20 What of Recognition Justice? An Empirical Analysis of the Role of Recognition Justice in Social Housing Smart City Projects in the Global North

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20.1 Introduction

Net-zero policies that foster smart city projects are increasingly being promoted across the EU and the rest of the Global North. These projects involve high-efficiency buildings and appliances, the digitalisation of neighbourhoods, and a shift to demand-oriented energy systems that include behavioural change and citizen empowerment (Levenda, 2019). However, there are concerns about the social aspects of these projects that could affect democratic processes and accountability (Hearn et al., 2021), including psychosocial and symbolic elements such as empowerment and epistemic dimensions (Fricker, 2007).

These concerns have often been investigated in the literature by adopting an energy justice (EJ) perspective to explore the social elements of energy transitions. EJ is predominantly, but not exclusively, considered from a three-tenet perspective: recognition, distributive, and procedural justice (Jenkins et al., 2021). However, as pointed out already (Levenda et al., 2021; Simcock et al., 2021), recognition justice is often considered absent or assumed in empirical investigations in the Global North; that is, it is not analysed based on individuals' and communities' lived experiences of recognition (in)justice. It has been used as a conceptual analytical framework (Simcock et al., 2021), but, as far as we know, not to empirically investigate vulnerable populations included in smart city projects. So, the chapter will focus on the tenet of recognition justice, taking into account the lived experience of energy vulnerability (Bouzarovski & Petrova, 2015). We adopt the notion of energy vulnerability as it challenges the narrow conception of energy poverty that is increasingly used in policymaking, which is overly focused on income, efficiency, and energy prices (Longhurst & Hargreaves, 2019). Instead, energy vulnerability considers issues of access, affordability, flexibility, energy efficiency, needs, and practices in domestic energy services (Bouzarovski & Petrova, 2015). As such, investigating the justice aspects of the lived experience of energy vulnerability can capture psychosocial disadvantages, specifically the agentic role of citizens. This role has been deemed essential for these smart city projects' success and social acceptance (Sovacool et al., 2021; Wittenberg & Fleury-Bahi, 2016).

Indeed, research on energy vulnerability has greatly benefited from adopting a lived experience framework (Gillard et al., 2017; Longhurst & Hargreaves, 2019; Middlemiss & Gillard, 2015). Middlemiss and Gillard (2015) identified the following attributes of vulnerabilities: power/empowerment, multidimensionality, capacity for action, challenge, and integrity (Middlemiss & Gillard, 2015; Spiers, 2000). In these circumstances, smart energy projects, once funding is secured, will likely address the main concerns regarding access, affordability, and energy efficiency, thereby addressing energy vulnerability's most material drivers (Middlemiss & Gillard, 2015), but normally leave behind the dimensions that a recognition justice lens would foreground: the role of citizens' agency, associated with aspects of needs, practices and

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flexibility. These are the aspects that we aim to empirically investigate in this chapter, therefore contributing to a more explicit and substantive integration of recognition justice in energy vulnerability research.

20.2 Energy vulnerabilities and recognition justice

Recognition justice is one of the tenets of the so-called "triumvirate" of energy justice (EJ), along with distributional and procedural tenets (Jenkins et al., 2021). Distributional justice focuses on the equitable distribution of energy resources and services, including costs, risks, benefits, and energy poverty concerns (Jenkins et al., 2021; Sovacool et al., 2017). The procedural tenet of EJ focuses on how decisions and decision-making processes about energy resources and services are realised, ensuring that decisions are made by all (Jenkins et al., 2021; Sovacool et al., 2017). Procedural justice intersects with recognitional justice. The latter concerns the appreciation and representation of stakeholder and citizen groups in energy systems (Simcock et al., 2021). They should be granted full and equal social, civic, and political rights, and their identities and values should be recognised and included in every step of the process (Walker, 2009). Often, the EJ triumvirate serves to better analyse the principles of justice such as availability and affordability, due process, transparency and accountability, sustainability, intragenerational and intergenerational equity, responsibility, resistance, and intersectionality (Sovacool et al., 2017). The recognition tenet thus accounts for those less tangible, symbolic, and affective dimensions, including of these justice principles, of people's relations with the eco-social-systems where they live (Jenkins et al., 2021; Martin et al., 2016; van Uffelen, 2022).

