CHAPTER 8

Digital Citizen Participation in a Comparative Context: Co-Creating Cities through Hybrid Practices

Aline Suter | ORCID: 0000-0002-9823-4993
Institute for Social Planning, Organisational Change and Urban Development, School of Social Work, University of Applied Sciences and Arts Northwestern Switzerland
aline.suter@fhnw.ch

Pekka Tuominen | ORCID: 0000-0002-6941-1268
Centre for Consumer Society Research, University of Helsinki, Helsinki, Finland
pekka.tuominen@helsinki.fi

Asma Mehan | ORCID: 0000-0002-7381-6663
Huckabee College of Architecture, Texas Tech University, Lubbock, Texas, USA
asma.mehan@ttu.edu

Paulina Polko | ORCID: 0000-0002-9770-7373
Department of Security Studies, Faculty of Applied Sciences, WSB University, Dąbrowa Górnicza, Poland
ppolko@wsb.edu.pl

Kinga Kimic | ORCID: 0000-0001-8336-347X
Warsaw University of Life Sciences, Department of Landscape Architecture, Institute of Environmental Engineering, Warsaw, Poland
kinga_kimic@sggw.edu.pl

Simone Tappert | ORCID: 0000-0001-6339-3938
Institute for Social Planning, Organisational Change and Urban Development, School of Social Work, University of Applied Sciences and Arts Northwestern Switzerland
simone.tappert@fhnw.ch

 | DOI:10.1163/9789004691919_010

Abstract

Citizen participation today needs to be understood as both an empowerment practice to create urban futures as well as the perpetuation of entrepreneurial and neoliberal modes of planning. The exponential progress of technologies and the digitalisation of everyday life have led to a surge of innovation. Since hybridity has become a key factor, citizen participation now involves citizens and governments meeting online and offline in a multi-stakeholder setting to plan the city in parallel layers, often according to controversial or even contradictory logic (Horelli et al., 2015). As digital citizen participation opens up new tools and means to mobilise people and shape urban futures, this chapter analyses these new aspects through the categories of top-down/bottom-up participation as well as formal/informal practices. Using four case studies comparatively, our aim with this chapter is to find a new theoretical basis and contextualisation for digital citizen participation. The case studies are situated across Europe and North America: we study participatory budgeting in Helsinki, digitalising citizen participation in Lubbock, Texas, the National Map of Security Threats in Poland, and digital placemaking by a grassroots movement in an urban planning participation process in Zürich, Switzerland. The findings of the article show that (1) digital citizen participation fosters novel multi-actor networks negotiating governance of the urban space, (2) studies of citizen participation need to acknowledge the multi-layered hybridity and (3) new modes of governance enable novel senses of informality in participation.

Keywords

participatory governance – digitalisation – bottom-up – top-down – informality

1 Introduction

The shift towards entrepreneurial urban politics (Harvey, 1989) has led to new forms of governance and participation in contemporary cities, aiming to minimise the distance between politics and citizens by activating and integrating civil society (Blokland et al., 2015, pp. 658, 662). What Rose (1996) has framed as "soft neoliberalism" describes the emphasis placed by government structures on the production of social coherence and individual responsibility by promoting partnership-oriented participatory instruments, often without undoing sociopolitical hierarchies. At the same time, these processes have created new structures allowing social movements and grassroots groups to participate as legitimate stakeholders in the development of urban policies and

projects (Kemp et al., 2015, p. 706). Such new structures coincide with the term "placemaking", which describes the practice of collectively re-imagining and re-inventing urban space (Pierce et al., 2011). In this context, citizen participation needs to be understood as both an empowerment practice to create urban futures as well as the perpetuation of entrepreneurial and neoliberal modes of planning. It can be defined as a categorical term for citizen power, highlighting the need to redistribute power (Arnstein, 2019, p. 24). The exponential progress of technologies and the digitalisation of everyday life have led to a shift in citizen participation and governing the neoliberal city: digital information and communications technology (ICT) is used to organise, manage and produce urban life, and smart governance has become a central strategy for city administrations all over the world (Anastasiu, 2019; Vadiati, 2022). This means that citizen participation involves citizens and governments meeting online and offline in a multi-stakeholder setting to plan the city in parallel layers, often in controversial or even contradictory logic (Horelli et al., 2015). Digital citizen participation opens up new tools and means to mobilise people and shape urban futures, as well as new techniques to govern urban space.

Common analysis of citizen participation uses simplistic abstractions by juxtaposing powerless citizens with the powerful (Arnstein, 2019, p. 25). Government planning practices lacking participation are commonly described as top-down and formal, whereas counter-practices by local communities, social movements and grassroots groups are framed as bottom-up and informal (Smith, 2014; Roy, 2009). While these categories are already reducing the complex realities of negotiating urban space in analogue practices, the additional digital sphere in citizen participation complicates these binary models even more. Therefore, we see a need to analyse digital and hybrid citizen participation by developing a new framework that creates provisional, negotiable and interchangeable categories. Critical urban processes in the Global South are the framework's inspiration. We applied the framework in four comparative case studies to find new theoretical bases and contextualisations for digital citizen participation. The case studies are situated across Europe and North America: we studied participatory budgeting in Helsinki (Finland), digitalising citizen participation in Lubbock, Texas (USA), the National Map of Security Threats in Poland and a Test Planning process in Zürich (Switzerland).

