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van Leeuwen, G., Singh, A., van Eekelen, B. F., & Keyson, D. (2026). Design, power, and transitions: A sensitizing framework. *Designing*, 2(3). <https://doi.org/10.1177/30497671261475370>

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Design, power, and transitions: A sensitizing framework

Designing

2026, Vol. 2(3) 195–210

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DOI: 10.1177/30497671261475370

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Abstract

This article explores the relationship between design, power, and transitions by positioning a framework of five dimensions: agency, relationality, scale, temporality, and abduction. Thereby, it aims to open up new ways of doing and thinking design in contexts of societal transitions, complex systems, and polycrisis. Power is positioned as a multifaceted phenomenon that is implicit in many aspects of design, and that shapes the design process and outcomes by enabling and constraining the agency of design actors and participants. Each of the five dimensions provides a different conceptual angle to understand the relationship between design, power, and transitions, and is based on both empirical findings and theoretical synthesis. The article concludes by offering several pointers towards thinking and doing transition-design-as-power-work, and provides a set of reflexive questions for designers.

Keywords

design, power, societal transitions, relationality, agency

Introduction

There is an increasing call for novel design approaches that can address the interconnected social, economic, and environmental global crises of the 21st century, as there is a sense that traditional problem-solving methods are inadequate (Avelino et al., 2024; Henig and Knight, 2023; Loorbach, 2022). Approaches such as transition design and systemic design have emerged in response to this need and advocate for design to contribute to causes such as sustainability and justice (Ceschin and Gaziulusoy, 2016; Coops et al., 2022). These causes are inherently politically contested, however, and their realization requires complex multi-actor negotiations, a careful balancing of conflicting values, and a modest yet deliberate harnessing of agency. Whilst various design approaches, such as participatory design and infrastructuring, address such issues (Björgvinsson et al., 2012; DiSalvo, 2022), there is a sense that design is still insufficiently equipped to address politics and power (De Rosa et al., 2023; Gaziulusoy and Ryan, 2017b; Loorbach, 2022; Tomasini Giannini and Mulder, 2022; Udoewa and Gress, 2023). This article aims to open up the black box of power and bring attention to complexities that may otherwise be considered out of scope, distracting, or intractable. This article argues that addressing issues of power is not only necessary but can also be constructive, and that this purpose serves the development of design approaches which can address the complex problems the world faces today.

Power is a uniquely multifaceted concept that has been theorized in various ways: as a form of coercion (Weber, 1978), as the capacity of actors to mobilize resources, strategies, and techniques to achieve their goals (Avelino and Rotmans, 2009), and as an intersubjective, relational phenomenon (Dowding, 2003; Gill, 2020; Nightingale and Ahlborg, 2018). This article engages with these various conceptualizations but takes a distinct starting point. This starting point is the situated positionality of the designer, who faces and must concretely work with issues of power in design settings and projects, in ways that are messy, complex, and often remain implicit (Akama, 2008). As such, the understanding of power developed in this article emphasizes both constructive and coercive forms of power, is explicitly interventionist and experimental, and is intrinsically pragmatic. Furthermore, this understanding of power is characterized by a contextualization in societal

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transitions. Issues of power are especially pertinent in this context, as transitions have an inherent normative directionality, are characterized by continual value contestations in multi-actor engagements, and are long-term, open-ended processes with deep uncertainty (Köhler et al., 2019). Hence, this article engages with the fields of transition design (Gaziulusoy and Erdoğan Öztekin, 2019; Irwin et al., 2015; Sevaldson and Jones, 2019) as well as systemic design (Jones, 2014; Van der Bijl-Brouwer and Malcolm, 2020). Overall, this article serves the purpose of design approaches becoming more power-literate in contexts of transitions and complex systems, and positions design as a practical mode of inquiry into power in these settings.

To characterize the relationship between design and power in the context of transitions, a framework of five dimensions is presented, each offering a particular conceptual angle. Each subsequent dimension constitutes a progressively more complex and nuanced understanding, which integrates the preceding dimensions. Importantly, the more nuanced dimensions—whilst arguably more providing a more complete account—do not always serve the pragmatic purposes of designerly practice. Such nuanced accounts integrate factors that designers may consider out of scope, as they may be impossible to address. Hence, depending on the particular situation in which a designer finds themselves, they may adopt the appropriate conceptual angle which focuses on those aspects that are in scope for intervention. The proposed framework sensitizes designers to the tension of understanding the complexities of power from a broad perspective, whilst needing to define a narrow locus of intervention. It does not suggest that designers can get a complete ‘grip’ on issues of power but rather argues that power consists in the very tension between the attempt to, and the impossibility of, getting a grip on complex societal issues.

The five dimensions of the framework are agency, relationality, scale, temporality, and abduction. This division was determined through (1) synthesizing relevant literature from the fields mentioned, and (2) devising a guiding heuristic serving our own designerly practice. To show how this framework is grounded in our own practice, each dimension features a short vignette that reports on a relevant empirical experience. The vignette describes a situation that is illustrative of the subsequent theoretical discussion. It does not necessarily include all aspects of that discussion but serves as an entry point for the synthesis of relevant theory.

In the vignettes, we draw from a design and research project, named the Local Inclusive Future Energy (LIFE) project, which we participated in between 2021 and 2025. This project aimed to address the entangled social and technological issues in the local energy transition in Amsterdam Southeast, the Netherlands. The project consortium consisted of various partners, including the municipality, local businesses and NGOs, the operator of the electrical grid, and academic partners. The project had a strong division between technically oriented partners, including the grid operator and electrical engineering experts, and socially oriented partners, including the authors and other

social researchers. The purpose was to develop innovative solutions to address congestion in the local electricity grid whilst catering to the needs of local stakeholders, especially residents from an underprivileged neighbourhood. This neighbourhood faced several entangled socio-economic challenges, including (energy) poverty and lack of social cohesion, as well as flourishing community initiatives and a rich diversity of cultural and ethnic backgrounds among the residents.

As partners in this project, we focused on identifying and addressing residents’ needs while contributing to the joint approach and collaboration between the various partners. While this article describes key experiences from this project, which are informative for the present purpose, we refer to our previous work for a more comprehensive empirical account, including the design anthropology approach which was used (Van Leeuwen et al., 2025; Van Leeuwen and Singh, 2023, 2024).

The vignettes are written as reflexive pieces that explicate our positionality within the project and the manner in which power was encountered in that positionality. The ‘I’ in these vignettes refers to the first author of the paper, while ‘we’ refers to all authors of this article. The authors are design researchers rather than expert designers, and the term ‘designer’ is hence used to refer to both ‘diffuse’ and ‘expert’ forms of design (Manzini, 2015). In line with previous research, we consider design in the context of transitions to consist in the dynamic interplay, or hybrid enactment, of diffuse and expert design (Gaziulusoy and Ryan, 2017a; Lähteenoja et al., 2023). Since, as also discussed in Section 4, the role of designer is itself contested in the context of transitions, and since addressing issues of power requires situating oneself in messy boundary problems where roles and responsibilities are not well defined, transition design is not a clear-cut role, discipline or practice. Rather, as discussed in section 7, this article characterizes transition design through its engagement with issues of power, meaning that contestation, negotiation, and value tensions are inherent.