In this analysis, the framework of recognition justice also assumes the centrality of the cultural status order, defined as the "institutionalised patterns of cultural value for their effects on the relative standing of social actors" (Fraser, 2000, p. 9) that prevents some individuals and groups from fully and fairly participating "as peers in social life" (Fraser, 2000; van Uffelen, 2022). This conceptualisation considers the power relationships embedded in social relationships and associated psychosocial impacts: agency, interpersonal treatment (Ruano-Chamorro et al., 2022), trust, and place attachment. Agency is concerned with the criteria of control, voice, and capabilities. Directly influencing decisions is known as decision control (Tyler, 2015). Voice is the capacity to communicate one's interests, needs, desires, and priorities and offer details that may indirectly affect decisions (Ruano-Chamorro et al., 2021). Capabilities refer to participants' access to the resources and capital they need to exercise agency, such as time, information, and human and material resources (George & Reed, 2017; Ruano-Chamorro et al., 2021). Interpersonal treatment concerns respect, politeness (Ruano-Chamorro et al., 2021), and dignity (Grossmann & Trubina, 2021). When treated with respect and politeness, people feel treated with dignity, which includes listening to them and caring about their needs and contributions (Tyler, 2015). Interpersonal relations create a "thick" type of trust (Swain & Tait, 2007), essential to engaging with proponents and empowering citizens (Talvitie, 2012). Place attachment can also be critical in recognition justice and its relationship with social acceptance of energy infrastructures (Batel & Devine-Wright, 2020; Manzo & Perkins, 2006). In the remainder of this chapter, we will, based on the data collected in Bolzano with social housing tenants involved in a smart city initiative, empirically explore the relationship between their lived experiences of recognition (in)justice – operationalised here through the principles of agency, interpersonal treatment and trust, and place attachment (Figure 20.1) – and their acceptance of these projects. It is timely to further conceptualise and empirically explore recognition justice because dismissing this tenet of EJ might result in the failure of projects and efforts towards greening the energy system in an inclusive and just way (Wittenberg & Fleury-Bahi, 2016).

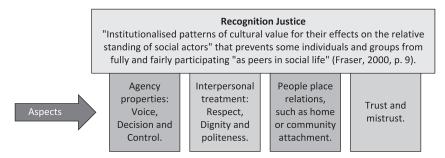


Figure 20.1 Conceptual framework.

Source: Adapted and modified from Ruano-Chamorro et al. (2021).

20.3 Case study

The case study is located in five different social housing complexes in two districts of Bolzano, North Italy, during the Sinfonia project (Caballero & Della Valle, 2021; Sinfonia smart cities, 2022). Bolzano is a midsized city and the capital of Alto Adige/South Tyrol (ASTAT, 2022). The share of social housing represents around 14% (ASTAT, 2022) against the national average of around 5% (Pittini, 2015). There are two social housing providers in Bolzano, one owned by the municipality and one by the province.

Sinfonia is a five-year pilot project that has been funded via the EU to achieve clean and affordable energy (Caballero & Della Valle, 2021; Sinfonia smart cities, 2022). The partnership is composed of the City Council, two social housing providers, owned by local polity: city council and the province, the local agency for Energy South Tyrol, two local research centres, and a local energy company. The declared objectives of the project were to reduce energy demand via retrofitting, behavioural change, and citizen engagement. Five social housing complexes were renovated, comprising around 300 flats. The project incorporated a deep renovation optimised for heating and cooling, smart electricity distribution, and PV panel installation. Retrofitting included home devices for Mechanical and Controlled Ventilation (MCV) and smart metering. Residents could voluntarily opt for a home tablet that monitors energy consumption and air quality to provide tips for optimal home comfort. MCV and tablets should require tenant interaction and a behavioural change in ventilation practices.

20.4 Methodology

We conducted 17 semi-structured interviews with households (mean length = 37 minutes), triangulated with 7 expert interviews (mean length = 40 minutes) (Creswell, 2009; Flyvbjerg, 2001), ethnographic observations, and official information from institutional sources. The experts were either involved in the Sinfonia project or similar projects in social housing districts (Creswell, 2009; Flyvbjerg, 2001). They provide further insights into tenants' lived experiences (Flyvbjerg, 2001; Martin et al., 2016; van Uffelen, 2022).

Fieldwork was carried out in November 2021 and January–February 2022. Procedures for data collection for the interviews were approved by the University Institute of Lisbon ethics committee (48/2021). Participants were provided with oral and written informed consent. The interviews were in Italian and were transcribed for coding and analysis. The authors translated quotations from Italian into English.

