

**Please cite the Published Version**

Pol, Shari, Ely, Philip and Geneste, Louis (2024) Using space and knowledge to confront power in design. In: DRS2024: Boston, 23 June 2024 - 28 June 2024, Boston, Massachusetts, USA.

**DOI:** <https://doi.org/10.21606/drs.2024.681>

**Publisher:** Design Research Society

**Version:** Published Version

**Downloaded from:** <https://e-space.mmu.ac.uk/635340/>

**Usage rights:**  [Creative Commons: Attribution-Noncommercial 4.0](https://creativecommons.org/licenses/by-nc/4.0/)

**Additional Information:** This is an open access conference paper which was originally presented at DRS2024: Boston

**Enquiries:**

If you have questions about this document, contact [openresearch@mmu.ac.uk](mailto:openresearch@mmu.ac.uk). Please include the URL of the record in e-space. If you believe that your, or a third party's rights have been compromised through this document please see our Take Down policy (available from <https://www.mmu.ac.uk/library/using-the-library/policies-and-guidelines>)

Jun 23rd, 9:00 AM - Jun 28th, 5:00 PM

## Using space and knowledge to confront power in design

Shari Pol  
*Curtin University, Australia*

Philip Ely  
*Manchester Metropolitan University*

Louis Geneste  
*Curtin University, Australia*

Follow this and additional works at: <https://dl.designresearchsociety.org/drs-conference-papers>



Part of the [Art and Design Commons](#)

---

### Citation

Pol, S., Ely, P., and Geneste, L. (2024) Using space and knowledge to confront power in design, in Gray, C., Ciliotta Chehade, E., Hekkert, P., Forlano, L., Ciuccarelli, P., Lloyd, P. (eds.), *DRS2024: Boston, 23–28 June*, Boston, USA. <https://doi.org/10.21606/drs.2024.681>

This Research Paper is brought to you for free and open access by the DRS Conference Proceedings at DRS Digital Library. It has been accepted for inclusion in DRS Biennial Conference Series by an authorized administrator of DRS Digital Library. For more information, please contact [dl@designresearchsociety.org](mailto:dl@designresearchsociety.org).

# Using space and knowledge to confront power in design

Shari Pol<sup>a,\*</sup>, Philip Ely<sup>b</sup>, Louis Geneste<sup>a</sup>

<sup>a</sup>Curtin University, Bentley, Australia

<sup>b</sup>Manchester Metropolitan University, Manchester, England

\*Corresponding e-mail: shari.pol@postgrad.curtin.edu.au

[doi.org/10.21606/drs.2024.681](https://doi.org/10.21606/drs.2024.681)

**Abstract:** This paper considers the disputes and questions arising from a systematic review of the social design literature and establishes three prominent contestations relating to the ideas of ‘power’, ‘systems thinking’ and ‘criticality’. These ideas are tightly connected, with systems thinking and criticality emerging in response to the omnipresence of power relations in social design. With the acceptance that social design is inherently political, and the provision that both ‘space’ and the ‘uncovering of knowledge’ can work to confront such power and enable social innovation, we see the need for both an expansion and nuance of future social design efforts. Our analysis suggests this is possible through the enacting of mechanisms that work to unveil and confront notions of power directly in design. We see these opportunities through acts including employing systematic design practices; practicing reflexive and situated design; and pursuing prototyping and infrastructuring in design.

**Keywords:** Social design; power; knowledge; systemic design

## 1. Introduction

Design for social innovation (social design) involves the “*creative recombination of existing assets...which aim to achieve socially recognized goals in a new way*” (Manzini, 2015). Whilst emergent (Amatullo et al., 2022), it is no longer a novel concept in the social sector (here understood as both the public and third sectors) (Bason, 2022a; Liedtka et al., 2017). Indeed, the broad adoption of design practices to address social challenges has been pervasive (Amatullo et al., 2022; Liedtka et al., 2017; McGann et al., 2018). The uptake of social design has been driven by the scale and complexity of social challenges (Ely, 2020; Grimm et al., 2013; Hillgren et al., 2011; Liedtka et al., 2017), and the failure of prominent social systems to generate sufficient responses to current social needs (Banerjee et al., 2020; Barraket & Collyer, 2010; Ely, 2020; Unceta et al., 2020). Additionally, there is an ongoing investment in—and valuing of—participatory and creative approaches to solving these complex social



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International Licence.

challenges (Spencer, 2021; Unceta et al., 2020). The demand for social design leads to an imperative to deeply understand the value of social design practices. There are some indicators of value and success—for example Bason (2022b) highlights that through public sector innovation cost savings, increasing citizen satisfaction and better outcomes have been achieved. However, it is also true that serious and concerning questions and claims regarding social design exist, including that “universalist design principles and practices erase certain groups of people, specifically those who are intersectionally disadvantaged or multiply burdened” (Costanza-Chock, 2020, p. 19).