All the case studies originate from individual research: in Helsinki, the study has been centred around developing comprehensive evaluation methods for participatory activities. The researchers have combined quantitative and qualitative approaches to capture the realities of new democratic innovations in urban contexts. In the case of Lubbock, Texas, an exploration was undertaken to understand how digital tools can enhance citizen participation

in local governance. Emphasising the city's utilisation of digital platforms such as Polco for citizen polling and policymaking, the introduction of online jury duty reporting and the promotion of cybersecurity awareness, the analysis of this case study provides valuable insights into creating a participative digital civic environment. The Zürich case study comes from a qualitative research project that was conducted in 2021/2022 and used a constructivist-hermeneutic approach to collect and analyse data. The project looked at how different stakeholders used digital tools in large-scale participatory urban development projects and how that affected the relationships, negotiations and decisions that were made. The case from Poland (National Map of Security Threats) discusses the use of a GIS-based tool for quantitative data collection and analysis of dangers and hazards reported directly by users of urban public spaces and how they are translated into improved safety in the city.

2 A Context-Sensitive Framework for Digital Citizen Participation

Digital or hybrid citizen participation needs new theoretical and analytical frameworks to understand its complex multi-layered structure. The proposed theoretical approach serves as a first draft for this, which is based on the binary categories top-down/bottom-up to describe participatory practices and formal/informal to analyse both governance practices and the production of space. Both categories are classified as flexible, dynamic and interchangeable concepts in movement, shaping urban life "within its unfolding" (McFarlane, 2012, p. 103). We aim to move beyond the binary reading and therefore acknowledge temporality; the categories are provisional, negotiable and changeable in nature (McFarlane, 2012, p. 105). It is clear that the practices guiding citizen participation are not limited to these two broad frameworks: however, they coexist embedded into the everyday life of the citizens with various accentuations and entanglements and provide a feasible way to study complex phenomena in various sociocultural contexts.

The framework is used as an analytical tool for digital citizen participation in city-making processes. These range from the Polish case of the tool for digital crime mapping based on the notifications of citizens, developed, provided and managed by the police; the participatory budgeting in Helsinki that emphasises the grassroots initiatives but, in fact, relies on heavy top-down organisation; hybrid grassroots practices by actors situated in between a bottom-up and top-down logic in the case of Zürich, and how in Lubbock, Texas, the government has exemplified top-down digital participation practices by introducing digital tools like Polco and the MyLubbock app, shifting city council

meetings online and launching an online jury reporting system. At the same time, the city's residents demonstrate bottom-up participation by actively engaging with these platforms to express opinions, collaborate and contribute to community empowerment.

3 Top-Down and Bottom-Up Participation Practices

In participatory processes, top-down describes the degree of authority and reveals those in power. With the digital transformation, this can mean a guiding role for private corporations within governance structures. Bottom-up approaches are related to citizenship and subjectivity (Burns & Welker, 2023), either by resisting certain forms of placemaking or remaking citizens' ownership of urban spaces through alternative forms. Digital participation reveals further aspects, such as "hacking" the city or the use of social media platforms for mobilising, creating networks and disseminating information and claims. While top-down/bottom-up is often used as a category to describe actors in place, the framework used here aims to incorporate the performative aspects of top-down and bottom-up and therefore focuses on participation practices that unfold in between the binaries.

Following Smith (2014), participation practices within a top-down and bottom-up logic can be extended into three dimensions: (1) Scalar relationships and processes need to be acknowledged. Often, the positionality of actors cannot be hierarchised as either top-down or bottom-up. Rather, they are constantly shifting their position, depending on the process and practice. This means to include "relationships and processes that jump scales or move diagonally or horizontally across territorial and administrative boundaries" (Smith, 2014, p. 211). (2) In participatory processes, especially when adding digital formats, it is sensible to refer to multi-actor networks instead of a hierarchical and closed relationship. As Smith frames it, "these networks, including the circulation of capital and labor, represent dynamic sources of change that threaten to destabilise the hegemonic verticality of the planning hierarchy" (Smith, 2014, p. 212). (3) The negotiation over contested urban space often sits at the heart of participatory processes (Varış Husar et al., 2023). As a result, territoriality as a "spatial abstraction" is negotiated "to access, control, and mobilise spatial resources, including land and the built environment" (ibid.). All three dimensions become particularly pronounced in digital or hybrid processes. Digitalisation can shape the power dimensions and therefore the scale of relationships and processes in participation, shift networks and add a digital layer to the urban space.

4 "Doing" Formality and Informality

Formality and informality need to be considered as a practice, instead of a static condition. While informality is often linked with certain geographical contexts as well as specific actors, "doing" informality moves beyond these fixed categories (Roy, 2009, p. 825) and emphasises "the fact that the urban is not readymade, but always in formation" (McFarlane, 2012, p. 103). In a European context, informality in planning processes is often defined as state-led participatory structures that are not part of the binding legal framework, whereas for the Global South, the term "informal" is often related to unregulated activities outside the state by the urban poor (Roy, 2009). Useful for this framework is that informality describes the gray spaces in between the formal and planned city (Yiftachel, 2009, pp. 250–251). The context of digital citizen participation brings two central aspects to the forefront: (1) Informality lies at the heart of what Brenner (2004) defines as "state spaces". State authorities define what is to be considered to be informal or formal. Therefore, informality needs to be understood as a state practice which is shaped and structured through political, social and discursive regulations (Roy, 2009, p. 826). This becomes particularly relevant in the digital sphere when state and city authorities increasingly invest in participatory platforms or other forms of digital participation. Understanding formality/informality as state practice in digital citizen participation reveals new power relations for negotiation processes in multi-actor settings. (2) Participation itself can appear as an informal practice. Therefore, informality needs to be analysed as a mode of planning practice (Ward et al., 2011, p. 861). With the shift to neoliberal and entrepreneurial modes of governance and participatory processes with informal dialogue and meetings, new forms of networking and actor relationships have increased. It has become what McFarlane calls a "constitutive element of formal urban planning practices" (2012, p. 104). These developments have become accentuated through the digitisation of citizen participation.