Interviews followed semi-structured guidelines in terms of topics. Questions revolved around the project itself, its design and implementation process, the new technologies installed, the relationship with, trust in, and ideas of the proponents, environmental and energy practices and place attachment. The participants were free to elaborate, and themes were constructed jointly between the researcher and the participants (Carter & Little, 2007; Patterson et al., 2012). Interviews were conducted adopting the saturation criterion, which is the criterion to stop sampling when no additional data is emerging from the interviews to develop themes (Glaser & Strauss, 1967; Saunders et al., 2018). The interviews with experts followed the same guidelines and reflections on preliminary insights from participants and tenants. Interviews were analysed on NVivo via thematic analysis (Braun & Clarke, 2006).

20.5 Analyses – lack of recognition of citizens' agency

Tenants mainly expressed satisfaction regarding the comfort of the renovated flats, whilst financial benefits were not always reported. Nevertheless, our research reveals how the agentic role of tenants was misrecognised in multiple ways. In turn, this misrecognition seems to affect citizen empowerment and lead to mistrust or, most frequently, indifference, a lack of appropriation, or confusion about the use of the new technologies, their goals, and the entire project. Feelings of anger, detachment, or disappointment sometimes emerged for different reasons: feeling disrespected because the proponents did not ask if they agreed with the renovation and due to long construction works, inconsistency in treatment, and a lack of clear accountability. Based on the interviews' analyses, this misrecognition seems to be mainly composed of four dimensions – influence of top-down governance mindset, epistemic dimension, people-place, and people-people relations – as described in detail below.

20.5.1 Influence of the top-down approach on misrecognition

The Sinfonia project was designed in a top-down fashion embedded in EU multilevel governance (Marks, 1996) and included citizen engagement activities solely for information, training, and environmental awareness. EU multilevel governance and regulations do not easily allow a bottom-up design to establish an open action plan or substantial modifications during the project. Whilst often in the literature these elements are merely considered part of decision-making processes in procedural injustice (Ruano-Chamorro et al., 2021), they are also a misrecognition of the agentic role of citizens, assuming the relevance of their self-hood (McAdams, 2013). Furthermore, the project was embedded in the existing dynamic of the SHP's mindset and its penalisation system, which has been increasingly adopted recently. These dynamics better show the impact of top-down governance on citizens' agency, as illustrated in the extracts below:

Extract 1. Participant 3 (expert – former Social Housing Provider Officer).

So, the ventilation [Mechanic and Controlled Ventilation – MCV] is a problem that can be resolved. The remote control should not be given to tenants, but something centralised should be implemented using an external computer to control the MCV devices remotely. Do not give them [the tenants] any responsibility.

Extract 1 shows the opinion of a former SHP officer: he clearly expresses that tenants' agency and control are problematic. It denotes a lack of trust towards them and reveals a strong centralistic and top-down mindset that the tenants are likely to perceive, possibly contributing to

trust erosion. The dyadic relationship between agency and trust is well known, and the trust deficit is usually higher towards vulnerable or discriminated against sections of populations (Domenicucci, 2017).

Besides, this mindset materialised in some buildings where the top-down control of MCV was adopted or some measures were adopted to limit tenants' control. A degree of automation and control might be appropriate for the most vulnerable or people with other priorities. However, other residents seemed not to appreciate the lack of control over devices because it limits customisations and tenants' capacity for action (Middlemiss & Gillard, 2015). In these cases, it created feelings of confusion, frustration, or complete indifference towards some new devices. These processes affected trust towards new domestic energy infrastructures, as shown in extract 2:

Extract 2. Participant 15 (tenant).

Yes, the mechanical ventilation, but I don't use that much because It is annoying. I told them [SHPs], 'Why don't you leave a remote control? So that I can control it myself. So now I can't control the MC that much [the different features or turn on/off from a distance], so it is always either on or off. You can turn it off/on just from the device itself, so ... [he continues to talk about the impracticality, especially if someone adds the disturbance of the noise during the night, which results in always having it off].

The mindset is compounded and exacerbated by the penalisation system used by the SHPs, which further accentuates the already unbalanced power relationships between the social housing proponents and the tenants. Extract 3 shows how the penalisation systems greatly impact citizens' interactions with external entities and individuals.

Extract 3. Participant 3 (expert).

