework developed by Orlikowski (2000).

The Experio Way

The creation of Experio Lab was motivated by the recognition of the need for a change in the healthcare system. The early team consisted of a small number of designers and project leaders. While it was embedded within the organization of the County Council, the lab was given the mandate to radically innovate a stagnating healthcare system. Their fervor to create change is summed up in this quote from a team member:

"We were born as a project with a certain task to change and to provoke and challenge. It is built into the construction and DNA."

Members of the team rely heavily on their design expertise and prior experiences to aid in developing meaningful healthcare services. They draw on resources both internally amongst colleagues and externally through the County Council. Further, they live out their values of curiosity and co-creation by reaching out and learning from others:

"We tried really hard to build relationships and not label our work and here is our banner and here we come now with our project. The opposite, we reached out to a lot of people in a respectful and curious way that we think are doing good work."

Experio Lab Team members pride themselves on the participatory approach they take to creating services by engaging diverse stakeholders in the process. They are constantly working at breaking down silos to bring the necessary stakeholders to the table:

“We brought in some more people, IT people, people from the clinical training center, people from infectious disease, pathological, clinical chemistry and Experio. We tried to look at this and ask what we saw.”

At the heart of it all, the patient continues to be a critical participant. The Experio Team prioritises patient goals and recognizes the importance of helping service providers understand the patient experience. They emphasize the patient perspective in all the projects they undertake:

“Then we transformed things to see it from another point of view. The patients point of view.”

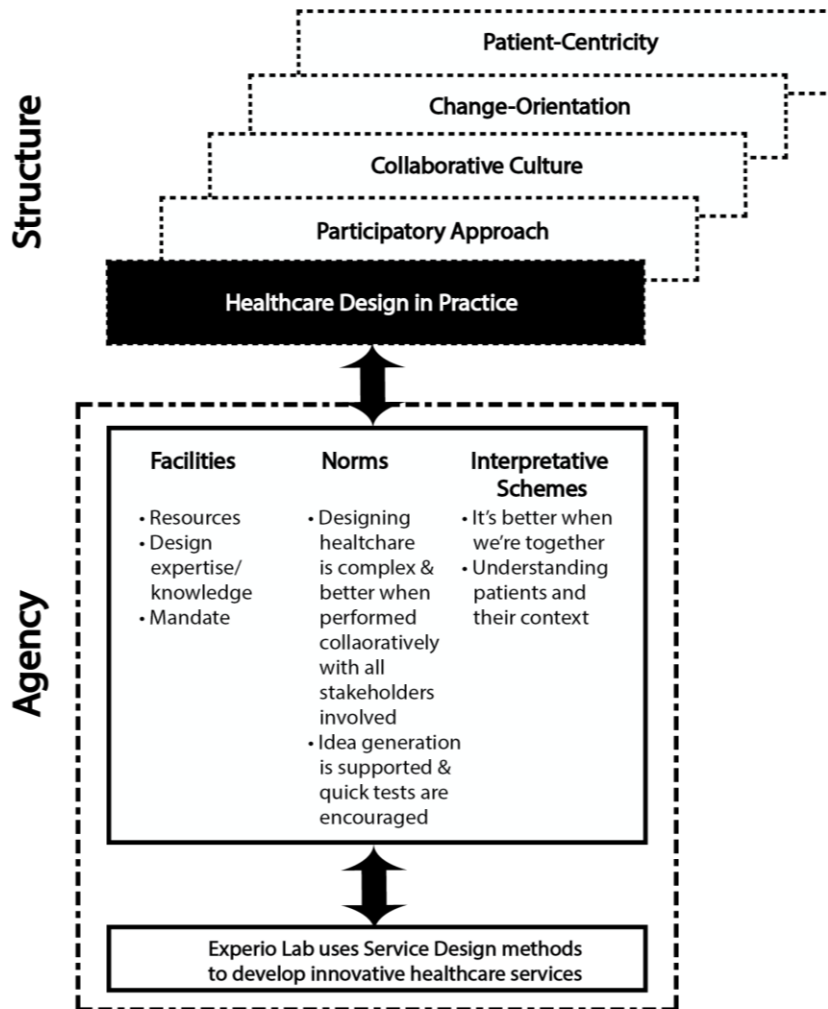


Figure 3: Enactment of structures in practice by Experio Lab actors

Figure 3 shows the social structures that Experio Lab actors enact through their actions within their service design process. Together in partnership with healthcare providers, patients, families and community members, they iteratively reinforce emergent social structures including: patient-centricity, change-orientation, collaborative culture, and participatory approach.