5 Cases

5.1 *Case 1 – OmaStadi: Participatory Budgeting in Helsinki* (*Finland*)

5.1.1 Competing Logics to Maximise Engagement

In a nutshell, participatory budgeting (PB) refers to a method used to establish consensus among various partners to use funds and other resources (Ahonen & Rask, 2019). In most cases, this is done by voting for the projects proposed by the residents. In Helsinki, participatory budgeting developed

gradually through the methods of municipal decision-making after a series of small-scale pilot studies and experiments. The principles for the citywide PB, called OmaStadi (meaning "MyCity" in Helsinki slang) were laid in 2017, with a specific emphasis on supporting the participation of marginalised groups by providing appropriate digital services and information in accessible language (Helsinki City Board, 2017).

The budget for the first round in 2019 was EUR 4.4 million and the sum doubled for the second round in 2021 because it was decided that the OmaStadi schedule would work better on a biannual basis. The sum is meagre, just 0.1% of the annual city budget. In comparison, in Paris the funding has been around 1% of the city budget, and the highest figures can be found in the Brazilian cities that initiated PB in the late 1980s: Porto Alegre has allocated around one-fifth of its city budget for PB, and in Belo Horizonte the figure has risen to around the 50% mark. In Helsinki, the citizens' proposals target either one of Helsinki's seven major districts or the entire city. The minimum budget for an individual proposal is relatively high, EUR 35,000, and the maximum budget, between EUR 288,390 and EUR 653,250, depending on the number of residents in the major districts. All Helsinki residents 12 years of age or older are eligible to vote.

The OmaStadi process consists of several stages spread over a duration of about one year, excluding the time for the implementation of the winning proposals. During the first round, the process was conducted in both digital and in-person environments. For the second round, the COVID-19 pandemic forced nearly all the activities online. To put it briefly, the process began with the proposal stage, during which residents posted their proposals on the OmaStadi platform. This was supported by the ideation events organised by the city and its active residents. Then, during the planning stage, the proposals with similar content were combined into plans, to be further developed and elaborated with the residents. After this, the plans were sent to the experts in the relevant city divisions, who calculated the cost estimates. Finally, the plans entered the voting stage, and the winning ones were implemented soon after the vote.

5.1.2 Top-Down and Bottom-Up Elements of OmaStadi

In Helsinki, the PB model has been developed with a strong top-down emphasis. The process has been initiated by the city administration and the decisions are made by the authorities and members of the municipal council. However, our study of the process (Rask et al., 2019) shows that there are very different understandings of the desired allocation of the rights and responsibilities of the participants. In many other contexts (for an overview, see Cabannes & Lipietz, 2018), PB has primarily been an activist-initiated process, challenging

the existing power structures. This tension was also expressed in the case of Helsinki:

> The basic idea was that we wanted something in the system depending clearly on the initiative of the residents and this interaction to be more than just an abstract process, allowing residents to propose ideas and have their say in a straightforward way. (Anni Sinnemäki, deputy mayor for urban environment)

> Representative democracy in the sense of "elections" is often recognised, but self-governing democracy is clearly a completely strange idea to some public servants, even though it is also based on the Local Government Act. (Yrjö Hakanen, former city councillor, urban activist)

In Helsinki, the PB process is structured around the alternation between digital and in-person environments (Ertiö et al., 2019). While the ideation and development of the proposals to be funded was at its most fruitful in the in-person meetings and workshops the digital channels of participation enabled co-creation across distances. At the same time, the interaction in the digital environment was difficult for many participants, especially the elderly (Ertiö et al., 2019).

5.1.3 Formal and Informal Practices of OmaStadi

According to the published guidelines, OmaStadi is a smooth and streamlined process with predetermined stages. The participants are encouraged to provide feedback to the organisers but have limited means to influence the process directly. At the same time, there have been several ways of tactically impacting the course of action from ideation to voting and implementation of successful initiatives.

To establish a process that would be tangible rather than abstract, with clear rules and distinct stages was emphasised in many research interviews among the decision-makers. In their view, PB would make the citizens' voices heard directly, without intermediaries distorting the message – a powerful claim in a context in which the municipality receives harsh criticism for excessive bureaucracy and non-representative decision-making. On the other side of the coin, the clarity and straightforwardness of the process means that the range of democracy is limited. The role of the citizens is reduced to following a predefined structure: participating in workshops to assemble their ideas, submitting their proposals into the system, and voting according to their preferences. Their capacity to alter the structure itself is suppressed and subject to criticism.

Within the relatively constrained set of rules, the participants have adopted several tactics to influence the decision-making. Groups with successful proposals were campaigning effectively using social media, often criticising the competing plan and encouraging tactical voting. The digital channels adopted by the participants, such as neighbourhood Facebook groups, WhatsApp groups of the sports associations and social media groups of the local influencers were much better suited for campaigning than the platforms and strategies the city was endorsing.

The evaluation of the Helsinki PB showed that the success was often based in the ability to balance top-down and bottom-up processes with mastery of formal and informal activities. OmaStadi is still relatively new and unfamiliar to most citizens with less than 10% voter turnout. Therefore, it is essential to be able to convince the citizens that their participation matters.