Responding to these concerns, this paper explores the prominent questions of social design practice arising from the literature. This analysis establishes three common themes—the ideas of ‘power’, ‘systems thinking’, and ‘critical design’, and considers opportunities arising from the controversies in social design practice. Our analysis reveals that systems thinking and critical design both work to navigate power in design, by uncovering the existence of power relations and eliciting knowledge regarding alternative futures and social innovation. These outcomes are achieved through the practices of systematic design, reflexive and situated design, and designing by prototyping and infrastructuring. This paper draws from the results of a systematic literature review exploring case studies of social design practice to inform a thematic analysis, leading to the emergence of key issues evident in contemporary social design theory.

We look to French philosopher of everyday life, Michel de Certeau to consider the ways in which design might provide valuable ‘space’ for the exploration of power, by those confronting it. Through his study of “the innumerable practices by means of which users reappropriate the space organized by techniques of sociocultural production” (p. xiv), de Certeau (2011) offers a framework to consider how societies respond to—and resist—the power of socio-technical systems. We apply this thinking to consider where social design efforts may support societal responses and resistance to power. De Certeau (2011) outlines the use of strategies and tactics as logics for groups and individuals responding to power dynamics. Strategies are described as mechanisms for appropriating power through acquisition of space – from which a target or threat can be managed. Conversely, tactics are described as “a calculated action determined by the absence of a proper locus” (de Certeau, 2011, p. 37) because it is occurring in the space of the other. Central to these logics is the notion of spatiality and temporality, whereby strategies utilise place as a form of resistance, while tactics utilise time to respond to, and undermine power. Applying de Certeau’s thinking to social design, it is apparent that the establishment of ‘space’ through designing is significant, given it provides the opportunity to ‘view and manage’ targets and threats (de Certeau, 2011, p. 36)—if, and when, we actively realise and engage with the power inherent in socio-technical systems. It may then be argued that without the establishment of ‘space’ to ‘manage’ power relations, we continue to operate at the level of tactics, with an absence of power or agency, “in the space of the other” (de Certeau, 2011, p. 37); a similar result to what we see when design works to maintain the status quo. Through this paper we consider how systematic, critical, and other acts of design work to unveil and examine power relations, enabling de-

sign participants to establish a new conceptual vision of social and cultural phenomena and, thus, working as mechanisms for the making of a conceptual 'designing space' (a space for design) which allows reflection and responses to power.

We also consider the analysis of Pfeffer and Sutton (2000) which explores the knowing-doing gap, or the challenge of utilising knowledge to enact innovative outcomes. This exploration offers useful analysis that may help us understand how different types of knowledge can support social innovation, particularly through the creative reconfiguring of existing assets. In their work there is an emphasis on doing, and the sharing of stories and experiences to effectively gain and distribute knowledge, which becomes pivotal to the implementation of that knowledge for innovative outcomes. These acts also work to establish relevant knowledge, such as the principles and philosophies that guide actions, which are central to enabling and informing adaptive decision making. Applying this understanding of knowledge to social design practice, we see that through practices of uncovering knowledge—by doing and sharing stories—information is gained that supports social innovation, building both knowledge that 'reveals' matters that are difficult to communicate, as well as relevant knowledge which enables adaptive social innovation. This uncovering of knowledge is important because it makes explicit the existence of power in design as well as the principles which can guide innovation outcomes.

## 2. Methodology

The methodology for the literature review was modelled on systematic review approaches as undertaken in Micheli et al. (2019) and Wrigley, Mosely, and Mosely (2021), which provide a rigorous framework to identify primary research and gaps in the literature (Liberati et al., 2009). Qualitative analysis of design literature as well as analysis of the work of French philosopher de Certeau (2011) has also been undertaken to supplement and inform a deeper understanding of the themes arising from the literature review.

The review applied specified eligibility criteria, to systematically identify relevant primary research presenting social innovation case studies for human services that employed designed approaches. Searches were conducted across five databases (ProQuest, Scopus, Web of Science, JSTOR and Science Direct) using a Boolean prompt ((("Social + innovation") AND ("design methodologies" OR "design methodology" OR "design methods") OR ("design thinking") OR "Human Centred Design" OR "Social Design")). Quality assessment was completed through a review of the 2674 articles found in the search, to ensure alignment to the search criteria. With duplicate and misaligned articles excluded, a total of 95 articles remained, representing a rich data source of empirical evidence on the current state of social design.

Because the case studies were varied in their research approach and focus, a comparison of methods and findings would be inappropriate. Instead, a thematic analysis considered the prominent contestations arising in the case study literature, finding the existence of themes of 'power', 'systems thinking' and 'criticality' in the data. To inform a deep understanding of

these themes, the authors looked to literature across social design, and design research more broadly, drawing insights to build context and comprehension for the analysis.