The Status Quo

Through our interviews and observations, it became clear that there were also legacy structures in place that were being enacted by many actors within the healthcare system. Some actors prioritised treatment and traditional ways of operating under intense pressure to stay afloat within their everyday job. This in many cases meant that they found it difficult to devote time to service design activities:

“The core is like a black hole. It has a gravitational pull. I have to do this; I have to do this. And it is getting worse and worse now. We are in a situation where we have a lot of patients and the resources are diminishing. So just to get their [healthcare providers'] time is really hard.”

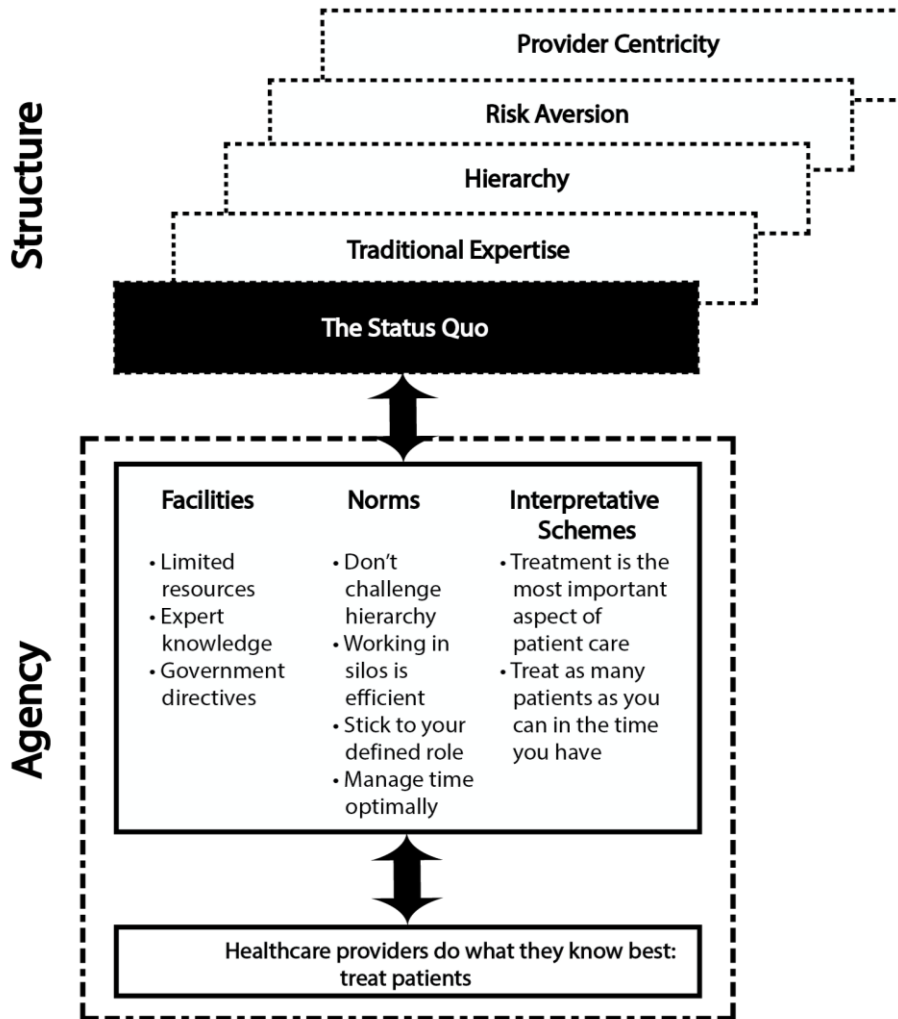


Figure 4: Enactment of structures in practice by actors in the healthcare system

Coupled with that is the resistance put up by expert practitioners, who are slow to trust and feel like their work is under scrutiny:

“It is kind of hard to reach the core of the healthcare system. To meet patients, to be where it happens. It is kind of hard because there is a shelter around it. You are looking at something that they feel they know how to do.”

Administration and hierarchy can make it hard to navigate and redesign within the healthcare system. The need for innovation is assumed, but the underlying sentiment is that not many truly understand it. The risk-averse and resistant nature of the system is manifested in the reluctance to implement design-led changes. Having people in positions of power champion initiatives is critical:

“People just go, nice work. Who asked you? That doesn’t fit into my everyday work. We learned that we need to have someone order us and someone who will receive the result and take the long-term responsibility.”