Agency: Value-laden action in design

At its inception, the project brief seemed straightforward enough. The LIFE project was commissioned to research and develop smart solutions for the local electricity grid, and its envisioned outcome was a ‘smart energy platform’ – a digital product-service system which would provide innovative energy services to local energy users, and enable new forms of interaction between them and with the wider energy system. My role was to visit the neighbourhood, engage the residents in a participatory process to gather insights into their needs, and to deliberate these needs with our technical project partners to shape the platform’s design.

Once in the neighbourhood, the reality on the ground quickly revealed a fundamental mismatch.

The ‘smart platform’ was misaligned with the needs of the residents. There were several reasons for this. The households

in the area had little access to rooftop solar panels, electric vehicles, or other smart energy technologies. Without access to such energy assets, there would be little purpose in connecting to a smart energy platform – both for them, and the rest of the system. But the mismatch ran deeper than infrastructure. The framing of ‘developing a smart energy platform’, intended to ‘solve problems in the local energy transition’, created alienation with the residents. They perceived energy transition as a ‘luxury problem’ and ‘not relevant for them’. The conversations raised fundamental questions about who the energy transition was actually designed for and who would benefit from the smart platform.

It became clear that the project’s framing was too narrow: the neighbourhood’s needs were shaped by a complex interplay of social, economic, cultural, and political factors that could not straightforwardly be reduced to a ‘problem to be solved’. The gap between what the platform intended to deliver and what the neighbourhood actually needed was not a technical one. It was social and political one. It became clear that, for our project to address the needs of this neighbourhood, a complex negotiation with our project partners would be required. This would require us to take a normative stance, advocating for the needs of the neighbourhood over the technical problems of the electrical grid.

While the project addressed entangled social and technical problems, it was skewed towards the technical dimension, which many of our partners prioritized. Addressing the social needs of the neighbourhood would require a shift in focus beyond the initial scope. To realize this change, required us to take a strong normative stance informed by moral and ethical reflections on the project’s purpose and our role within it. This normative stance, and especially the action resulting from it, is what is conceptualized here as the exercise of agency. Agency concerns how designers can engage in value-contestation through

intentional action. Exercising agency may be necessary when the process of reframing the problem-solution space demands normative contestation with collaborators. If the designer finds that a directional shift is required for a project, they may have to challenge the incumbent powers that have shaped and continue to shape its current direction. Because of their normative directionality and inherent contestation, transition contexts may especially demand that designers explicitly position themselves relative to this normative direction.

The occasional necessity to take a normative stance is not captured by value-neutral understandings of design, which we briefly discuss here before elaborating on the concept of agency. Design has been commonly understood as a practice of ‘devising artefacts to attain goals’ (Simon, 1996: 114), as well as a means of rational problem-solving (Dorst, 2004). From these perspectives, the goals, problems, and solutions of design can be technically defined, and designers can use methods to frame the needs of their users and clients and conceptualize, prototype, and design the solution. This value-neutral understanding of design parallels understandings of power as *the capacity to achieve goals*. For example, Avelino & Rotmans define power as ‘the ability of actors to mobilize resources to achieve a certain goal’ (Avelino and Rotmans, 2009). Whilst determining a goal might be informed by values, the exercise of power to achieve it can be seen as value-neutral. From this value-neutral stance, design may be regarded as a form of power exercise which mobilizes particular resources – such as design methods, techniques, and materials – to attain specific goals – such as solving problems or meeting user needs. Understanding power as the achievement of goals is represented in Figure 1(a).

Many scholars have questioned the conception of design as merely a value-neutral problem-solving practice. First of all, the complexity of societal challenges exceeds the cognitive capacity of designers to grasp the full scope of the

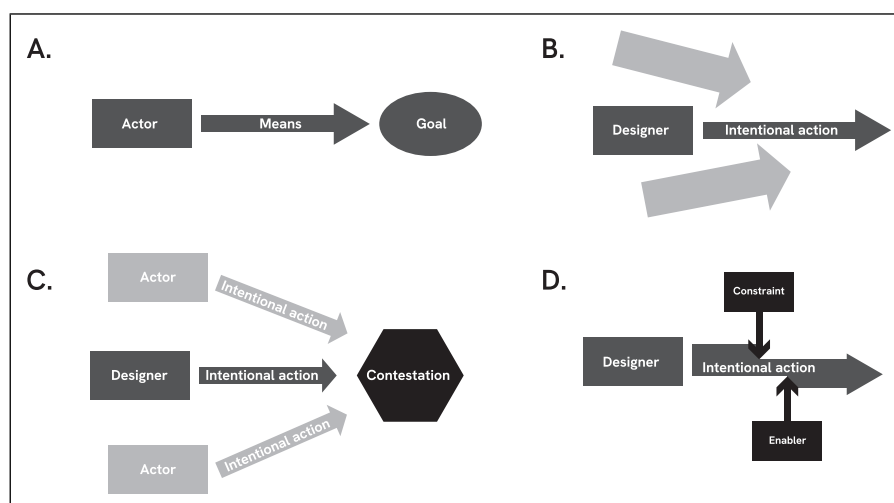


Figure 1. An illustration of various aspects of power and agency. (a) represents the understanding of power as a value-neutral capacity to achieve goals. (b) represents the capacity of the designer to exercise agency, where the directionality rather than outcome of intervention is emphasized. (c) represents how the entanglement of multiple agencies can result in contestation. (d) represents how agency can be enabled or constrained by other powers.

problem-solution space (Dorst, 2019), and as open-ended processes, transitions cannot be ‘solved’ (Coops et al., 2022). Secondly, designing in a systemic context requires recognizing the interconnectedness of diverse problems and their different framings, rather than identifying singular ones (Van der Bijl-Brouwer and Malcolm, 2020). Thirdly, ‘wicked problems’ which characterize complex societal challenges cannot be clearly defined or demarcated (Rittel and Webber, 1973). Finally, some have argued that the rational problem-solving paradigm of design itself contributes to societal problems, for example, by uncritically serving wasteful consumerism (Fry, 2003). From these findings, two reasons may be inferred for the unsuitability of transition contexts for the value-neutral problem-solving paradigm. Firstly, complexity and open-endedness inhibit the framing of well-defined problems and solutions: any problem-solution definition is by necessity partial, local, and temporary. Secondly, the complexity is not technical but social: it is constituted by divergent actor interests, values, and understandings. Navigating this complexity may require designers to engage in value-laden debates, negotiations, and interactions.