### 3. Results

Progression of social design theory and practice is marked by widespread uptake (Akama et al., 2019), specialisation (Tonkinwise, 2015) and a growing influence within positions of power (i.e., executive suite; middle management) in the social sector (Bason, 2022a). However, this progress has been tempered by perceived limitations arising from social design practice: as Amatullo et al. (2022) explain, social design “is still finding its footing in numerous ways” (p. 14). Further to the recognition of opportunities to refine approaches to social design, more critical views illuminate the high cost of poor practices in social design. Such views explain how design can have systemic implications on societies—such as when design has been complicit in perpetuating systems of oppression (Akama et al., 2019; Ely, 2020), and when design has been central to the current planetary crisis (Escobar, 2018; Fry & Nocek, 2021).

Interrogation of this tension between the value and problematics of social design throughout the social design literature unveils ideas of ‘power’, ‘systems thinking’ and ‘criticality’, which frequently arise in the discourse. We find these ideas are interrelated and inseparable because they inform each other—with systems thinking and criticality working to unveil and confront power in design. Where these ideas aren’t explored in design, we see limitations in social design outcomes, as well as opportunities for an expansion of practice (Bason & Skibsted, 2022) including more conscious and courageous approaches to innovation (Bason, 2022b). This discussion of ideas offers a view of the present priorities for social design, minimising and managing the problematics of design, and therefore realising and elevating the opportunities arising from design.

**Error! Reference source not found.** presents a visualization of our argument—that until power is acknowledged, design operates within existing socio-technical systems (in the space of the other (de Certeau, 2011)), and that through design mechanisms that uncover power and knowledge (systemic design, situated design and design acts of prototyping and infrastructuring) we provide a means to create space and alternative views of phenomena.

*Figure 1 Demonstrates the proposition that conceptually design occurs within the space of socio-technical systems until design mechanisms are employed after which design space is formed separate to the social technical system, offering an alternative view of the system.*

### ***3.1 Designing is inherently political***

A critical question regarding the value of social design is the extent to which design can affect the broader systems in which it operates. The potential for design to influence macro systems such as the economy, gender relations, and accepted (social) ways of knowing is relevant given these systems represent the structural and ideological causes of the inequalities that social design is working to ameliorate (Julier & Kimbell, 2019). In this sense these macro systems and their enacting structures (e.g., abiding institutions) represent systems of power and influence. Despite the power of these systems, Palmer et al. (2019) clarify there is “a lack of critical engagement with issues of power, power relations and questions of representation” (p. 248) in social design approaches. This is problematic because design practices that fail to consider power limit the agency of design, by reducing the prism through which we design, and the spectrum of possibilities of new ways of doing (those outside of the existing structures of power). For example, by avoiding the interrogation of power—a significant element of a system—design efforts fail to be systematic (Bijl-Brouwer & Malcolm, 2020), resulting in a reduced view of the design premise. A naivety to power in design limits innovation prospects because it contributes to the embedding and enabling of existing power relations (Julier & Kimbell, 2019), limiting our view of what’s possible. Thus, in situations where design approaches do not critically engage with power (a failure to establish a holistic view of the system), we understand that “it[s] impossible [for designers] to see, engage with, account for, or attempt to remedy the unequal distribution of benefits and burdens that they [the design processes] reproduce” (Costanza-Chock, 2020, p. 19). Consequently, design approaches that are not responsive to power, are not only ineffectual, but work to perpetuate subjugation of the least powerful participants in the system.

Failure to recognise systems and structures of power in design relates to a lack of criticality. Applying thinking in relation to the critique of industrial design by Dunne & Raby (2013) we

understand that criticality in design works to “challenge narrow assumptions, preconceptions and givens” (p. 34). In the context of social design, Mallo, Tardiveau, and Parsons (2020) explain that the lack of critical exploration of systems of power favours “tokenistic or instrumental forms of participation” (Mallo et al., 2020, p. 102) where the *maintenance* of power rather than *transformation* is the intended goal. Here we see that with a lack of criticality toward power, design efforts can be co-opted to both favour and maintain established systems and structures of power (Mallo et al., 2020; Palmer et al., 2019). Without critical reflection, there is a risk of design-led approaches becoming a rubber stamp for those in power (Rosa et al., 2021).

The adoption of systems thinking in design practice is one mechanism to support more critical and effective approaches to designing. Systemic design practices are responsive to power because they involve exploration of the connection between the many components of a system—a process that works to unveil power relations. Norman and Stappers (2015) explain the need for the holistic views that systems thinking offer in design, clarifying that complex systems like those which social design is focused on (such as healthcare and welfare) “have many components—technical and otherwise—whose interactions are critical to the system’s overall behavior” (p. 84). The authors have also highlighted that it is because of the complexity of social systems that responsive social design approaches are required. The application of systemic design (in theory and practice) therefore builds the efficacy of design efforts, because this approach allows designers to consider and respond to systems (what we recognise as structures of power) and avoid design efforts being overwhelmed by elements of power in the system (Bijl-Brouwer & Malcolm, 2020; Norman & Stappers, 2015). The foci of social design—complex social systems—dictates that social design operates within systems and structures of power and thus demands systemic approaches that acknowledge and respond appropriately.