Thus, members of Experio Lab encounter numerous challenges in creating buy-in from some of the key stakeholders. At the centre of this lie issues of creative freedom, trust, managing time and expectations of those involved in the healthcare innovation projects. At the core of this challenge are the tensions between the structures actors connected to Experio Lab are working to enact and the legacy structures that continue to be enacted by many actors, such as: provider centricity, risk aversion, hierarchy, and traditional expertise (shown in Figure 4). This conflict is at the core of what Experio Lab actors are working to overcome.

Changing Mindsets

To dissolve the tensions between emerging and legacy structures, actors connected to Experio Lab discussed the important role of mindsets within the social system. They discussed existing mindsets they faced:

“They have a mindset that is – we are the experts, we know what they should do, they over there must do it.”

There was acknowledgement by participating healthcare providers that these traditional ways of internalizing the world often limit the service design process:

“Sometimes you just have the solutions in your mind and it is kind of controlling your mindset.”

Experio Lab team members also talked about their efforts to challenge and change existing mindsets:

“We give people the opportunity to see their own work from another perspective.”

Archival documentation also revealed the reactions by actors who experience a perspective shift through the service design process:

“I am ashamed that I haven’t understood the real needs of the patients. I thought I knew.”

Interviews and observations suggest that Experio Lab actors support other actors in shifting their mindset by helping to engage actors in new ways of doing and making using tangible and experiential interventions. One participant calls out the value of this approach:

“It is a powerful way to explain what you mean to a large group, to do it in a physical shape.”

Another strategy employed by the Experio Team to shift mindsets is coaching and guiding actors in observations to see things with new eyes. By helping other actors notice the subtleties in a situation or reflect on the patient perspective, the design team supports actors to take in new information through their senses. One member of a county leadership team reflects on the coaching process by saying:

“I will make sure that I have these coaches for each moment. They need someone to inspire them or guide them . . .”

Experio Lab’s approach seems to mirror findings from systems thinking experts that suggest that structures in social systems are guided by actor’s mental models (Meadows, 2008; Senge, 1990). This research suggest that mental models act as filters for actors’ experiences, causing actors to let go of information that conflicts with their current way of viewing the world, further enabling the status quo (Senge, 1990). However, these mental models – or what Experio Lab actors refer to as mindsets – are one of the leverage points with the most transformative potential in social systems (Meadows, 2008). By engaging actors in experiences that surface and reshape their mental models, Experio Lab could start to change how actors are enacting structures, reducing the pressure of legacy structures.

Concluding Discussion

This case study shows the tensions actors connected to Experio Lab face as they attempt to disrupt the status quo through service design amid the existing health care system. This research contributes to literature at the intersection of design and social systems in the following ways:

- By contextualizing the process of designing within social systems, rather than seeing actors as separate from the systems they are designing for.
- By showing how actors can enact new social structures through design as well as the tensions they face amid legacy systems.
- By reinforcing the transformative potential of working to alter mindsets (or reshaping mental models) through the design process to help unlock actors from conforming to the status quo.

The transformative role of design in organisations and communities has been explored in design literature (Junginger and Sangiorgi, 2009; Sangiorgi, 2010; Bate and Robert, 2007; Thackara, 2007). The structures enacted by the Experio Lab team can be compared to the transformative design practices articulated by Sangiorgi (2009). Specifically, she advocates for the role of citizens as active participants in the creation of wellbeing, which Experio Lab practices by involving all relevant stakeholders, including patients. Further, she elucidates the importance of building capacities and project partnerships, redistributing power in the design process, designing infrastructures and platforms that enable participation, and enhancing imagination and hope. Through our interviews and observatory data, we see that the Experio Lab team is taking steps toward enacting these practices. This is aligned with previous research on Experio Lab that came to similar conclusions (Wetter-Edman & Moritz, 2015). Junginger and Sangiorgi (2009) also reflect on the embeddedness

of service design in organizations and the potential of design professionals to generate and implement change in organisations. They draw attention to the fact that catalysing change is not enough and organizations aiming for long-term, enduring transformations have to sustain the change. One way of doing this is by designers' reflecting on their work and interventions, and conducting reflexive inquiries into organizational systems (Junginger and Sangiorgi, 2009; Sangiorgi 2010). This reflexivity should be part of the newly enacted structures in practice, including mindful evaluations and interventions as part of the design process (Sangiorgi, 2010). Taking this one step further, actors striving to enact change should extend the reflective practice to all participating actors. We propose that such collective reflection can overcome some of the challenges in shifting mindsets and lead to changes in the status quo.