This article proposes that this alternative stance may be understood through the concept of agency, which has been considered as an aspect of power (Haugaard, 2012). Agency is commonly understood as the capacity to take intentional action (Bratman, 1991), and as ‘the ability to do otherwise’ and ‘intervene in the world’ (Giddens, 1984: 14). Compared to the goal-achieving conception of power, agency relocates focus from the outcome to the directionality of intervention, and is therefore well-suited to the open-endedness of transitions. Understood in this way, agency is represented in Figure 1(B). More importantly, agency is associated with a commitment to particular societal causes, movements, or values. As such, a consideration of agency can address the need to better equip designers to act in morally-charged discussions (Goss, 2025; Goss et al., 2024), the need to more strongly commit to values such as justice and sustainability (Coops et al., 2022), and the need to consider the political implications of participatory encounters (Gaziulusoy and Ryan, 2017b). The need to consider the explicit agency of designers is consistent with observations that ethical judgements and value tradeoffs are often implicit throughout the design process (Chan, 2018; Devan and Van de Poel, 2004). A consideration of agency serves the need to translate ethical reflections into concrete actions. As such, the exercise of agency is explicitly constructive and serves the ambition of design to contribute to better futures.

To be clear, this argument does not propose that all forms of design, and all designerly practice, always entail the exercise of agency. At times of sufficient coherence between the diverse actor interests and the overarching normative transition direction, designers may not need to exercise agency – forms of value-neutral ‘satisficing’ (Simon, 1997), or taking up roles of mediation, orchestration, and facilitation (Geenen et al., 2022; Van Arkel and Tromp, 2024) may be adequate. While value contestation may occur, designers may at times serve as neutral

facilitators of this rather than participants (Gaziulusoy and Ryan, 2017a). But this paper does argue that, in the context of societal transitions, designers should be prepared for situations in which their value commitments are required, such as the one in the authors’ project. Such value commitments may be implicated in many aspects of designerly practice, as a design project is the result of many micro-decisions and non-decisions, where the designer is an active agent (Bratteteig and Wagner, 2012).

As the agency of the designer interacts with that of other actors, this may lead to open contestation and conflict of values, which is represented in Figure 1(C). The articulation of value contestation has been explicitly identified as a goal of transition design (Akama, 2008; Gaziulusoy and Ryan, 2017b) and of other approaches such as agonistic design (Andersen et al., 2015; Björgvinsson et al., 2012). The tensions inherent in this process are well illustrated by the following quote from Björgvinsson et al. (2012), who wonder whether they ‘should have taken the issue around how youngsters could use public buses further. [...] Should we, together with RGRA, have gone into an agonistic negotiation with the bus company concerning who should own and occupy the digital spaces on the buses, as well as the bus company’s engagement in the Middle East?’ (Björgvinsson et al., 2012: 143). The kind of dilemma illustrated here is likely to become more frequent and explicit as designers take their potential to harness agency more seriously. To handle such situations, it is helpful for designers to clarify the values to which they are committed, the lengths they are willing to go to in order to realize these values, and what they are willing to concede when confronted with opposing interests.

Of course, the agency of a single actor does not exist in a vacuum: as represented in Figure 1(D), agency is both enabled and constrained by other forms of power (Avelino, 2021), and agency and societal structures mutually produce each other (Giddens, 1984). Whilst later dimensions of the present framework elaborate on these broader influences, agency is a key starting point, as it is only by considering how agency is enabled and constrained that other forms of power – which have a relational, intersubjective, or structural character – may become discernible. It is in this way that the designer’s situated positionality forms the starting point for the conceptualization of power, which serves to avoid overly abstract or theoretical characterizations. Importantly, we do not propose that an agency perspective on design should completely replace the problem-solving approach, which may still be suited for specific contexts and projects. However, transition contexts implicate the designer themselves in its politics, meaning that a value-neutral position is not always tenable.

Relationality: Mitigating power asymmetries through reciprocity

At a community centre, not long into our first round of visits in the neighbourhood, a resident looked at me with a tired look and said that they were ‘asked the same questions over and over

again'. And the residents reported that 'little had changed' as a result of numerous participatory projects that had been organized by authorities and institutions, including the local government and universities.

Hence, it became clear to us that the neighbourhood was dealing with participation fatigue and a history of extractive research. And yet, in an uncomfortable sense, we were reproducing the same pattern. Our project's structure, aims and activities had been defined long before any resident had been consulted. Even our role, as 'design researchers' was thoroughly embedded in a university environment, funded by institutional interests – it was impossible to step outside of this. How could we collaborate with people on an equal basis? Given that the relationship between residents and institutional actors was deficient, repair work was required. The asymmetry was structural, and goodwill alone would not repair it.

Asking people to invest their free time and energy in joining workshops felt inappropriate. After all, we – and our colleagues – were afforded the possibility to work on this project on a professional basis, funded accordingly. Why should we have this opportunity, while local residents do not? By working with a local partnering NGO, an hourly financial compensation was arranged for the participation of the residents. This was a minimum correction we could implement to foster more reciprocal engagements. It signalled that we understood their time had value, that their participation was not something we were entitled to, and that reciprocity, however imperfect, had to be built beyond good intentions.

While exercising agency was a key step in starting to internally 'restructure' the project aims and activities, another key question was the following: how may the residents harness their agency to co-shape project outcomes as equal partners? The above vignette shows how our relationship with the local residents, and issues of relationality more generally, came to the forefront. There was a distinct power asymmetry between the residents and other project partners, and even if our project scope could be reframed to address their needs, it was important to provide them with

appropriate agency to co-shape the process. As this section elaborates, a relational understanding of power serves to better understand and frame this issue.

In the context of societal transitions, relationships between citizens and institutions have been addressed through the lens of public participation (Barnes et al., 2003; Chilvers and Longhurst, 2016). Participation is an issue that is really about power (Arnstein, 1969), which can result in various degrees of problematic tokenism and extractivism, and which implies that, whilst publics and citizens can participate, control still resides with institutions (Bogner, 2012). Design research has also grappled with the issue of participation, especially in participatory design. The primary goals of participatory design have been described as restructuring power (Eriksen et al., 2014; Kensing and Greenbaum, 2012) and as 'to rebalance the power relations between users and technical experts' (Kensing and Blomberg, 1998: 181). Participatory designers often have explicit or implicit goals of promoting empowerment (Agid and Chin, 2019; Björgvinsson et al., 2012; Tomasini Giannini and Mulder, 2022).