A policy design case study which applied systemic design principles (Blomkamp, 2022), demonstrates the challenge of confronting systems of power through design. Blomkamp (2022) reports a resistance to the sharing of power by powerful actors in the case, noting a “lack of support and ownership from senior management” (p.22), and that with exception to the discovery phase, citizens were not included in the policy design process. This example highlights that design is not independent of systems of power and can therefore be constrained by them. As Blomkamp (2022) explains, where government teams are not “open to new ways of working, including democratic approaches to decision-making and power-sharing” (p. 22), systemic design may not be appropriate and effective. However, the finding that there was a “wider adoption of design-based methods throughout the organization” (p. 23), despite limited support from senior management (powerful actors), suggests that there is potential through systemic design for the shaping and influencing of systems of power—albeit slowly. This outcome is attributed to the “self-organizing and emergent properties” (p. 23) of systemic design, which are also recognized by van der Bijl-Brouwer and Malcolm (2020). Further to systems *change*, the act of *identifying* systems of power and their influ-



ence on design approaches may also provide benefit by alerting all actors in the design to the existing power relations.

### 3.2 Responsive design

While systemic design approaches offer mechanisms to respond to the political, economic, cultural, organisational, and structural influences in socio-technical systems (Buchanan, 2019), there are limitations to the application of systems thinking in design. In addition to the risk of it being reductionist, “systems thinking also tends to fail in addressing the social and environmental issues in the concrete particular circumstances of human beings” (Buchanan, 2019, p. 97). This ability to consider and explore socio-technical relations from a human perspective is a strength of design thinking (Buchanan, 2019). Through the more nuanced focus of design thinking (compared to systems thinking) there is also an opportunity (and arguably a need) to uncover knowledge and to make explicit norms and values in design methods (i.e., those found amongst designers and broader design project participants) (Nilsson & Jahnke, 2018).

It is this focus on deep connection to (and space for) understanding the human experience in design and the elucidating of the thinking informing decisions that can be found in critical design discourse. As Akama, Hagen, and Whaanga-Schollum (2019) explain, problematic (e.g., universal and simplistic) design approaches fail to “stress what biases the practitioners might bring to their set of questioning, and a reflexive awareness of who they are in the process of existing and shifting power dynamics” (p. 4). Here we see that, in addition to consideration of systemic power relations, there is also a need for an awareness of power and its representations *within* design practices—through the power (bias) embodied by designers, design methods, and design participants. Notions of tacit knowledge—knowledge that either is not, or cannot be communicated (Niedderer, 2007)—arise through this discourse, prompting exploration of how social design practices enable the uncovering of knowledge that is difficult to communicate. In the literature, opportunities for the unveiling of existing and shifting power dynamics (and therefore knowledge) are demonstrated through situated design and reflexive practices.

Simonsen et al. (2014) explores how situated design is informed by situated knowledge, drawing on Haraway (1988) to explain the concept. Simonsen et al. (2014) note that “[k]nowledge production takes place under specific historical, political, and situational circumstances” (p. 4). Given knowledge is influenced by context, we see that those who claim knowledge must be responsible for what they construct. To be responsible for the construction of knowledge, one must hold onto the “particular, partial, and embedded and thereby to ground knowledge by accounting for how it is locally and historically contingent” (Simonsen et al., 2014, p. 4). Situated design follows this theory, in that it “is always carried out with partiality and from a specific, embedded position” (Simonsen et al., 2014, p. 7).

This emphasis on locating the positionality of the designer is prominent in the critical social design literature. By example, Akama, Hagen, and Whaanga-Schollum (2019) argue that codesign must begin by accounting for self and they offer an approach to achieving this by

demonstrating an exploration of the “evolving positionality” (p. 17) of each author in their case study. Through this exploration, the themes of “[r]espect, reciprocity, and relationships emerge” (Akama et al., 2019, p. 17). However, the authors warn that these principles are informed by a highly contextualised understanding and argue that it is the process—the telling of personal stories of journeys of “our histories, legacies, education, and professional work”—that enables the development of a “deeper situational awareness [Sheehan (2011, 70)]” (Akama et al., 2019, p. 17). This case highlights that reflexivity, the recognition of pluralities, and the uncovering of knowledge (situated design practices), work together to facilitate social design which is considerate of the human perspective.