We always had to accompany them [designers and workers that went to do door-to-door training for the smart energy tablet] ... because if they go with the surveyor of the city council/SHP, they acquire a certain authority, and the tenants were a little scared that we would tell the provider that tenants refused to do something. As they are city council houses, it is easy to get them, but it is also easy to send the tenants away. So, as a consequence, they showed ... I would not say dread, but almost

The system seemed to create fear and distrust towards the SHPs, making it more difficult to engage with them voluntarily without a sense of perceived obligation, often based on fear of losing one's home. As such, professionals working on citizen engagement had few opportunities for engagement, information, and empowerment. This system has traits of the so-called policing welfare (Headworth, 2021). There are well-known consequences of stigmatising those already vulnerable, exacerbating disparities of class, ethnicity, health, and so forth (Headworth, 2021). These processes produce mistrust towards the authorities and mixed emotions of fear, anger, and feeling degraded (Headworth, 2021). Some tenants expressed their concerns and manifested feelings of anger and impotence, typically towards bureaucracy and public authorities (Lapassade, 1977). The circumstances of being trapped in the bureaucracy have been thoroughly investigated, revealing an experience of injustice that leads to a sense of anger and detachment, affecting agency and self-esteem (van Uffelen, 2022). This is illustrated in the extract below:

Extract 4. Participant. 13 (tenant).

This year, the SHP called me [and said] you did not pay the monthly rent last year' I responded that I did pay. They answered, "no, but that was for the previous house etc. etc., and you have to pay that one as well, 'look you must pay 101 Euros still left from the other time, and then you are done" And then you pay and shut up because they are always right. And I responded that I needed to check another bill of 45 euros arrived, and I was told 'no, you have to pay also this, but then you are done with the previous apartment

The experience of penalisation or fear of penalisation in social housing combined with the lack of recognition in the implementation of the Sinfonia project seems to affect dimensions of self-esteem and respect (van Uffelen, 2022) and hinder agency, particularly in the aspect of "voice" (Ruano-Chamorro et al., 2021). These processes negatively affect the citizens' representations towards the SHPs, considered the only proponents. In turn, these representations seem to affect trust and engagement with new energy infrastructures and practices.

20.5.2 Misrecognising the epistemic dimension of energy justice

The lack of recognition of tenants as epistemic agents was also pointed out because adopting a standard and top-down design normally excludes this. In other words, tenants' knowledge about what worked and made sense and what did not in the context of their needs and lived experiences before and after the smart city-related interventions was dismissed and not included in the decisions taken at all. There is a perception of so-called deflated credibility (Fricker, 2007), which the literature shows might be associated with elitism or perceiving citizens as passive (Batel & Devine-Wright, 2020). The extracts below illustrate this issue:

Extract 5. Participant 16 (tenant).

I say to him [worker/architect], 'what if one day I want to change the furniture? What is going to happen? There is a hole behind this piece of furniture now; what should we do?

Extract 6. Participant 13b (tenant).

It is not that the windows are in a high position; it is the different sizes. Before there were three windows, you know ... Now, they made a small window, like 20 cm and a huge window ... Each time my mother must open a window ... [he goes through the complicated procedure of opening the windows]

Participant 13a: "They seem like hospital windows"

The top-down design sometimes led to dissatisfaction, as shown by extract 5. The participant did not refer to any energy infrastructures or practices but to technical interventions that affected the aesthetics and control over their home. The sense of ownership of some tenants was affected; in turn, some tenants might be less engaged with the new energy infrastructures and practices that are considered alien to them or not specifically requested. More dramatically, neglect of the epistemic dimension and specific vulnerabilities lead to ageism and ableism (extract 6). This is aligned with the digitalisation of the SHPs that is common in public administration (Battisti, 2020), such as the increased use of email for communication, which appears to be particularly challenging for the elderly (Servon, 2002).

Misrecognising the epistemic dimensions and vulnerabilities of residents also materialised in the maintenance procedures of the new energy devices, namely the MCV and the tablet, which appear to be challenging for many tenants. These circumstances are especially true for those unfamiliar with the construction and manual labour industries and disengaged or detached from the Sinfonia participation process and final design.

20.5.3. Role of people-place relations

People-place relations have been proven to be greatly affected by EJ, given that if community members are not involved in the project's decision-making processes, important symbolic and affective aspects of their relations with their home and community will be neglected (Batel & Küpers, 2022). Impacts on people-place relations often emerge as a misrecognition of psychosocial needs in terms of social and place identities and meanings (Walker, 2009). Every interviewee presented a strong sense of attachment, either to the home, the neighbourhood, or community, even if often accompanied by a sense of somewhat not feeling at home due to a lack of agency, as explored above. This is illustrated through the extracts below:

Extract 7. Participant 12 (tenant).

it has always been like this [SHP decided something and informed the residents]; *I have been in municipal houses for 40 years.* They have already decided. Why should I go there? [to workshop and meetings].