To elaborate how designers can engage with issues of power in participation, it is fruitful to adopt a relational conception of power (Dowding, 2011; Gill, 2020). One key perspective comes from Nightingale and Ahlborg (2018), who define power as a 'relational capacity to act' that is contingent and emergent from social dynamics. In this view, power is not an individual capacity for agency but resides in the relationships among multiple actors, in the intersubjective space that each can relate to with partial perspective and influence. Actors are subject to this relational power and can only position themselves relative to power relations in which they are entangled. Informed by these considerations, we define *power relations as the interdependencies in capacity for action between actors*. In other words, the concept of power relations concerns how actors influence one another's capacity to exercise agency and achieve their goals. A particular and important kind of interdependency is the *power asymmetry*, which denotes significant differences in actors' capacity to act. In the

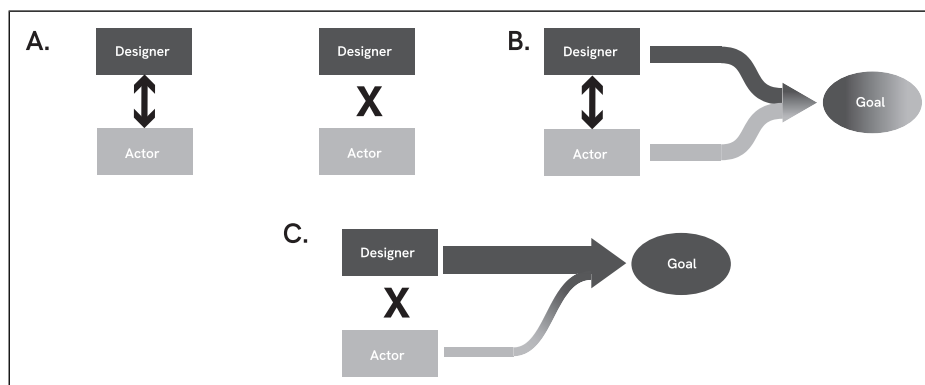


Figure 2. An illustration of various aspects of power relations. (a) represents how relations can be characterized by trust and mutual understanding (on the left) or the lack thereof (on the right). (b) represents power-with, where multiple actors act together towards shared interests. (c) represents power-over, where less powerful actors are made to act towards the interests of more powerful actors.

vignette, the relationship between the project and the residents is characterized by a large power asymmetry that disempowers the latter and inhibits their capacity to act. Transition design settings have been found to be fraught with power asymmetries (Gaziulusoy and Ryan, 2017b).

Various additional concepts help enrich this understanding of power relations. Notably, Avelino distinguishes ‘power-over’ and ‘power-with’ (Avelino, 2021), which are represented in Figure 2. Power-over refers to relationships of domination and oppression, in which a powerful actor can coerce less powerful actors into doing things they would not otherwise do. Power-over resembles classic conceptions of power as coercion (Weber, 1978) and characterizes extractive forms of design or research in which participants are regarded as mere data sources (Udoewa and Gress, 2023). On the other hand, power-with points towards a more consensual form of power where two or more actors work together for a common purpose. Power-with has been regarded as a goal of participatory design (Tomasini Giannini and Mulder, 2022), albeit one that may be hard to realize in practice, given the numerous other powers that co-shape such collaborations. Another aspect of relational power concerns empowerment (Avelino et al., 2019), which refers to a relationship between more and less powerful actors, in which the intended outcome is that the less powerful actor increases their capacity to act. Importantly, relations of empowerment also reinforce a power asymmetry and can thereby paradoxically result in disempowerment and power-over (Hardy and Leiba-O’Sullivan, 1998). Hence, terms such as participation and empowerment ought to be used carefully in design.

What are, then, constructive pathways for designers to work with power relations? The emerging field of relational design, which regards design as a practice of relation-building, offers interesting potential here. Relational design regards power and politics as core concerns and explicitly addresses agency as a relational rather than individual phenomenon (De Rosa et al., 2023; Nielsen and Bjerck, 2022; Udoewa and Gress, 2023). In relational design, aspects such as building trust, mutuality, and care become core foci for designers (Akama et al., 2019; Lake et al., 2022; Light and Akama, 2014). In line with this development, we suggest that a key guiding principle for navigating power relations in design is reciprocity: fostering fair exchanges between collaborators. This principle guided the intervention described in the vignette, in which residents were afforded financial compensation. Importantly, the principle of reciprocity exceeds this transactional form, but it is a clear example.

The context of transitions, which extends beyond human-to-human interaction, calls for additional considerations in navigating power relations. Importantly, relations between citizens and institutions are intrinsically characterized by large power asymmetries that are impossible to balance (Farr, 2018), as well as power relations among diverse institutional actors such as governments, businesses, universities, and NGOs (Avelino and Wittmayer, 2016). As will be elaborated in the next dimension of scale, relations among institutional actors are qualitatively

different from human-to-human relations. Still, designers may help to bridge the paradoxical chicken-and-egg problems that often emerge between institutional actors (Evald et al., 2025; Waardenburg et al., 2020) by acting as mediators and facilitators in the in-between space. It is in this in-between space, where roles and responsibilities are emergent, that designers may have a significant capacity to co-shape power relations (Dantec and DiSalvo, 2013; Salmi and Mattelmäki, 2021). The question for designers in transition contexts is how relationships, networks, and collaborations among actors may be strengthened whilst appropriately addressing the distribution of power among them.

Scale: Bridging between communities and institutions

While the provision of an hourly compensation allowed the residents to participate on a more equal basis in the LIFE project, the issue of them obtaining a better position in the local energy transition was not yet addressed. Among the local commercial stakeholders, there was a willingness to explore partnerships with the neighbourhood, yet also a lack of understanding about how this could proceed.

Coming with the intention to facilitate reciprocal collaborations between them, we suggested that the businesses can invite the residents over for an open conversation, to get acquainted, exchange their interests for the area, and explore future possibilities. We had already heard that the residents were open to and interested in this. When we proposed this to our commercial partners, however, this idea was met with reluctance. The commercial partners declared that they were not interested to ‘meet with individuals who don’t represent anyone’. In other words: the absence of a greater collective which could represent the entire neighbourhood prevented a conversation from taking place.

While we sensed that a meeting would still be informative for building mutual understanding and rapport, we also realized that under the institutional logics of the energy transition, the residents would indeed need to be collectively organized to have agency. Therefore, we engaged in the initiative to establish a local energy community in the neighbourhood, a formal organization which could represent the interests of the residents. Over the course of 2 years, a – at times tedious – co-creation process took place with the residents, featuring monthly sessions where future visions for the energy community were made tangible using LEGO, and where key issues were discussed and deliberated. Through establishing the local energy community, the residents could position themselves in relation to the greater system, and engage with other actors in the local energy transition.

The power relation described above does not merely consist in an asymmetry of agency, but in a qualitative difference in the scale at which actors reside. The power relation between the residents and the project partners was constituted by the interaction between people on the one

hand and institutions on the other. The neighbourhood residents were concerned with meeting their daily needs, fostering mutual understanding, and with the overall well-being of their neighbourhood. In contrast, the institutions active in the energy transition – including businesses, local government, and universities – mobilize significant epistemic, financial, and technical resources to participate in societal arenas of markets, governance, and science, and to realize measurable impact at scale. To further characterize this particular power relation between institutions and people, we make use of the multi-level perspective (MLP), which distinguishes among micro-, meso-, and macro-scales of long-term sociotechnical change (Geels, 2005). The micro-level represents local niches of experimentation and innovation, the meso-level represents incumbent institutional regimes that provide stability, and the macro-scale represents the greater societal landscape of external influences. For the present purpose, we will focus on the niche and regime levels, where power plays an interesting role.