The relational value arising from these critical design approaches is significant, because through relations it is possible to uncover tacit knowledge, and such knowledge is important for the implementation of innovations (Pfeffer & Sutton, 2000). Dutta (2019) provides a case study which details examples of how situated and reflexive design works to uncover knowledge to enhance design. An example of the importance of relationality and uncovering of knowledge is demonstrated in the following excerpt of the case which explores the development of a small hospital in a remote village:

“[L]ocal health professionals suggested buying standard hospital beds made of iron, and I initially could not see any problem with that proposal. Later, the villagers pointed out that owing to high altitude and geographical isolation (i.e., no proper road was there to connect the villagers, therefore working on foot was the option), it was very difficult (if not impossible) to manually carry hospital beds, which are made with iron, i[n] a high altitude region. Moreover, in the long run when the iron beds might be damaged or rusted (especially in these high rainfall regions), they would need to be repaired. When these issues were brought forward, villagers collectively decided to choose wood as an alternate material, particularly when the wood (coming from legal sources—i.e., from trees that have fallen down or died) was abundant in that forest area”. (Dutta, 2019, p. 11)

Through this example we see a significant outcome of situated design, through the provision of space that allowed the uncovering of knowledge that confronts embedded bias and structures of power.

### *3.3 Agency in design*

Power relations in design are not only operating at the level of systems, or in practices, but also through the participants of designs (participant agency). Participatory design is recognized as critical for effective design, because it enables the realising of the agency of participants in a design. Sangiorgi (2011) explains “[t]he central condition for transformative practices is the understanding of citizens as “agents” and their active role in the creation of well-being” (p. 264). This realisation of agency is enabled through the redistribution of power, which allows meaningful participation (Sangiorgi, 2011). From this perspective, agency in social design is predicated on the degree of power transferred to participants in the design process, an outcome which is only possible if systems of power are confronted and negotiated.

While there is a focus on participant agency during design, there is a lesser focus in the literature on supporting the agency of stakeholders participating in design *after* a project, an approach which can result in “opening up the possibility of use as design, or design-after-design” (Bjögvinsson et al., 2012, p. 104). Through the literature we see that social design must consider the agency of participants to enact designs, given they make transformative outcomes possible (Bjögvinsson et al., 2012). A focus on agency to implement designs will encourage long-term and transformative design, by moving the focus of design efforts from projects to future stakeholders of designs (Bjögvinsson et al., 2012). Hillgren, Seravalli, and Emilson (2011), provide a case study considering the use of both prototyping and infrastructuring design approaches to facilitate participant agency in implementing and delivering long-term design outcomes. The authors (2011) demonstrate that through the process of prototyping and infrastructuring it is possible to reveal, explore, and respond to existing and potential power relations that may either support, or disrupt the implementation of a design outcome. The result of prototyping and infrastructuring is the creation of space and the eliciting of knowledge that support and inform acts of design-after-design. We are drawn back to an emphasis on the need for places where design participants can enact strategies (spaces to view and manage threats)—in this instance, space to consider threats to the future stakeholders of a design. Infrastructuring as “a continuous process of building relations with diverse participants and by a flexible allotment of time and resources” (Hillgren et al., 2011, p. 180) is a mechanism for the enablement of such space.

An important precursor to infrastructuring is prototyping, which Hillgren, Seravalli, and Emilson (2011) contend acts as a mechanism to “foresee how a radical change can affect power relations or different political views” (Hillgren et al., 2011, p. 174). The authors (2011) illustrate that in social design the importance of prototyping is to evoke dilemmas, in this way prototyping establishes agnostic spaces where consensus may not exist. This realisation of “questions, controversies and opportunities that can have an impact for social change in the long run” (Hillgren et al., 2011, p. 179) facilitates spaces for the consideration of realistic and achievable implementation outcomes. Prototyping therefore applies a critical lens to reveal significant power and social relations that must be considered in design infrastructuring. This exploration of long-term design illuminates the significance of considering power relations at the conclusion of a design project and the implementation of design solutions. Rather an ignorance of the power relations surrounding design participants limits the long-term implementation of design, and therefore the potential impact of designs. Yet, as the case study of Hillgren, Seravalli, and Emilson (2011) illuminates through an example of the social complexities faced by migrant families, prototyping may reveal dilemmas that cannot easily be solved. Although in such cases the continuation of design may be limited, we agree with the synopsis of the authors, that the revelation is an important insight for social innovation, informing current and future decision-making.

### 3.4 Research implications

In addition to the need to engage with power in social design practice, there is also a need to engage with power in social design research, given the role of research for informing theory and practice (or how designers design). Noel (2024) provides insight to the power that exists *in* and *through* design research with a discussion of emancipatory research and its application for design, highlighting the current disparity in design research which privileges certain voices. In addition to the need for more critical design research, there is demand for the expansion of social design research across the literature (e.g., (Bijl-Brouwer, 2019; Kiem, 2011; Tan & Szebeko, 2009; Temmerman et al., 2021). For example, we see calls for the analysis of design methods going “beyond individual case studies” (Bijl-Brouwer, 2019, p. 31), the undertaking of “in depth case studies of design-led policy practice” (Blomkamp, 2022, p. 13), and explorations of “how we understand how value is determined in design” (Agid & Chin, 2019, p. 77). This demand for social design research foreshadows a lack of data available to inform and guide new approaches to critical social design practice—including those which are responsive to systems, practices, and structures of power.