While research in this area is progressing, referring specifically design practice in the public sector, Deserti and Rizzo (2014, p. 86) point out that "their [cases] focus is primarily on the changes to the services, while very little reflection is being produced on the change within the organizations that are supposed to manage them. There seems to be a widespread idea that the introduction of user-centered practices will work per se, without the need for facing the problem of change in the hosting organizations. Most of the changes obtained through the new practices are thus affecting the superficial level, while at deeper levels the established culture, mindset, habits, and practices are still dominant." Our study takes this idea and turns it on its head by highlighting the rampant tensions and challenges faced by actors working to catalyze change with social systems and their efforts to transform mindsets and the status quo.

This case study, however, is just the beginning. We argue that more research needs to be done around the contextual nature of the design process in social systems and the conflict actors experience as they look to design for change in social systems. There is also an opportunity to investigate how actors might more intentionally design for shifts in mindsets in social systems. It was our hope to open up the discussion on the embedded nature of actors when designing and spark further research that can help to better equip actors interested in designing for social systems change.

References

- Banathy, B. H. (1996). *Designing Social Systems in a Changing World*. (R. L. Flood, Ed.). New York: Plenum Press.
- Battilana, J., & D'Aunno, T. (2009). Institutional work and the paradox of embedded agency. In T. Lawrence, R. Suddaby, & B. Leca (Eds.), *Institutional work: actors and agency in institutional studies of organizations* (pp. 31–58). Cambridge: Cambridge University Press.
- Bate, R., Robert, G. (2007). Toward more user-centric OD: lessons from the field of experience-based design and a case study. *Journal of Applied Behavioral Science*, 43(42): 41-66
- Carr, V., Sangiorgi, D., Büscher, M., Cooper, R., & Junginger, S. (2009). Clinicians as service designers? reflections on current transformation in the UK health services. Imagination Lancaster. First Nordic Conference on Service Design and Service Innovation.
- Deserti, A., & Rizzo, F. (2014). Design and organizational change in the public sector. *Design Management Journal*, 9(1), 85–97. <https://doi.org/10.1111/dmj.12013>
- Dickson, F., Friedman, E., and Ross, L. (2011), Innovating in health care – an environment adverse to change. *Touchpoint: The Journal of Service Design*, 3(2), 48–53.
- Donetto, S., Pierri, P., Tsianakas, V., & Robert, G. (2014). Experience-based co-design and healthcare improvement: realising participatory design in the public sector. Fourth Service Design and Innovation conference. Lancaster, United Kingdom.
- Eisenhardt, K. (1989). Agency theory: an assessment and review. *Academy of Management Review*, 14(1), 57–74.
- Giddens, A. (1984). *The constitution of society: outline of the theory of structuration*. California: University of California Press.
- Jones, M., & Karsten, H. (2008). Giddens's structuration theory and information systems research. *Management Information Systems Quarterly*, 32(1), 127–157.
- Junginger, S. and Sangiorgi, D. (2009). Service design and organisational change... Bridging the gap between rigour and relevance. IASDR09 conference, 19-22 October, Seoul.
- Lawrence, T., Suddaby, R., & Leca, B. (2009). *Institutional work – Actors and Agency in Institutional Studies or Organizations*. Cambridge University Press, New York.
- Meadows, D. H. (2008). *Thinking in Systems: A Primer*. (D. Wright, Ed.). London: Earthscan.
- Metcalf, G. S. (2014). *Social Systems and Design*. (G. S. Metcalf, Ed.) (Vol. 1). Tokyo: Springer Japan. doi:10.1007/978-4-431-54478-4
- Norman, D. A., & Stappers, P. J. (2015). DesignX: complex sociotechnical systems. *She Ji: The Journal of Design, Economics, and Innovation*. 1(2), 83–106. doi:10.1016/j.sheji.2016.01.002
- Orlikowski, W. J. (2000). Using technology and constituting structures: a practice lens for studying technology in organizations. *Organization Science*, 11(4), 404-428. doi:10.1287/orsc.11.4.404.14600
- Sangiorgi, D. (2010). Transformative services and transformation design. *International Journal of Design*, 5(2), 29–40.
- Sangiorgi, D., & Prendiville, A. (2014). A theoretical framework for studying service design practices: first steps to a mature field. *Design Management Journal*, 9(1), 61–73.
- Senge, P. M. (1990). *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York: Doubleday.
- Stacey, P., & Tether, B. (2015). Designing emotion-centred product service systems: the case of a cancer care facility. *Design Studies*, 40, 85–118.
- Thackara, J. (2007) *Ack. Wouldn't be great if...* London: Dotto07, Design Council.
- Wetter-Edman, K. & Moritz, S. (2015). Empowering transformation through design inquiry in public healthcare. Proceedings of the 3rd European Conference on Design for Health.

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