It can appear as if there is a hierarchical relationship between the different levels of the MLP: that the regime level is higher than the niche level and hence has power-over it. There is indeed a form of power derived from the institutional structures, norms, and conventions of the regime, which has been termed *dispositional power* in power theories (Clegg, 2023; Grin et al., 2011). Dispositional power is derived from the manner in which the regime legitimizes power and authority, and can pertain to formal institutionalized functions and roles (e.g. of policy-maker, technical subject expert, or designer) as well as privileges related to social, economic, or cultural background. Hence, it relates to what has been called ‘privilege’ and ‘role power’ in design research (Goodwill et al., 2021). Since designers increasingly act within and across diverse system scales (Geenen et al., 2022; Goss et al., 2024), their engagement with dispositional power bears consideration. At the same time, it has been emphasized that the levels of the MLP are not intended to represent a hierarchy, but rather different degrees of structuration of local practices (Geels, 2011). Hence, another interesting question is to consider how designers participate in diverse local practices characterized by varying degrees of structuration and institutionalization, and how power plays a role in these practices. In the following paragraphs, we first focus on the latter, and then return to dispositional power.

In micro-scale niches, sociotechnical change takes place through innovation of new technologies, services, and practices. This often happens through semi-controlled experimentation in environments such as living labs (Keyson et al., 2017). By bringing local innovations to the greater system, niches have been said to exercise ‘innovative power’ through a transformative impulse (Avelino, 2017). This is, of course, a likely arena for designerly activity, as designers often contribute to the innovation of new tools, services, and techniques. Besides the innovative power of design, however, it is also informative to consider designers’ roles in supporting community-based projects. Several authors highlight community- and place-based

interventions as key sites where transformations in values, practices, and meanings occur. For example, Lake et al. (2022) designate community building as ‘scaling deep’, and De Rosa et al. (2023) consider how designers can strengthen connections by supporting community narratives. Kossoff et al. (2015) argue for a transition design approach that fosters ‘authentic’ communal relations, and Escobar (2020) and Akama et al. (2019) advocate designing alternative ontologies grounded in indigenous values, including relationality and reciprocity. These observations point to a focus on relationality and power-with, which is supported by Grin et al. (2011), who recognize a key role for relational power at the niche level.

Quite different dynamics unfold at the meso-level of the sociotechnical regime, which is characterized by a higher order of institutionalized rules and regulations, and by a standardization of meanings and practices. The regime plays a stabilizing role and has been said to exercise ‘re-inforcive power’ (Avelino, 2017). Design is increasingly adopted in regime contexts, as is recognized in calls for design to ‘enable governance of highly strategic and complex policy processes’ (Lähteenoja et al., 2023), and in the prevalence of design in policy-making (Blomkamp, 2018, 2022). To better understand the role of power in this context, Foucault’s concept of *governmentality*, which examines how modern institutions exercise power, is fruitful (Foucault, 2010). Using quantitative logics and technical measurement instruments, administrative institutions can enable and constrain the collective mode of action of a large set of actors. Governmentality operates through the abstraction of human populations into manageable concepts, the filtering of these concepts through social structures, and the self-disciplinary behaviour these concepts and categories induce upon subjects. Issues of governmentality appear to be related to some of the relational challenges that occur when institutions and citizens aim to collaborate, co-produce, or co-create. Importantly, the use of design approaches in regime contexts has been found to reconfigure these governing practices by encouraging more relational, empathic, interactive, and reflexive forms of engagement between public institutions and citizens (Bason, 2017; Van Buuren et al., 2020).

In this way, an important difference between institutional and community actors consists in the handling of domain-specific expertise and technical knowledge. This difference shapes their power relations in several important ways. First of all, technical knowledge is often mobilized by regime actors to depoliticize issues (Turnhout et al., 2020). This move empowers experts and disempowers laypeople, thereby reinforcing a power-over hierarchy. Furthermore, while regimes tend to aim for measurable, quantifiable impact at scale, community-based projects seek to be respected on their own terms rather than reduced to merely ‘one amongst many’ (Fitzpatrick et al., 2024).

Finally, collaborative efforts between institutions and citizens tend to challenge established notions of power, authority, and legitimacy (Bovaird, 2007) – this is where relational power meets dispositional power. The impossibility of defining ‘redistribution of power’ as a measurable

outcome (Durose et al., 2017) makes it difficult for such efforts to succeed and persist in regime environments. This is represented in the vignette, which shows how the only conceivably successful outcome was for the community to ‘upscale’ into an actor capable of participating in the regime.

These considerations have several implications for designers working with, or across, diverse system scales. First of all, for designers working with communities, it is crucial to reflect on their own dispositional power: how do their roles, privileges, and cultural perspectives affect their collaborative engagements? The same goes for designers working in regime contexts, where the designer role may confer legitimacy to conduct various forms of experimental work, but also constrain designers’ capacity to contest the institutional structures that confer this legitimacy. Furthermore, designers often lack the domain-specific knowledge required for regime activity (Goss et al., 2024). Finally, considering dispositional power requires that the institutionalization of design itself be made explicit: how does the embedding of designerly practice in academic, commercial, or governmental institutions enable and constrain its agency?

Temporality: Negotiating futures in the present

While establishing the energy community could allow the residents to become an actor in the energy transition, a new challenge was that our work was framed by several, at times conflicting, timelines. First of all, the national policy to realize net-zero carbon emissions by 2050 was an overarching timeline for the energy transition. At the same time, the congestion issues in the local electricity grid were urgent and required immediate solutions. We had to work towards both timelines in a project that itself had a 4-year time horizon, meaning that tangible outcomes should be delivered at the end of these 4 years.

During the co-creation process in the neighbourhood, we learnt that the residents’ needs are characterized by yet again different temporalities. First and foremost, they expressed that their daily needs and expenses were a priority. While the financial compensation helped to address this, it was necessary to explore how the energy community could also provide such benefits. In particular, the residents were keen to make sure that the initiative could help to reduce their energy bills. In the co-creation process, the residents’ inquiries frequently brought us back to this issue. Beyond financial concerns, people also held a broader concern for their local environment and its wellbeing. While we focused on delivering outcomes by the end of the 4-year project deadline, the residents’ concern for the living conditions of the neighbourhood extended into the future indefinitely, beyond the availability of support from the research project.

Hence, we had to balance two temporal sensibilities. On the one hand, we had to provide clear pathways towards guaranteed and narrowly defined outcomes, especially economic

benefits. On the other hand, we had to provide perspective towards future continuation and growth of the initiative, envisioning it to continue to yield new insights and connections, and to respond to uncertain transition developments. Most important, however, was the tension between the temporary character of our project, and the open-endedness of transition work. If we ‘leave’ the neighbourhood after 4 years already, what is the likelihood that persistent transformative outcomes can be achieved?