5.2 *Case 2 – a Critical Examination of Digital Citizen Participation in Lubbock, Texas (USA)*

5.2.1 A Critical Examination of Digital Citizen Participation

Lubbock, Texas, a city with a population of approximately 260,000, provides a compelling case study on digital citizen participation. This city has encountered notable challenges in engaging its citizens in a manner that is both effective and efficient. Key among these challenges has been a consistently low voter turnout, pointing to a broader issue of civic disengagement. Additionally, the city has grappled with a significant lack of diversity and inclusion in its public participation initiatives. This shortfall has been particularly evident in the city's attempts to reach and engage its diverse population segments.

Since launching Polco (2019), Lubbock has seen significant improvements in its digital citizen participation. Polco is a digital platform designed to enhance civic communication. It allows governments and civic organisations to create surveys on a variety of topics and to collect feedback from verified residents, thereby enabling informed decision-making that reflects the sentiments and preferences of the community. Lubbock has effectively used Polco to create over a hundred surveys on topics ranging from budget priorities, public safety, transportation, parks and recreation to COVID-19 response and recovery. The city has received over 20,000 responses from more than 10,000 verified residents, representing a response rate of about 4%, which is higher than the national average for online surveys. The city has also increased its reach and diversity of participants, attracting more younger, female, Hispanic and African American residents than before (Lubbock City Council, 2023b).

Lubbock has used the feedback collected through Polco to inform its decision-making and policymaking processes. For example, the city used Polco to gauge public support for a proposed bond election for various infrastructure projects in 2019. Municipal bonds are debt securities that local governments issue to finance public projects, and a bond election is a particular type of election where voters can approve or reject a proposed issuance. The city found that most residents supported the bond election but had different project preferences. The city then adjusted its bond proposal accordingly and successfully passed it with 64% approval from voters. The city also used Polco to solicit residents' input on allocating federal funds for COVID-19 relief and recovery efforts in 2020. The city found that most residents prioritised assistance for small businesses, healthcare workers and vulnerable populations. The city then allocated its funds accordingly and reported to residents how their feedback was used (Lubbock City Council, 2023a).

As a second example, one of the more innovative ways that Lubbock has enabled digital citizen participation is by allowing citizens to report for jury duty online. According to GovTech, Lubbock County is one of many counties in Texas that offers this option, which saves citizens time and hassle by avoiding a trip to the courthouse (Lubbock City Council, 2023b). When citizens receive a jury summons in the mail, they can log onto the Lubbock County Online Jury Access System website and follow the steps to complete their reporting process. They must answer some questions about their eligibility and availability for jury service, as well as provide their contact information. The system then assigns them a juror number and tells them if they need to appear at the courthouse on a specific date or if they are excused from service (Lubbock City Council, 2023b). Online jury reporting reduces congestion at the courthouse, saves paper and postage costs, allows citizens to plan for their jury duty obligations and increases participation rates by making it more convenient and accessible for citizens. According to GovTech, Lubbock County has seen an increase of 10% in juror participation since implementing online reporting (Lubbock City Council, 2023a).

Another way that Lubbock has fostered digital citizen participation is by launching a cybersecurity awareness programme that educates citizens about online safety and responsible digital behaviour. The Office of the CIO at Texas Tech University oversees the programme, which provides Lubbock residents with a variety of resources and events. The programme also hosts an annual Cybersecurity Awareness Month every October with activities such as workshops, webinars, contests and giveaways. The goal of the programme is to

empower citizens with knowledge and skills that will help them stay safe online and use technology for good.

The city government in Lubbock has implemented various digital platforms and tools to engage citizens in governance, planning and decision-making. One of the key initiatives is transitioning city council meetings to an online format in response to the COVID-19 pandemic. This allows citizens to attend remotely and participate in discussions through live chats and Q&A sessions. Another initiative is the implementation of a digital participatory budgeting platform that enables residents to propose and vote on community projects, giving them a direct say in allocating a portion of the city's budget (Lubbock City Council, 2023b). Additionally, the MyLubbock app allows citizens to report non-emergency issues, such as potholes, graffiti or broken street lights, directly to the city, fostering a sense of ownership and involvement in maintaining the community. Furthermore, the city government maintains active social media accounts to inform citizens about news, events and opportunities for participation (Lubbock City Council, 2023a).

5.2.2 Top-Down and Bottom-Up Elements of Digital Participation in Lubbock, Texas

The narrative of digital citizen participation in Lubbock, Texas, while showcasing a synergistic blend of top-down and bottom-up approaches, warrants a more nuanced and critical examination. While the initiatives undertaken represent significant steps toward enhancing civic engagement, several underlying issues and challenges merit closer scrutiny.

From a top-down perspective, the Lubbock government's adoption of digital platforms such as Polco and the MyLubbock app has undeniably facilitated improved interaction between the city and its residents. However, this reliance on digital tools raises concerns about inclusivity and accessibility (Mehan, 2023). The assumption that all residents have equal access to digital resources overlooks the digital divide that may exist within the community. This disparity can lead to unequal participation opportunities, potentially marginalising certain groups who lack digital access or skills.

The transition of city council meetings to an online format during the COVID-19 pandemic is commendable for its adaptability. However, this shift also poses questions about long-term engagement and the effectiveness of digital forums in replicating the dynamics of in-person meetings. The potential for reduced personal interaction and the challenges of managing public discourse in a digital environment are aspects that need critical evaluation.