To critically confront power in social design theory, research must continue to challenge the simplistic versions of design we see promoted through management discourse (Akama et al., 2019; Ely, 2020); examine the avoidance of power relations in design (Julier & Kimbell, 2019); and explore how social design is valued (Agid & Chin, 2019; Kimbell & Julier, 2019). Such research is necessary, because, as has been demonstrated through this paper, a lack of engagement with power in design establishes conditions for the co-opting of design by established systems and structures of power, resulting in design becoming a tool to maintain the *status quo*. Responding to the imperative for social design practices that are responsive to power, the current doctoral research of one of the authors will explore implementation approaches in social design. This research will consider how social design can work to recognise, value, and facilitate the agency of individuals and communities in design practice, therefore enabling the devolution of power from embedded structures and systems to those marginalised and minimised by those systems.

## 4. Discussion

Through this analysis we present a view of the omnipresence of power in design, in the recognition of power that exists in the systems influencing design, the power that exists in design methods and objects, and the power that exists with design participants—both during and after designing. Given the pervasiveness of power in design, we establish the need for multiple approaches to navigating and negotiating power in design. We identified that systematic design, situated design, and the design acts of prototyping and infrastructuring offer the means to unveil and respond to power operating at the systems, practice, and individual level of design. These approaches work to unveil power, allowing its critical examination, and establish the conceptual space for interrogating power relations and capacities for innovation. Through these approaches, designers (recognizing all participants of designs as a designer!) can view (in full) the design challenge that lies ahead—including the influence of

power in relation to the challenge—and thereby respond. Without these actions designers are otherwise always working in the territory of others as de Certeau (2011) describes, as well as omitting the tacit knowledge (arising from these design approaches) which are key to enabling social innovation through the creative recombination of existing assets (Manzini, 2015).

Such acts of design that work to engage with power and uncover knowledge are mechanisms which elevate design through their ability to appropriately frame design actions and uncover essential knowledge that is required to generate social innovations. We note these acts may offer only a partial response to mitigating the forces of power that operate to marginalize others. Despite their limitations, these acts work to provide a more conscious and courageous approach to design which Bason and Skibsted (2022) call for as the next phase of design. Without the engagement of power in design there is a risk that social design efforts work to perpetuate the status quo through a failure to recognize and address the implications of power on a given design project, design methods and participants. Such approaches also fail to uncover the knowledge that is required to fully appreciate the assets available for new futures and represent the antithesis of design for social innovation.

## 5. Conclusion

The significant scale of social design practices, and the growing crises facing the social sector generate an imperative for deep exploration of the value and mechanisms of social design. Through an analysis of design contestations, we understand that power is inherent throughout the practice of design, yet there are degrees of ignorance or naivety to this, resulting in design approaches that are unresponsive—and therefore ineffectual—against the systems of power for which social design should be working to address. We see that power is present at the macro scale in systems and structures that shape the possibilities of change (Julier & Kimbell, 2019), warranting the use of systemic design approaches that facilitate the exploration of systemic considerations in design (Bijl-Brouwer & Malcolm, 2020). We understand that power is inherent in design practice—in the methods, histories and context of design, designers, and participants (Akama et al., 2019; Ely, 2020)—which reinforces the value of situated and reflexive practices in design (Akama, 2016; Dutta, 2019). Additionally, the power of individuals and communities (demonstrated through agency) is critical to the implementation and maintenance of designs (Sangiorgi, 2011), establishing the need for prototyping and infrastructuring approaches to realise and facilitate the agency of participants of design (Hillgren et al., 2011). Underlying these mechanisms is a practice of confronting power, by uncovering tacit knowledge relevant to design, and the establishment of conceptual space which allows for critical reflection regarding the socio-technical systems design operates within. In response we acknowledge the need for the expansion of critical social design research that explores power in social design—particularly in relation to the implementation and thus efficacy of design—to support more sophisticated and nuanced theory and practice.