The fourth dimension of the framework concerns the temporal dimension. The vignette shows how different stakeholder needs are characterized by different timeframes, all of which need to be accounted for. The need to account for multiple timeframes and incorporate short- and long-term interests is a recognized factor of importance for transition design (Coops et al., 2022; Goss et al., 2024). Another challenge is the open-endedness of the energy transition and the issue of neighbourhood livability, whilst the project is temporary. While there is a tendency to evaluate individual projects based on what is achieved within their period, the open-endedness of transitions implies that ‘what happens afterward’ is of equal, perhaps greater, importance. Whilst designers might implement interventions as temporary experiments, residents may regard them as failures if these experiments do not provide persistent benefits. To account for this challenge, evolutionary approaches – which focus on numerous small interventions over time and provide a perspective towards future continuation – might be required (Van der Bijl-Brouwer and Malcolm, 2020). Such approaches can remain continually adaptive to external changes (Jones, 2014) and are well-positioned to track how power changes over time.

To further characterize these temporal tensions in terms of power, a conceptualization of *power dynamics* is informative. Power has been recognized as a temporally dynamic phenomenon, for example, by Ahlborg who considers power as contingent as well as productive of social change (Ahlborg, 2017) and by Avelino & Rotmans who distinguish different forms of power based on their relation to structural societal change (Avelino and Rotmans, 2009). Power dynamics comprise the continually changing field of power relations and the fluidity and flux of actor interactions, whereby capacities to act change over time. Power dynamics comprise those interactions, mechanisms, and processes by which future pathways are opened up or closed down, and which shape the entanglement between present-day actor agency, emerging potentialities, and envisioned future outcomes. The conception of power dynamics integrates power relations as discussed before, but points towards their dynamic fluidity along the time axis. To elaborate on power dynamics, we distinguish two concepts: *control* and *emergence*. This article defines power dynamics as the interplay between mechanisms of control and processes of emergence, both of which are elaborated in the following paragraphs.

Design is often described as a highly future-oriented practice, which aims for desirable futures that are better

than the present. This aim is related to a culturally specific understanding of time: that time progresses forward in a linear fashion, and that the future is a singular destination that lies ahead on this linear path (Adam, 1998). By positing future goals of choice, and deploying resources, strategies, and tools – that is, mobilizing power – to attain those goals, the future may be controlled and even colonized. This understanding of time and the future is associated with forms of reasoning based on risk minimization, measurement, and quantification (Appadurai, 2013), which we characterize as forms of *control*: a form of power that aims to ensure specific future outcomes. This notion of control is implicit in the problem-solving paradigm of design and the goal-achieving paradigm of power. The vignette shows various controlling tendencies: the need of the project to deliver pre-defined project outcomes, but also the residents' desire for the energy community to deliver well-defined energy bill reductions.

In the context of transitions, attempts to control future outcomes are problematic for multiple reasons. First of all, since transitions are open-ended processes characterized by uncertainty, it is impossible to specify concrete end-goals, much less tangible strategies to realize them in a controlled fashion (Köhler et al., 2019). Openness to uncertainty may be generative as well as detrimental (Akama et al., 2018; Salazar et al., 2017) and implies openness to value contestation and power dynamics. Furthermore, besides a recognition of uncertainty, the existence of a broad diversity of ways of being, thinking, and doing – which designers often aim to understand and include – means that futures are not singular but plural (Kambunga et al., 2023; Salazar et al., 2017). To retain plurality, the specificities of these diverse futures should be respected on their own terms, rather than effaced in a single, universalizing future outcome (Escobar, 2020). Finally, the notion of control is founded on a separation between the present and the future, and between the design process and outcome. This separation can be recognized as superficial if future visions are understood to act back upon the present (Gaede and Meadowcroft, 2015), or even further, that futures are not remote destinations but are always enacted in the present (Kjaersgaard et al., 2016). This observation serves to avoid one of the pitfalls of speculative design, namely that its insistence on critical distance can result in a separation of futures from the sociopolitical contexts, controversies, and contestations where they are shaped (Gerber, 2018).

While mechanisms of control serve to ensure future outcomes, the transformative potential of a plurality of futures in the present is signified by the concept of *emergence* (Smith and Otto, 2020). This article defines emergence as the process by which the future becomes the present. Rather than focusing on integrating distant future timelines, emergence draws attention to how these interests are enacted in the present and how their negotiation may remain open to continued change. Whilst mechanisms of control 'close down' futures, processes of emergence 'open up' futures. Drawing attention to these distinct temporal qualities can sensitize designers to power dynamics. For example, common control mechanisms include pre-defined

project deadlines and deliverables, and allocation of financial budgets, which may be tightly defined with little flexibility. To open up such mechanisms to futures which serve alternative interests can require considerable effort and confrontation with power. At the same time, some interests that suffer from excessive uncertainty may benefit from a greater emphasis on control. For example, for people struggling to make ends meet, or for communities attempting to safeguard resources for their own local projects, certainty about the availability of future support is highly important. In other words, openness to uncertainty is a privilege. Finally, attending to power dynamics requires that designers look beyond their own deadlines, and simultaneously explore how design activities can provide short-term value to citizen collaborators, fit into long-term institutional agendas, and extend into open-ended transition pathways and activities.

Design abduction: Sensemaking in transitions through design

As mentioned before, the project consortium consisted of both 'social' and 'technical' partners, and there was a distinct difference in how these partners understood the aims and activities of the project. From our encounters in the neighbourhood, we realized that the overall framing of the project was weighted towards the technical rather than social side. In the early phases, many of our activities were aimed at bridging this difference, and at providing more balance to the project framing.

To this end, we used a particular designerly strategy in consortium workshops. To counterbalance the 'smart energy platform', we positioned a second entity as a to-be-designed outcome of the project: the so-called 'Social Platform'. The exact nature of this Social Platform was to-be-determined, but at the very least, it was imagined to address the needs of the residents which we now understood. Of course, we realized that this was an overt simplification: the needs of the residents were complex and entangled with a variety of systemic problems and could not be straightforwardly solved. This simplification was strategic, however, as it served to bridge the difference with the technical partners. By positioning a social 'object' which could 'solve' social issues, cross-disciplinary conversations about the relationship between the social and technical now became possible.

To bring further focus to the political dimension of the subject matter, we further defined the Social Platform as a 'Local Energy Institution' in consortium workshops. This prompted project partners to discuss the power issues which were prevalent in the local energy transition, leading them to imagine that the Local Energy Institution would work to 'balance power relations'. Ultimately, the abstract concept of the Social Platform became manifest in the initiative to establish a local energy community, which was described before.

The final dimension of abduction is more specific to expert forms of design than the previous ones. Design

abduction, as conceptualized here, concerns how designers enable sensemaking and ideation by moving between abstractions and concretizations. Abduction is related to the tendency in transition design to simplify the conceptual framing of transitions, making them manageable issues that can be designed for (Goss, 2025). While such simplification is unavoidable and inherent to design, it also comes with risks. Simplifying the context to render it designable might result in a design that loses relevance to the real-world context, or in a misrepresentation of stakeholder needs, interests, and values. This section discusses these and other issues in terms of power. Since abduction is a specific approach to knowledge creation, this discussion proceeds by considering the interconnection between power and knowledge.