Regarding the bottom-up approach, while the active use of digital tools by Lubbock's residents suggests a heightened level of engagement and

empowerment, it is essential to assess critically the actual impact of this participation. For instance, the digital participatory budgeting platform, though innovative, requires a closer look at how representative the participating demographic is of the city's entire population. There is a risk of biased outcomes if the platform primarily attracts certain segments of the community while leaving others under-represented (Mostafavi & Mehan, 2023).

In terms of formal and informal digital practices, Lubbock's initiatives, including the online jury reporting system and the use of social media for civic interaction, certainly mark progress in digital civic engagement. Yet, it is crucial to analyse the effectiveness of these practices in achieving substantive civic outcomes (Mehan & Mostafavi, 2023). The jury reporting system, while increasing convenience, needs to be evaluated for its impact on the quality of jury selection and the legal process. Similarly, the role of social media in civic engagement, while fostering informal communication, may also lead to the proliferation of misinformation and polarised debates, aspects that require vigilant monitoring and management.

Finally, Lubbock's cybersecurity awareness programme is a positive step toward promoting responsible online engagement. However, the programme's effectiveness in reaching and educating the diverse populace of Lubbock and its actual impact in mitigating cybersecurity risks among citizens remains an area open to further exploration and assessment.

5.2.3 Formal and Informal Practices of Digital Participation in Lubbock, Texas

Lubbock, Texas, has made notable advances in digital citizen participation, transitioning traditional civic processes like city council meetings and public hearings to online platforms, thereby enhancing accessibility and inclusivity. However, this shift necessitates a critical examination of the depth and quality of engagement these digital media provide. While they offer convenience, they may not fully replicate the dynamic of in-person interactions, raising concerns about the comprehensive inclusivity of these platforms, particularly for individuals with limited digital access or skills. Also, the online jury reporting system needs to be closely looked at to see how well it works at making sure that the jury pool is diverse and representative, even though more people are using it. This is because digital processes can introduce bias.

On the informal side, social media platforms in Lubbock have opened new avenues for citizen engagement, facilitating spontaneous discussions and grassroots initiatives. Yet, these channels come with challenges like misinformation, echo chambers and digital harassment, necessitating careful management to ensure a balanced and factual discourse. Furthermore, the city's

cybersecurity awareness programme, critical for safe and responsible digital engagement, needs evaluation regarding its impact across the community's various segments. Ensuring that this programme effectively enhances the digital literacy and security practices of all citizens, especially those less technologically adept, is crucial for the programme's success. Overall, while Lubbock's digital participation initiatives are progressive, a balanced approach addressing issues of access, equity and the effective management of digital platforms is essential for realising the full potential of these efforts.

5.3 *Case 3 – Test Planning at the Lakefront in the Wollishofen Neighbourhood in Zürich* (*Switzerland*)

5.3.1 Hybrid Grassroots Practices in Formal Planning Processes

From 2021 to 2022, the city planning office of Zürich was commissioned to carry out a test planning at the lakefront in Wollishofen, a neighbourhood in the city. The aim of the test planning, initiated by a political motion in the local council (GR 2019/44), was to test different use scenarios of spatial and urban planning approaches for the examined perimeter by considering the city residents' needs for recreation, public space and affordable housing (AfS, 2022). As the area was assessed as being of public interest, the city planning office integrated a participatory component into the process; this is uncommon for the planning instrument test planning. Representatives of the local population and the private property owners of the planning perimeter were invited to participate in the planning process between October 2021 and January 2023.

The reason for the political motion leading to the test planning was based on a potential real estate development by a private company processing concrete and gravel (Kibag AG) at the lakefront in Wollishofen, which raised public concerns. Wollishofen is an exemplary middle-class residential neighbourhood and has experienced major urban development changes in recent years: a handful of former industrial buildings bordering Lake Zürich had been redeveloped into real estate projects in the high-price segment (Statistik Stadt Zürich, 2023). Previously, a former car garage located on the test planning perimeter was demolished and reconstructed as 68 luxurious rental apartments, storefronts, and office spaces (Website Franz Mythenquai Zürich). Local residents were worried about potential conflicts between local users and the new residents as well as the forthcoming commercialisation of the area. The planning application was too advanced for any objection and construction complaints, but due to similar developments on the land plot of Kibag AG, a coalition of neighbourhood residents, cultural workers and citizens of Zürich called Linkes Seeufer für Alle (LSFA, Left Lakeshore for All) formed itself, advocating for a public and democratic debate on the future development of the land owned by Kibag AG (LSFA n.d.). LSFA directed its criticism against the private company

as well as the city council, which issued a special use plan for the land plot in 2008 and transferred the commercial zone into a mixed-use zone, which legally laid the foundation for the real estate project (GR 2008/358).

The planning perimeter that was examined is characterised by its diverse use for local recreation and culture; located in the area is a neighbourhood community centre, an alternative cultural centre that has historically resulted from the Opera House riots (youth protests in the 1980s), a park with public barbecue spots, numerous swimming spots, two commercial buildings and a shipyard. The preservation of this zone was the key demand of LSFA, together with other local actors (e.g. the neighbourhood association). Both the representatives of local institutions and organisations and the private property owners of the planning perimeter attended three participatory workshops which accompanied the development of three urban planning scenarios. Additionally, the city planning office engaged in dialogue with the greater public through an info-point located in front of the community centre on five selected dates as well as an information event in September 2022. Apart from the documentation of the process on the website of the city of Zürich, as well as an in-situ online poll through a QR code at the information event, the citizen participation was executed in an analogue setting. Meanwhile, local actors, notably LSFA, used various digital channels and tools to demand the preservation of public space both within and outside of the formal test planning.