Extract 7 shows how person-house relations and past interactions with who owns the house can be an aspect that causes inertia and disempowerment.

This mixed feeling seems less present in long-term residents. Moreover, in former times, the social housing providers conceded a higher degree of informality and capacity for action to the tenants in their homes, with a higher share of interpersonal contacts and "common sense" agreements. These tenants usually exhibit a heightened sense of attachment to the home, neighbourhood, or community, showing more agency and confidence in their environment. However, they seem only to become active and engaged once their trust is acquired, when they feel there will be an improvement in their lives and that they could be part of it (see extract 8).

Extract 8. Participant 1 (expert).

So, there are those who have just arrived and are curious, that think that if they use things properly, they can better exploit the technology and context. Contrarily, some people who have lived there for a long time have higher satisfaction standards, and they say, 'I have always lived here', but when they understand that there is scope to have an improvement in their home, they become more active themselves.

If they do not have that trust, their mindset seems to be more detached or dismissive, as extract 7 shows. The extract emphasises the "usual" verticality and top-down approach of the SHP governance and the representation of the tenants as passive, a perception well spread in energy projects (Lennon et al., 2020).

20.5.4. Role of social relationships

People-people relations emerge as crucial aspects that affect citizens' agentic function, affecting trust in multiple ways. The main proponents, namely the local city council, social housing providers, and local research centres, almost entirely neglect this dimension, including the critical role of relationships and attention to interpersonal treatment.

Most prominently, there is a neglect of the historical interactions with the SHP organisations and their officers (see extract 8) intertwined with the people-place relations.

The misrecognition of social dimensions reveals a lack of consideration for a holistic perspective on the residents' lived experiences. Indeed, lived experiences in Sinfonia are inseparable from the broader lived experience of the relationships with the SHPs. Past interactions greatly affect trust towards the proponents, specifically the SHPs. SHPs should be aware of the trust relationship and past interactions and held accountable for being public authorities. Low trust and, most dramatically, mistrust affect the citizen's agentic role (Talvitie, 2012). Issues in people-people relations are illustrated in the extracts below:

Extract 9. Participant (expert) responding to the question: would it have been possible to change anything in the project?

No, and additionally, the meetings were always poorly attended. When the director [of the SHP], who is a difficult person, was there, they [the tenants] would ask things like, As you changed the windows, would it be possible to change the door? She would firmly answer "No", then get angry

Extract 10 Participant 1 (expert).

I mean, the relations between tenants are just the result of individual and spontaneous efforts. There is no proper official structure that helps this. So, no, I don't know how the processes or SHP can be improved, but surely introducing a more "social" element inside the IPES [one of the two SHPs] would help.

Extract 9 shows the essential role of interpersonal treatment, specifically "politeness" (Ruano-Chamorro et al., 2021). Some interactions are perceived as distant or sometimes disrespectful. It appears to lead to a silencing attitude and a lack of mediation and procedures for feedback or complaints. It emerges as a violation of the principle of self-respect (van Uffelen, 2022). An expert who worked with SHPs on various occasions (extract 10) highlighted that there is no formal structure for mediation and relations in the SHPs. It reveals how the SHPs tend to be interested in the physical buildings rather than the socio-psychological aspects of the tenants. Furthermore, extracts 8 and 10 show how even other encounters with SHPs count and that smart city projects should not be considered outside the historical dimension (Küpers & Batel, 2023); that is, as embedded in particular contexts, with a given past and history that needs to be taken into account for these projects to be efficient and sustainable.

20.6. Conclusions and discussion

This exploratory study aimed to fill a gap in illustrating the role of recognition injustice empirically in smart city projects in the social housing context in the Global North, adopting a lived experience lens.

The recognition justice framework allowed us to identify an overreaching theme in tenants' lived experiences of the Sinfonia smart city project, the misrecognition of their agentic role, and disentangle its dimensions. Additionally, we exposed how the specific project, Sinfonia, is not happening in a vacuum but is incorporated into pre-existing dynamics and representations. Tenants cannot clearly distinguish the project from the wider relationship and interactions with their social landlords, similar to what has been found in other energy poverty case studies (Grossmann et al., 2021).