To do so, we first elaborate on what design abduction is. A common understanding of design abduction is that it is the step in the design process where designers make a creative leap or ‘bridge’ from defined problems to imagined solutions (Dorst and Cross, 2001). In this sense, abduction is about the creation of novelty and is associated with designers’ intuition and creativity (Kroll and Koskela, 2015). Another way of defining abduction is as ‘the use of abstraction to allow novel connections to be made between apparently unconnected things’ (Snowden, 2024: 51). By drawing such new interrelations, abduction allows designers to synthesize how diverse elements in their context of interest are interconnected (Kolko, 2010). Hence, abduction is a means of postulating a possibility for the purpose of enabling further investigation, deliberation and experimentation. Often, such further steps include the materialization of abstract concepts into concrete artefacts. This concretization of the abstraction serves to make ideas tangible, to materialize the interconnections that were conceptually established, and to enable an experiential engagement with the idea. In this way, design abduction consists in the movement between abstractions and concretizations (Koskela et al., 2018), which is central to individual and collective sensemaking in design (Kolko, 2010). The potential of design abduction is illustrated in the vignette: it shows how the positioning of the ‘Social Platform’ allowed for an engagement with sociopolitical relations, and for reframing the primary project outcome from a technical product to a social organization.

Since abduction is considered a form of knowledge creation, insights into the interconnection between power and knowledge can highlight useful ways in which power is implicit in design abduction. Informed by Foucault and other social theorists, Avelino describes how power may be mobilized in the construction of knowledge, and how knowledge can itself co-shape new power relations (Avelino, 2021; Avelino and Rotmans, 2009). Hence, the relation between power and knowledge can be understood in two directions. The first is how knowledge construction is informed by the negotiation of particular interests. From this perspective, design abduction may be considered as a political act, which is informed by value tradeoffs. These tradeoffs inform decisions to emphasize some qualities of a phenomenon over others, or to establish some new

interconnections but not others. The second direction concerns how knowledge acts back upon the world, thereby shaping actors’ positionalities, roles, and identities. Here, Ahlborg & Nightingale’s notion of *constitutive power* (Nightingale and Ahlborg, 2018), which is closely associated with the relational and dynamic conceptions of power, is informative. Constitutive power concerns the performativity of design concepts or prototypes, and their role in co-shaping power dynamics. Hence, the manner in which designs communicate the nature of broader systems is of significance for power.

These understandings of power and abduction carry several implications for the context of transition design. First of all, designers ought to be aware and transparent about any implicit and explicit value trade-offs they make in the design process. Furthermore, the mechanisms by which designs act upon transition actors through constitutive power can be investigated more explicitly. If such mechanisms can be identified, they can also be leveraged to support desirable sociopolitical change. Furthermore, design abduction can be a key factor in enabling transition actors to engage in sensemaking about their positioning relative to other transition elements that are not proximate in time or space. For example, visualizations and frames can help envision interrelationships between people’s local context, distant actors, other system domains, and future possibilities (Goss et al., 2021). How these interrelationships are shaped by power can likewise be framed. Finally, the use of design in micro- and meso-scale contexts – which feature different power relations, as discussed earlier – carry different risks for abduction. In community-based work, there is a risk that outputs of abduction are perceived as a flattening and simplification of reality, especially for those with deeply embodied, experiential, and historical knowledge of the context (Fitzpatrick et al., 2024). On the other hand, designers working in institutional regimes, which are characterized by technical definitions and expert knowledge, are challenged to avoid oversimplifying technically defined matters.

Transition design practices use abduction in various ways. The first is framing, where a frame is a heuristic concept which orients designers towards ‘the possible’ and thereby guides designerly action and practice (Dorst, 2011). Distinct aspects of transitions, such as pathways, desirable behaviour changes, and concrete interventions, all require framing and reframing. Framing can open up new pathways for intervention (Paton and Dorst, 2011; Peeters et al., 2023), enable sensemaking across scales and timeframes (Goss, 2025; Lähteenoja et al., 2023), and create understanding how a concept and target context fit together (Jones, 2014). When multiple frames co-emerge, the manner in which they are conflicted and contested, and their co-emergence with social dynamics, may be investigated (McGrail et al., 2015). The second mode of abduction is visual, as new system interrelationships may be envisioned by appealing to the imagination. In transition design, visualizations have been used to depict relationships between people, products, and organizations in novel ways (Gaziulusoy and Ryan, 2017b), to facilitate shared learning

through a continual framing and reframing of relationships (Jones and Bowes, 2017) and to facilitate interactions between diverse transition stakeholders by mapping transition pathways (Hyysalo et al., 2019).

In all these practices, power plays an implicit role. While transition designers can never capture transitions in their totality, design abduction can serve to construct a higher order understanding of – and thereby co-produce – transitions. Through abduction, designers create frames, visuals, and artefacts that can represent and enact particular perspectives, angles, or aspects of transitions, thereby giving form to sociotechnical relations at conceptual, aesthetic, and material levels. Through the iterative back-and-forth between the abstract and the concrete, designers frame existing and emerging infrastructures, actor networks, and social practices. In doing so, they co-shape society, and the distribution of power within it. Explicating the role of power in these processes would be fruitful for future work in transition design.

Towards transition-design-as-power-work

The multi-dimensional overview of the relationship between power, design and transitions provided by this article does not result in a clear and unambiguous ‘strategy’ which designers can easily adopt to address issues of power. As has become clear, issues of power are deeply contextual and situated. Nevertheless, this section will formulate some recommendations, or pointers, which may help designers to address power in their work.

Importantly, power is inherently a tense and conflictual topic. To address and explicate issues of power, designers may need to explore, and lean into, the tensions and conflicts which they encounter. In particular, a generative tension exists between (1) the felt need to make better futures, and (2) the nuanced and complex landscape of structural, systemic and societal factors, which can make it seemingly impossible to realize this ambition. Design inherently has a creative and productive impulse, and from a critical perspective of power, the unreflexive embracing of this impulse can be problematic, as it can result in the mobilization of power for particular interests which do not serve a societal good. However, the opposite position – the complete acknowledgement of the complexity of power and societal problems in their full nuance, but the negation of the agency of design – is also problematic. Designers are well-positioned to co-shape the complex problem-solution space of societal issues, and if they do not harness their capacity for agency, this space may be filled by other interests. Hence, we suggest that to deal with issues of power, designers should adopt what Arjun Appadurai has coined ‘ethics of possibility’ (Appadurai, 2013). Ethics of possibility foreground human agency and the hope that we can make the future better than the present. Following an ethics of possibility entails a non-naïve hope that positive change is possible, and that the means of design can be skillfully deployed to challenge, distribute and restructure power in constructive ways.