5.3.2 Top-Down and Bottom-Up Elements in the Test Planning and Beyond

The project design of the test planning was structured predominantly in a top-down manner. Invited interest groups were chosen by the project team and each group was allowed to send one or two representative individual(s). The decision-making power was in the hands of a supervisory committee with representatives from different departments of the city administration as well as external experts. During the workshop format, invited participants were able to communicate their concerns, proposals and requests. Additionally, local actors used various digital and analogue channels to make their claim on the contested urban space. While these practices can be classified as bottom-up initiatives, a closer observation reveals a more complex situation:

– All participants of the test planning, apart from the private property owners, were opposed to private housing in the examined area and collaborated with the local coalition LSFA. Some actors were jumping scales (Smith, 2014), as they were simultaneously representatives of institutions largely funded by public funds (neighbourhood community centre, Rote Fabrik) and collaborators of resistant practices, such as an online political petition.

– Digital tools were used for mobilising and strengthening relevant networks by local actors. Instagram (social media), Telegram (messenger), and the participatory portal of the Zürich city administration (Participatory Budgeting Process in 2021; Decidim Software) encouraged collaboration beyond local networks.
– The digital space has been used as an additional space to make territorial claims by grassroots practices and has initiated a public debate. This indicates that local actors have politicised in a highly professional and organised manner both within and beyond the test planning process, blending the binary between bottom-up and top-down.

5.3.3 Formal and Informal Practices in the Test Planning and Beyond

Due to a lack of decision-making power in the test planning, local actors such as the LSFA searched for various hybrid interfaces to strengthen their position and demands for the area. Thus, the coalition submitted a project idea for the first citywide participatory budgeting which was carried out by the urban development department in the city administration in 2021 and applied for CHF 4,500 (approximately EUR 4,000) for a neighbourhood event. The aim of the festival was to "put the interests of the local community back at the centre of the [...] debate" (LSFA, 2021). The project team of the participatory budgeting acted as an enabler to occupy contested urban space legally to make claims and circulate its demands in the manner of informal practices. This formalisation of traditionally informal practices becomes visible in a statement by the organisers: "The festival is legal, popular, and fascinating, but the gesture is also that of an occupation: the appropriation of a space stimulates the imagination of what else could be done with it" (LSFA, 2022). This example demonstrates formalisation processes as state practices, ensured by a digital citizen participation platform.

The city administration has clearly distinguished between planning practices within the test planning and other hybrid practices and initiatives by LSFA and other actors, such as an online political petition, the neighbourhood festival, a demonstration, informational posts on Instagram etc. Therefore, "informal practices" remained ignored within the "formal planning process". These hegemonic regulations shaped power relations within the test planning. Nevertheless, the counter-practices deeply influenced or at least substantiated the final report of the test planning – there, the supervisory committee follows a similar line of argumentation as the local interest groups and recommends the preservation and extension of public space with no residential housing areas.

5.4 *Case 4 – National Map of Security Threats as a Digital, Citizens-Involving Tool for Crime Mapping, Based on GIS (Poland)*

5.4.1 Creation of Safe Neighbourhoods by the Use of Volunteered Geographic Information (VGI)

Crime mapping has been used for years for imaging, analysing, preventing and combating crime. Initially, maps served only the police in their efforts to fight against crime. Subsequently, crime maps became sources of public information on the level of security in particular locations. In the 21st century, citizens have become not only passive users of these tools but also their active creators, which has been possible mainly thanks to digitisation. VGI is a new way of collecting and gathering data, through which geospatial content is generated by non-professionals using mapping systems available on the internet. In Poland, it has been involved in the process of encouraging citizens to share information about the threats and dangers in their neighbourhoods.

The National Map of Security Threats (NMST, Krajowa Mapa Zagrożeń Bezpieczeństwa) was implemented in Poland as a GIS-based tool to involve citizens in the process of creation of local security and as a source of knowledge about the perception of personal security of NMST users. It was established in 2016 after 12,000 meetings between police officers and local communities in which the greatest threats in the areas were discussed (Szyszka & Polko, 2020; Polko & Kimic, 2024). The NMST is an interactive tool enabling citizens to report online threats in their residential area (https://mapy.geoportal.gov.pl/iMapLite/KMZBPublic.html). Reports made by citizens are visible down to the street and number (if this can be indicated). The map allows for reports to be made in 26 hazard categories related to threats occurring in a range of public spaces (such as roads or green areas) and social behaviours (Kimic & Polko, 2022): acts of vandalism, unguarded bathing sites, wild waste dumps, poaching, groupings of minors at risk of corruption, dangerous places on the water, dangerous places for entertainment, illegal logging, illegal car rallies, improper parking, unguarded track and railway crossings, inappropriate road infrastructure, destruction of greenery, a homeless person in need of assistance, driving quads in forest areas, speeding, alcohol consumption in prohibited places, drowning, use of drugs, wandering stray dogs, burning of grass, traffic incidents involving forest animals, animal abuse, poor traffic organisation, begging.