Tenants' agency misrecognition appeared to be associated with a lowered sense of ownership of the new energy devices and changes in their own homes, causing issues of disappropriation and disinterest towards these devices and mistrust towards the social landlords. We also exposed how the misrecognition and its dimensions created feelings of fear, anger, and frustration in the tenants, and, consequently, of, detachment and disengagement. As already shown in the literature (Longhurst & Hargreaves, 2019), the above-mentioned negative emotions, as relational practices, are not simply consequences of energy vulnerability but contribute to it. Indeed, the examined misrecognition emerges as a potent barrier to behavioural change and empowering environmental awareness, trust-building processes, and citizen engagement. It seems that failing these symbolic dimensions overrides cognitive factors, such as visibility of energy consumption (Hargreaves et al., 2013; Ingeborgrud & Ryghaug, 2019), or rational arguments on financial benefits from associated behavioural changes. We illustrated that the misrecognition of the agentic role is predominantly composed of four dimensions. Firstly, the influence on trust towards the SHPs following top-down governance and mindset and the current "policing welfare" (Headworth, 2021) of social housing. Secondly, we illustrated the role of people and place relations, which could be expected considering existing research (Batel & Devine-Wright, 2020). Thirdly, we also exposed the role of people-people ties, which seems under-researched but seems promising for future research. The fourth dimension is the epistemic dimension: tenants are not just misrecognised in their agentic role but also as epistemic agents that can contribute valuable knowledge to the discussion.

Misrecognising agency and its dimensions of injustice is then tied to the intersection between procedural and recognition justice (Jenkins et al., 2021; Ruano-Chamorro et al., 2021). As such, this chapter shows that addressing misrecognition is key to empowering citizens in the Global North and enabling a more active, autonomous, and caring energy citizenship. Whilst it is of primary importance to invest public resources in housing and energy efficiency, symbolic and psychosocial aspects also play a huge role in inclusive and democratic accountability and providing clean energy to all in a just way. In this regard, this chapter aimed to show the critical role of citizens' agency and its dimensions by examining the citizens' lived experience of recognition justice in a social housing smart city initiative.

References

ASTAT (2022). Istituto provinciale di statistica – Provincia autonoma Bolzano – Alto Adige website (ASTAT). https://astat.provinz.bz.it/it/default.asp

Batel, S., & Devine-Wright, P. (2020). Using NIMBY Rhetoric as a Political Resource to Negotiate Responses to Local Energy Infrastructure: a Power Line Case Study. *Local Environment*, 25(5), 338–350.

Batel, S., & Küpers, S. (2022). Politicising Hydroelectric Power Plants in Portugal: Spatio-Temporal Injustices and Psychosocial Impacts of Renewable Energy Colonialism in the Global North. *Globalisations*, 1–20. https://doi.org/10.1080/14747731.2022.2070110

Battisti, D. (2020). The Digital Transformation of Italy's Public Sector: Government Cannot Be Left Behind. *JeDEM – eJournal of eDemocracy and Open Government*, 12(1), 25–39. https://doi.org/10.29379/jedem.v12i1.591

Bouzarovski, S., & Petrova, S. (2015). A Global Perspective on Domestic Energy Deprivation: Overcoming the Energy Poverty–Fuel Poverty Binary. *Energy Research & Social Science*, 10, 31–40. https://doi.org/10.1016/j.erss.2015.06.007

Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Caballero, N., & Della Valle, N. (2021). Tackling Energy Poverty Through Behavioral Change: A Pilot Study on Social Comparison Interventions in Social Housing Districts. Frontiers in Sustainable Cities, 2, 601095. https://doi.org/10.3389/frsc.2020.601095