The nature of transitions is fundamentally social, and social complexity is inherently characterized by power. Hence, the considerations in this article provide pointers towards framing transition-design-as-power-work. In this understanding, the restructuring of power between transition actors becomes a more central focus of transition design. In doing so, the power of the designer themselves is explicated, and problematic centralization of power to design transitions in their totality is avoided. The five dimensions of the framework provide an overview of numerous ways in which designers might perform power-work – as pertaining to their own mode of action, the fostering of reciprocal relationships with collaborators, the bridging of scale between institutions and citizens, the negotiation of diverse futures in the present, and the positioning of ‘designs’ as co-enactors of power dynamics. In these diverse ways, designers participate in the ongoing process of navigating, balancing, and prioritizing diverse interests in transition contexts.

To conduct power-work, the situated positionality of the designer is the starting point. From that position, the designer can reflect on their possibility for exercising agency, the manner in which their agency is enabled or constrained by other powers, and the relations between them and their collaborators. As such, a practical starting point for power-work is a simple loop of action and reflection, which is represented in Figure 3. This loop consists firstly in the exercise of agency, and secondly, in reflecting on how this agency is enabled and constrained by other forms of power. The experience of having one’s actions limited or opposed can be an informative starting point for understanding how other powers co-shape design practice. Hence, power-work is a reflective practice (Schön, 2013).

Below, a number of reflexive questions are listed which may be used in tandem with the above framework:

Agency

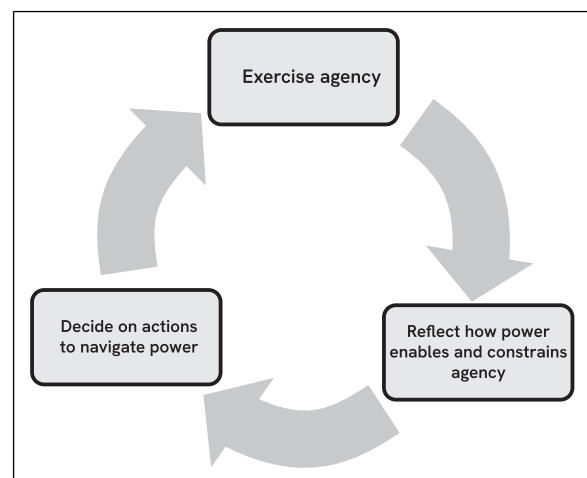


Figure 3. A simple loop for performing power-work, which consists in the exercise of agency, and reflection on how this agency is enabled and constrained by power.

Towards what interests, or values, do we exercise agency? What resources, means, and techniques are we mobilizing to realize these interests?

What other powers are enabling or constraining our agency?

How do we engage in implicit or explicit contestation? Should we, more explicitly, open our own interests up to contestation?

What aspects of the design process can we take ownership of and accountability for? Where can we not?

Relationality

How is our agency enabled and constrained by other actors?

How does the agency of other actors affect our own, and vice versa? What are the interdependencies between other actors' agencies?

What power relations do we recognize between other actors?

How do our interests converge or conflict with other actors' interests?

How can we work pragmatically with actors that don't share our interests?

How can we address power asymmetries through initiating reciprocal relationships? Can we foster and encourage a sense of empathy, care, and mutuality?

What relations of power-with or power-over can we recognize?

Scale

How do hierarchies, privileges, and social status enable or constrain our agency? How about the agency of our collaborators?

Which institutional regimes are we engaging with? What is our relationship to these regimes – do we aim to challenge or reinforce them?

How can we facilitate the embedding of transition developments in local, community-based values, meanings, and practices? How can we ensure local contexts are not extracted from, or overdetermined, by institutional regimes? How can local practices and meanings inform and shape higher-level transition processes?

How can we restructure tendencies of governmentality in institutional contexts?

How does the institutionalization of design enable and constrain our own agency and that of our collaborators?

Temporality

What are the diverse timeframes which shape our design process and outcomes?

How can we track power dynamics over time?

What control mechanisms do we recognize? To what extent should these be opened up?

What processes of emergence do we recognize? To what extent should uncertainty be reduced?

What actors and interests are served by an increase, or mitigation, of uncertainty?

What is the perspective on the continuity of our intervention beyond a project deadline?

Abduction

How can we use design abduction to make sense of the ambiguity, remoteness, and uncertainties of transitions?

Are we at risk of oversimplifying or overgeneralizing the lived experiences of citizen collaborators?

Are we at risk of oversimplifying or overgeneralizing technically defined policy issues?

To what extent are our designs the output of a negotiation of particular interests?

How do our designs act back upon the world, by enacting particular values or shaping particular actor roles and identities?

Concluding remarks

To conclude this article we briefly revisit the key concepts positioned in this paper, and comment on the limitations, future prospects and broader relevance of this work. The relationship between power, design and transitions has been characterized by distinguishing five dimensions, each of which defines a different aspect of power. *Agency* is value-laden action which explicitly engages in contestation. *Power relations* are the interdependencies in capacity for action between two or more actors. *Dispositional power* represents the power conferred by privileges, social statuses and roles, especially through one's positioning in institutional regimes. *Power dynamics* comprise the temporal fluidity of power relations, which is mediated by mechanisms of control and emergence. *Constitutive power* is exercised through design concepts and artefacts, as these co-shape power dynamics through their enactment and framing of transition elements, including actor identities and categorizations.

The purpose of this article is to provide conceptual directions, which further theoretical and empirical engagements between design, power, and transitions may pursue. Since the present article has focused on a broad overview, many of the arguments and concepts that are discussed can – and should – be investigated in greater depth and detail.

Acknowledgements

This research is part of the Local Inclusive Future Energy (LIFE) City Platform project, which is funded by the Missiegedreven Onderzoek, Ontwikkeling en Innovatie (MOOI) subsidy program from the Netherlands Enterprise Agency (RVO). The RVO is part of the Dutch Ministry of Economic Affairs.

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Ethical considerations

This research makes use of data collected from interactions and conversations with various stakeholders in our project. This data was gathered in the form of written notes and audio recordings. All participants have signed an informed consent form before this data was collected, and the data were anonymized so that participants are not identifiable. Our research was approved by the Human Research Ethics Committee of TU Delft on 24 June 2022, under the ID 2354. The application was categorized as minimal risk.

Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research is part of the Local Inclusive Future Energy (LIFE) City Platform project, which is funded by the Missiegedreven Onderzoek, Ontwikkeling en Innovatie (MOOI) subsidy program from the Netherlands Enterprise Agency (RVO). The RVO is part of the Dutch Ministry of Economic Affairs. Rijksdienst voor Ondernemend Nederland; MOOI32019.

Declaration of conflicting interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Data Availability Statement

The empirical research is based on ethnographic fieldwork which yielded highly context-sensitive data and fieldnotes. Other researchers, lacking familiarity with the context, would have little use for this data, and its publication would make it possible to identify people, organizations and locations of interest. Whilst the data may be anonymized, removing references to specific places, times and organizations would render the data rather uninteresting.

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