The reporting system is simple and intuitive. The user clicks the red button labelled "Add report" and selects the threat type from the list of categories and then indicates the location of the report on the map by clicking on the right place or by entering the address. In the report, the user can indicate the time of the day or days of the week or if the threat occurs periodically, describe it in detail and even attach a photo. Each time, the person entering the report is

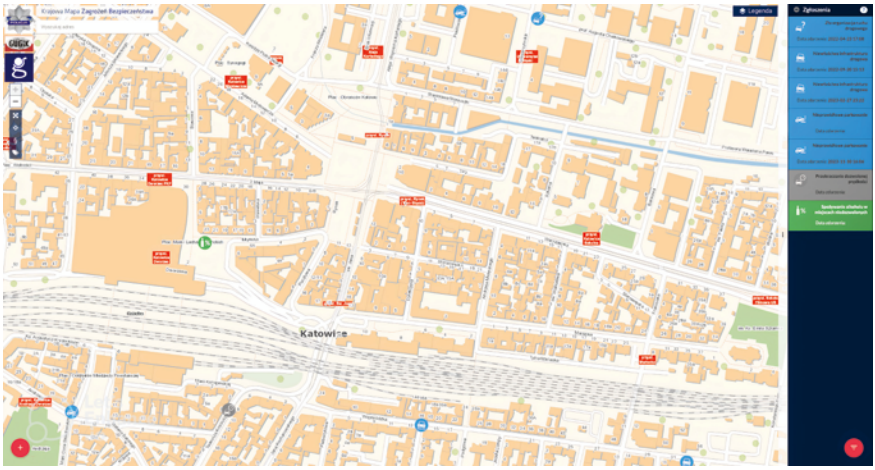

FIGURE 8.1 Example from NMST (city of Katowice)
SOURCE: THE NMST WEBSITE
(HTTPS://MAPY.GEOPORTAL.GOV.PL/IMAPLITE/KMZBPUBLIC.HTML)

informed that in the case of an emergency, police should be contacted immediately by telephone on indicated numbers. Each report is anonymous.

Reports are marked with colours indicating their status: new (green), verification (yellow), confirmed (red), confirmed and transferred to other institutions (violet), confirmed and eliminated (blue) and unconfirmed (gray) (see Figure 8.1). A citizen's report registered in the system appears on the map with a "new" status. Within a maximum of two days, it must be examined by the local coordinator appointed at the level of the city (county, district) headquarters and placed on a threat verification card. The verification may take a maximum of five days, which does not always make it possible to determine the validity of the report, especially in case of incidental or seasonal events. After verification, the report is assigned a "confirmed" or "unconfirmed" status. Subsequent events from the same category in the same area and added in the same time frame automatically receive the status of "confirmed". By the end of 2021, 2,122,772 threat reports were recorded.

Apart from some limitations (such as a lack of access to archived data or a predetermined list of threats which can be reported [Polko, 2022]), the NMST is a unique tool that allows residents to report dangers or hazards in a given area and at the same time have access to at least some of the data collected in this way. The residents can follow the status updates and compare their reports with the reports of the other users. In this way, they can enhance the safety of the neighbourhood and have information about its condition. The digital nature of the tool allows for quick and anonymous reports, which is an

alternative to visiting the police station. By having the threat eliminated after the report, they might be encouraged to do other types of activities for the local community.

5.4.2 Top-Down and Bottom-Up Practices of NMST

The National Map of Security Threats is a tool initiated, developed and provided by the Polish state police following the logic of top-down activity. The police established rules for the use of the map, and it is the only institution entitled to collect data and decide which data will be available online in open access. Any other limitations provided by the tool (such as a closed list of threats possible to report by citizens or lack of access to the archive data) are also an effect of the institutional decision. Local map administrators are to decide which of the reported threats will be sent for verification and, as a consequence, elimination. After submitting the report citizens cannot interact with the administrator.

At the same time, the NMST is not entirely a top-down tool, as it shows elements of the bottom-up logic. Firstly, the map was implemented after a public consultation with citizens (12,000 participants) as a response to their need for quick, easy and anonymous communication with the police from the place where the threat exists. Traditional forms of communication, such as a phone call or face-to-face report at the police station, were regarded as too engaging in case of "small threats". Secondly, the map was primarily tested in the Silesia region to verify not only the technical aspects of the tool but also such elements as the list of the threats possible to report or the response system. It was modified after receiving suggestions. Thirdly, the map is evaluated annually and improved according to the received suggestions (for example, some of the categories of threats to be reported were added after feedback from the citizens). The suggestions referring to the possible modification of the tool could be sent by email or by the app at any time, while staying anonymous.

5.4.3 Formal and Informal Practices of NMST

The National Map of Security Threats is an example of a formal practice. Although the reporting process is fully online and anonymous, it follows the same procedures as in the case of the face-to-face report at the police station. The form of the report has no impact on the police procedures – that is why the next stages of the process are very formal and transparent. Reports are registered and classified, and the police or other institutions have five days for verification and confirmation of the report. Citizens can observe the reaction of the police on the internet (on the map) and verify online status with the activity in the field (the process of elimination of the hazard or danger). In cases in

which there is no satisfaction with the result or in case of the reappearance of the threat, it might be re-reported, as many times as needed. In cases of a lack of reaction to the reported problem, a citizen might make a direct complaint to the local police station commander.

There is no space in the NMST for informal activity because the police treat the reports from the map in the same way as other reports. However, citizens dissatisfied with the reaction (or lack of it) in case of the threats reported by them might not only re-report them individually but also in a collective mode with the others from the neighbourhood, to make a bigger impact. It has been possible to indicate examples of such activities on the map, mostly in cases of the more common threats such as speeding, improper parking and alcohol consumption in prohibited places. In this form, "massive report" is a method of informal activity undertaken to "boost" formal procedures.