**Acknowledgements:** This research is supported through an Australian Government Research Training Program.

## 6. References

- Agid, S., & Chin, E. (2019). Making and negotiating value: design and collaboration with community led groups. *CoDesign*, 15(1), 75–89. <https://doi.org/10.1080/15710882.2018.1563191>
- Akama, Y. (2016). Ba of Emptiness: A Place of Potential for Designing Social Innovation. *Review of Japanese Culture and Society*, 28(1), 227–246. <https://doi.org/10.1353/roj.2016.0035>
- Akama, Y., Hagen, P., & Whaanga-Schollum, D. (2019). Problematizing Replicable Design to Practice Respectful, Reciprocal, and Relational Co-designing with Indigenous People. *Design and Culture*, 11(1), 59–84. <https://doi.org/10.1080/17547075.2019.1571306>
- Amatullo, M., Boyer, B., May, J., & Shea, A. (Eds.). (2022). *Design for Social Innovation: Case studies from Around the World* (1st ed.). Routledge.
- Banerjee, S., Carney, S., & Hulgard, L. (2020). People-Centered Social Innovation: An Emerging Paradigm with Global Potential. In S. Banerjee, S. Carney, & L. Hulgard (Eds.), *People-Centered Social Innovation* (1st ed., pp. 1–16). Routledge. <https://doi.org/10.4324/9781351121026-1>
- Barraket, J., & Collyer, N. (2010). Mapping social enterprise in Australia : conceptual debates and their operational implications. *Third Sector Review*, 16(2), 11–28.
- Bason, C. (2022a). Beyond Labs: The Future of Civic Design. *Design Management Review*, 33(2), 32–39. <https://doi.org/10.1111/drev.12296>
- Bason, C. (2022b). *Leading Public Sector Innovation: Co-creating for a Better Society* (2nd ed.). Cambridge University Press.
- Bason, C., & Skibsted, J. M. (2022). *Expand: Stretching the Future by Design*. BenBella Books.
- Bijl-Brouwer, M. van der. (2019). Problem Framing Expertise in Public and Social Innovation. *She Ji*, 5(1), 29–43. <https://doi.org/10.1016/j.sheji.2019.01.003>
- Bijl-Brouwer, M. van der, & Malcolm, B. (2020). Systemic Design Principles in Social Innovation: A Study of Expert Practices and Design Rationales. *She Ji*, 6(3), 386–407. <https://doi.org/10.1016/j.sheji.2020.06.001>
- Bjögvinsson, E., Ehn, P., & Hillgren, P. A. (2012). Design things and design thinking: Contemporary participatory design challenges. *Design Issues*, 28(3), 101–116. [https://doi.org/10.1162/DESI\\_a\\_00165](https://doi.org/10.1162/DESI_a_00165)
- Blomkamp, E. (2022). Systemic design practice for participatory policymaking. *Policy Design and Practice*, 5(1), 12–31. <https://doi.org/10.1080/25741292.2021.1887576>
- Buchanan, R. (2019). Systems Thinking and Design Thinking: The Search for Principles in the World We Are Making. *She Ji*, 5(2), 85–104. <https://doi.org/10.1016/j.sheji.2019.04.001>
- Certeau, M. de. (2011). *The practice of everyday life* (3rd ed.). University of California Press.
- Costanza-Chock, S. (2020). *Design Justice: Community-led practices to build the worlds we need* (S. Braman (Ed.)). The MIT Press.
- Dunne, A., & Raby, F. (2013). *Speculate everything: design, fiction, and social dreaming*. The MIT Press.
- Dutta, U. (2019). Design engagements at the margins of the global South: De-centering the “expert” within me. *Sustainability (Switzerland)*, 11(20), 18. <https://doi.org/10.3390/su11205675>
- Ely, P. (2020). Designing Futures for an Age of Differentialism. *Design and Culture*, 12(3), 265–288. <https://doi.org/10.1080/17547075.2020.1810907>