- Carter, S., & Little, M. (2007). Justifying Knowledge, Justifying Method, Taking Action: Epistemologies, Methodologies, and Methods in Qualitative Research. Qualitative Health Research, 17(10), 1316–1328.
- Creswell, J. W. (2009). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Domenicucci, J. (2017). Trust, Agency and Discrimination. Rivista di estetica, 64, 83-102. https://doi. org/10.4000/estetica.2067
- Flyvbjerg, B. (2001). Making Social Science Matter: Why Social Inquiry Fails and How It Can Succeed Again (S. Sampson, Trad.; 1a ed.). Cambridge: Cambridge University Press. https://doi.org/10.1017/ CBO9780511810503
- Fraser, N. (2000). Rethinking Recognition. New Left Rev. 3, 107–120.
- Fricker, M. (2007). Epistemic Injustice: Power and the Ethics of Knowing. Oxford: Oxford Press.
- George, C., & Reed, M. G. (2017). Revealing Inadvertent Elitism in Stakeholder Models of Environmental Governance: Assessing Procedural Justice in Sustainability Organisations. Journal of Environmental Planning and Management, 60, 158-177. https://doi.org/10.1080/09640568.2016.1146576
- Gillard, R., Snell, C., & Bevan, M. (2017). Advancing an Energy Justice Perspective of Fuel Poverty: Household Vulnerability and Domestic Retrofit Policy in the United Kingdom. Energy Research & Social Science, 29, 53–61. https://doi.org/10.1016/j.erss.2017.05.012
- Glaser, B., & Strauss, A. L. (1967). The Discovery of Grounded Theory: Strategies for Qualitative Research. Chicago, IL: Aldine.
- Grossmann, K., Jiglau, G., Dubois, U., Sinea, A., Martín-Consuegra, F., Dereniowska, M., Franke, R., Guyet, R., Horta, A., Katman, F., Papamikrouli, L., Castaño-Rosa, R., Sandmann, L., Stojilovska, A., & Varo, A. (2021). The Critical Role of Trust in Experiencing and Coping with Energy Poverty: Evidence from Across Europe. Energy Research & Social Science, 76, 102064 https://doi.org/10.1016/j.erss.2021.102064
- Grossmann, K., & Trubina, E. (2021). How the Concept of Dignity Is Relevant to the Study of Energy Poverty and Energy Justice. Frontiers in Sustainable Cities, 3. https://doi.org/10.3389/frsc.2021.644231
- Hargreaves, T., Nye, M., & Burgess, J. (2013). Keeping Energy Visible? Exploring How Householders Interact with Feedback from Smart Energy Monitors in the Longer Term. Energy Policy, 52, 126-134. https://doi.org/10.1016/j.enpol.2012.03.027
- Headworth, S. (2021). Policing Welfare: Punitive Adversarialism in Public Assistance. Chicago: The University of Chicago Press. https://doi.org/10.7208/chicago/9780226779539.001.0001
- Hearn, A. X., Sohre, A., & Burger, P. (2021). Innovative but Unjust? Analysing the Opportunities and Justice Issues within Positive Energy Districts in Europe. Energy Research & Social Science, 78, 102127. https://doi.org/10.1016/j.erss.2021.102127
- Ingeborgrud, L., & Ryghaug, M. (2019). The Role of Practical, Cognitive and Symbolic Factors in the Successful Implementation of Battery Electric Vehicles in Norway. Transportation Research Part A: Policy and Practice, 130, 507-516.
- Jenkins, K. E. H., Sovacool, B. K., Mouter, N., Hacking, N., Burns, M.-K., & McCauley, D. (2021). The Methodologies, Geographies, and Technologies of Energy Justice: A Systematic and Comprehensive Review. Environmental Research Letters, 16(4), 043009. https://doi.org/10.1088/1748-9326/abd78c
- Küpers, S., & Batel, S. (2023). Time, History and Meaning-Making in Research on People's Relations with Renewable Energy Technologies (RETs)-A Conceptual Proposal. Energy Policy, 173, 113358.
- Lapassade, G. (1977). Grupos, organizações e instituições. Rio de Janeiro: Francisco Alves, 1977.
- Lennon, B., Dunphy, N., Gaffney, C., Revez, A., Mullally, G., & O'Connor, P. (2020). Citizen or Consumer? Reconsidering Energy Citizenship. Journal of Environmental Policy & Planning, 22(2), 184–197.
- Levenda, A. M. (2019). Thinking Critically About Smart City Experimentation: Entrepreneurialism and Responsibilisation in Urban Living Labs, Local Environment, 24(7), 565-579. https://doi.org/10.1080/ 13549839.2019.1598957
- Levenda, A.M., Behrsin, I., & Disano, F. (2021). Renewable Energy for Whom? A Global Systematic Review of the Environmental Justice Implications of Renewable Energy Technologies. Energy Research & Social Science, 71, 101837.
- Longhurst, N., & Hargreaves, T. (2019). Emotions and Fuel Poverty: The Lived Experience of Social Housing Tenants in the United Kingdom. Energy Research & Social Science, 56, 101207. https://doi. org/10.1016/j.erss.2019.05.017

- Marks, G. (1996). An Actor-Centred Approach to Multi-Level Governance. *Regional & Federal Studies*, 6(2), 20–38.
- Manzo, L. C., & Perkins, D. D. (2006). Finding Common Ground: The Importance of Place Attachment to Community Participation and Planning. *Journal of Planning Literature*, 20(4), 335–350. https://doi.org/10.1177/0885412205286160
- Martin, A., Coolsaet, B., Corbera, E., Dawson, N. M., Fraser, J. A., Lehmann, I., & Rodriguez, I. (2016). Justice and Conservation: The Need to Incorporate Recognition. *Biological Conservation*, 197, 254–261. https://doi.org/10.1016/j.biocon.2016.03.021
- McAdams, D. P. (2013). The Psychological Self as Actor, Agent, and Author. *Perspectives on Psychological Science*, 8(3), 272–295. https://doi.org/10.1177/1745691612464657
- Middlemiss, L., & Gillard, R. (2015). Fuel Poverty from the Bottom-up: Characterising Household Energy Vulnerability Through the Lived Experience of the Fuel Poor. *Energy Research & Social Science*, 6, 146–154. https://doi.org/10.1016/j.erss.2015.02.001
- Patterson, M. L., Markey, M. A., & Somers, J. M. (2012). Multiple Paths to Just Ends: Using Narrative Interviews and Timelines to Explore Health Equity and Homelessness. *International Journal of Qualita*tive Methods, 11(2), 132–151. https://doi.org/10.1177/160940691201100202
- Pittini, A. (2015). State of Housing in the EU 2015. A Housing Europe review. https://www.housingeurope.eu/resource-468/the-state-of-housing-in-the-eu-2015
- Ruano-Chamorro, C., Gurney, G. G., & Cinner, J. E. (2021). Advancing Procedural Justice in Conservation. *Conservation Letters*, 15(3). https://doi.org/10.1111/conl.12861
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in Qualitative Research: Exploring Its Conceptualization and Operationalization. *Quality & Quantity*, 52, 1893–1907.
- Servon, L. J. (2002). *Bridging the Digital Divide: Technology, Community, and Public Policy*. New York: Blackwell Publishing.
- Simcock, N., Frankowski, J., & Bouzarovski, S. (2021). Rendered Invisible: Institutional Misrecognition and the Reproduction of Energy Poverty. *Geoforum*, 124, 1–9. https://doi.org/10.1016/j.geoforum.2021.05.005
- Sinfonia Smart cities Home. Available at: http://www.sinfonia-smartcities.eu/ (Accessed: November 10, 2022).
- Sovacool, B. K., Burkec, M., Bakerb, L., Kumar Kotikalapudib, C., & Wloka, H. (2017). New Frontiers and Conceptual Frameworks for Energy justice. *Energy Policy*, 105, 677–91.
- Sovacool, B. K., Martiskainen, M., & Furszyfer Del Rio, D. D. (2021). Knowledge, Energy Sustainability, and Vulnerability in the Demographics of Smart Home Technology Diffusion. *Energy Policy*, 153, 112196. https://doi.org/10.1016/j.enpol.2021.112196
- Spiers, J. (2000). New Perspectives on Vulnerability Using Emic and Etic Approaches. *Journal of Advanced Nursing*, 31(3), 715–721. https://doi.org/10.1046/j.1365-2648.2000.01328
- Swain, C., & Tait, M. (2007). The Crisis of Trust and Planning. Planning Theory and Practice, 8(2), 229–247.
 Talvitie, A. (2012). The Problem of Trust in Planning. Planning Theory. https://doi.org/10.1177/1473095
 211430494
- Tyler, T. R. (2015). Social Justice. In M. Mikulincer, P. R. Shaver, J. F. Dovidio, & J. A. Simpson (Eds.), *APA Handbook of Personality and Social Psychology; Vol. 2. Group Processes* (pp. 95–122). New York: American Psychological Association. https://doi.org/10.1037/14342-004
- van Uffelen, N. (2022). Revisiting Recognition in Energy Justice. *Energy Research & Social Science*, 92, 102764. https://doi.org/10.1016/j.erss.2022.102764
- Walker, G. (2009). Beyond Distribution and Proximity: Exploring the Multiple Spatialities of Environmental Justice. *Antipode*, 41(2009), 614–636.
- Wittenberg, I., & Fleury-Bahi, G. (2016). Application of Sustainable Habitat: What Is the Appropriation and Utilisation of Equipment After Energy-Saving Renovations in Social Housing?: Application of Sustainable Habitat, *Journal of Community & Applied Social Psychology*, 26(5), 409–420. https://doi.org/10.1002/casp.2271