- Escobar, A. (2018). *Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds*. Duke University Press.
- Fry, T., & Nocek, A. (Eds.). (2021). *Design in Crisis, New Worlds, Philosophies and Practices*. Routledge.
- Grimm, R., Fox, C., Baines, S., & Albertson, K. (2013). Social innovation , an answer to contemporary societal challenges ? Locating the concept in theory and practice. *Innovation: The European Journal of Social Science Research*, 26(4), 436–455. <https://doi.org/10.1080/13511610.2013.848163>
- Hillgren, P. A., Seravalli, A., & Emilson, A. (2011). Prototyping and infrastructuring in design for social innovation. *CoDesign*, 7(3–4), 169–183. <https://doi.org/10.1080/15710882.2011.630474>
- Julier, G., & Kimbell, L. (2019). Keeping the System Going : Social Design and the Reproduction of Inequalities in Neoliberal Times. *Design Issues*, 35(4), 12–24. <https://doi.org/10.1080/17547075.2018.1434368>.Jesper
- Kiem, M. (2011). Designing the Social, and the Politics of Social Innovation. *Design Philosophy Papers*, 9(3), 207–216. <https://doi.org/10.2752/144871311x13968752924879>
- Kimbell, L., & Julier, G. (2019). Confronting bureaucracies and assessing value in the co-production of social design research. *CoDesign*, 15(1), 8–23. <https://doi.org/10.1080/15710882.2018.1563190>
- Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P. A., Clarke, M., Devereaux, P. J., Kleijnen, J., & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate healthcare interventions: explanation and elaboration. *BMJ (Clinical Research Ed.)*, 339, online. <https://doi.org/10.1136/bmj.b2700>
- Liedtka, J., Salzman, R., & Azer, D. (2017). *Design thinking for the greater good*. Columbia University Press.
- Mallo, D., Tardiveau, A., & Parsons, R. (2020). Design activism : catalysing communities of practice. *Arq: Architectural Research Quarterly*, 24(2), 100–116.
- Manzini, E. (2015). *Design, when everybody designs: An introduction to design for social innovation*. MIT Press.
- McGann, M., Blomkamp, E., & Lewis, J. (2018). The rise of public sector innovation labs: experiments in design thinking for policy. *Policy Sciences*, 51(3), 249–267. <https://doi.org/10.1007/s11077-018-9315-7>
- Micheli, P., Wilner, S. J. S., Bhatti, S. H., Mura, M., & Beverland, M. B. (2019). Doing Design Thinking: Conceptual Review, Synthesis, and Research Agenda. *Journal of Product Innovation Management*, 36(2), 124–148. <https://doi.org/10.1111/jpim.12466>
- Niedderer, K. (2007). Mapping the meaning of knowledge in design research. *Nordes 2007: Design Inquiries*, 1(April), 1–27. <https://doi.org/10.21606/nordes.2007.002>
- Nilsson, Å. W., & Jahnke, M. (2018). Tactics for Norm-Creative Innovation. *She Ji*, 4(4), 375–391.
- Noel, L.-A. (2024). An Emancipatory Research Primer for Designers. In P. A. Rodgers & J. Yee (Eds.), *The Routledge Companion to Design Research* (2nd ed., pp. 177–188). Routledge.
- Norman, D. A., & Stappers, P. J. (2015). DesignX: Complex Sociotechnical Systems. *She Ji*, 1(2), 83–106. <https://doi.org/10.1016/j.sheji.2016.01.002>
- Palmer, V. J., Weavell, W., Callander, R., Piper, D., Richard, L., Maher, L., Boyd, H., Herrman, H., Furler, J., Gunn, J., Iedema, R., & Robert, G. (2019). The Participatory Zeitgeist: An explanatory theoretical model of change in an era of coproduction and codesign in healthcare improvement. *Medical Humanities*, 45(3), 247–257. <https://doi.org/10.1136/medhum-2017-011398>
- Pfeffer, J., & Sutton, R. (2000). *The Knowing-Doing Gap: How smart companies turn knowledge into action* (1st ed.). Harvard Business School Press.

- Rosa, J. de la, Ruecker, S., & Nohora, C. G. (2021). Systemic Mapping and Design Research: Towards Participatory Democratic Engagement. *She Ji: The Journal of Design, Economics, and Innovation*, 7(2), 282–298. <https://doi.org/10.1016/j.sheji.2021.04.001>
- Sangiorgi, D. (2011). Transformative services and transformation design. In *The Social Design Reader* (pp. 257–275).
- Simonsen, J., Svabo, C., Strandvad, S., Samson, K., Hertzum, M., & Hansen, O. (2014). Curtin University Library. In J. Simonsen, C. Svabo, S. Strandvad, K. Samson, M. Hertzum, & O. Hansen (Eds.), *Situated Design Methods* (pp. 1–15). The MIT Press. <http://nms.sagepub.com.dbgw.lis.curtin.edu.au/cgi/content/long/12/8/1368>
- Spencer, J. (2021). The role of design. In E. Tseklevs, R. Cooper, & J. Spenser (Eds.), *Design for Global Challenges and Goals* (1st ed., pp. 26–37). Routl.
- Tan, L., & Szebeko, D. (2009). Co-designing for dementia: The Alzheimer 100 project. *Australasian Medical Journal*, 1(12), 185–198.
- Temmerman, L., Veeckman, C., & Ballon, P. (2021). Collaborative governance platform for social innovation in Brussels. *Social Enterprise Journal*, 17(2), 165–182.
- Tonkinwise, C. (2015). Is Social Design a Thing? In E. Resnick (Ed.), *The Social Design Reader* (1st ed.). Bloomsbury Visual Arts.
- Unceta, A., Luna, Á., Castro, J., & Wintjes, R. (2020). Social Innovation Regime: an integrated approach to measure social innovation. *European Planning Studies*, 28(5), 906–924. <https://doi.org/10.1080/09654313.2019.1578338>
- Wrigley, C., Mosely, G., & Mosely, M. (2021). Defining Military Design Thinking: An Extensive, Critical Literature Review. *She Ji*, 7(1), 104–143. <https://doi.org/10.1016/j.sheji.2020.12.002>

#### About the Authors:

**Shari Pol** is the recipient of an Australian Government scholarship exploring the efficacy of design methods for public and social sector innovation in Western Australia. In her part-time role at Deloitte Australia, Shari practices social design in the public sector.

**Philip Ely** is Reader in Design at Manchester Metropolitan University, Co-Lead of the Material and Making, Community, Culture & Heritage Research Group, and Editor-in-Chief of the Journal of Design, Business & Society. Philip was a professional designer before becoming an academic.

**Louis Geneste** is a Senior Lecturer in Innovation and Entrepreneurship in the Curtin University Faculty of Business and Law. Louis research and teaching focuses on entrepreneurship, innovation and small business. Louis professional experience includes owning and operating small and medium enterprises.