6 Discussion

The case studies are differently structured in terms of their geographical context, local governance, and participation practices and the digital tools used that range from participatory budgeting, GIS-based maps and digital survey platforms to low-threshold tools, such as social media or websites. Despite their differences, all the case studies share a similar stance: a government-led tool, programme or practice for (digital) citizen participation, introduced by city-level administrations with the aim of establishing new channels of communication and decision-making channels between governments and citizens and co-create the urban space, or enhancing existing channels. All four cases show that bottom-up and top-down practices in citizen participation are exercised beyond that binary logic. Digitalisation in citizen participation has even increased complex relationships in between. The situation in Zürich, where new networks and inter-scalar relationships (Brenner, 2001) in the digital sphere have shaped both local planning and grassroots practices, has served to emphasise this. Often, actors cannot be categorised as bottom-up or top-down. Rather, their position on the scale is constantly shifting, depending on the observed space (digital, hybrid or analogue) and practice, and different actors fulfil multiple roles at the same time. As the case from Helsinki shows, various challenges come with hybrid settings: The geographically local, culturally intimate (Herzfeld, 2016) networks alternate between digital ones that include unfamiliar actors and situations. These are difficult to place into the hierarchies many participants are familiar with. In the OmaStadi participatory budgeting process, finding a balance between in-person and digital environments was

difficult (and stressful) and led to a lack of clarity for the participants. The digital platform did not correspond to the spatial layer of districts. For the same reason, many participants moved the dialogue away from the official platform to face-to-face encounters and local social media platforms.

The approach of Lubbock, Texas, to digital citizen participation, integrating top-down and bottom-up methods, showcases significant progress yet requires critical examination. The government's adoption of digital platforms like Polco and the MyLubbock app, and the shift to online city council meetings reflect a commitment to modernising civic engagement. However, this top-down strategy must be scrutinised for its inclusivity and accessibility, particularly for those with limited digital literacy or access. Conversely, while the bottom-up engagement of residents on these platforms indicates increased community involvement, it raises questions about the representativeness and equity of this participation across diverse demographic groups (Mehan et al., 2022). The implementation of a digital participatory budgeting platform is a notable step, but its effectiveness in democratising decision-making and encompassing varied community voices requires further critical evaluation. Overall, Lubbock's initiatives highlight a need for ongoing assessment to ensure they effectively bridge the digital divide and genuinely represent the entire community.

That hybridity is a key element of digital citizen participation can also be observed in the Polish case of the National Map of Security Threats. The tool had been developed, provided and managed by the police and only this institution can decide which data will be published and be open for all community members, but the idea came from the citizens during meetings with the police representatives across the city districts. The citizens also actively participate in the tool improvement process by proposing new categories of threats that it is possible to report to be added to the list. Data collected through the NMST are discussed during local meetings referring to security issues and has led to particular decisions such as more police patrols on the street, new video surveillance installations and reconstructions of the road infrastructure. That is why the tool is actively used by citizens with the potential to be one of the crucial sources of information about local safety and security.

Through new modes of governance increasingly shifting to digital or hybrid formats, the state authorities and city administrations reproduce the framing of formality/informality in the digital sphere. Roy (2009) has described informality as being structured through regulations on political, social and discursive regulations. In the context of the digital participatory budgeting process in Zürich, where a grassroots organisation and other local actors organised a neighbourhood festival in the manner of a "legal occupation", such smart governance strategies shaping informal practices become particularly

pronounced. This example shows the complex, sometimes contradictory practices in hybrid citizen participation. On the one hand, the city administration legalises spatial and territorial claims by local actors and therefore creates new power relations in the examined case. On the other hand, with the formalisation process, authorities can integrate their own regulations and frameworks into bottom-up practices. Similarly, the National Map of Security Threats reproduces formal procedures in the digital form of an online tool. Although the process of reporting new threats is easy and anonymous from a technical point of view, the next steps undertaken by the police are as formal as in the case of a traditional police report – they are registered, verified, confirmed or unconfirmed and, finally, eliminated. In this case, digitisation refers only to the form of activity, not to the process. However, successful informal digital participation on social media platforms has created an environment for spontaneous discussions and collaborations among citizens, leading to a more engaged citizenry. Clearly, this shows how grassroots groups extend their domains based on new modes of governance. This has also been the case in Helsinki, where the separate groups involved oscillate between the formal and informal domains, use tactical interventions to reach their aims and alternate between digital and in-person environments to form new networks. Still, the definition of the formal state practices is at the heart of the process. The understanding of participation and democracy varies considerably among civil servants, decision-makers and residents and, in many ways, OmaStadi PB has become an arena for voicing these concerns.

7 Conclusion

With shifting modes of governance in the age of digitalisation and entrepreneurial politics, citizen participation has undergone considerable revision. These developments have reframed (digital) citizen participation as both a hegemonic and neoliberal strategy to govern and introduced novel leverage for social movements and grassroots practices to take part in formal decision-making processes. To move beyond a simplistic and binary logic of citizen participation – bottom-up/top-down and formal/informal – the conceptualisation of a context-sensitive framework has been useful as an analytical lens through which to study digital citizen participation in a comparative context. While the valued aspects of citizen participation are structured in different ways, the case studies have shown that, first, despite the differences in structuring and executing participatory processes, digital citizen participation fosters novel multi-actor networks negotiating governance of the urban

space. Second, the digital and analogue environments are brought together in participatory processes and the participants have to find balance in shifting scales between often radically different environments. Acknowledgement and understanding of this multi-layered hybridity are central for studies of citizen participation. Third, the new modes of governance enable novel senses of informality in participation and often enhance previous senses. Digital participatory processes are never neutral, and it is important to track down temporal continuities and discontinuities of participatory politics. Therefore, it seems crucial to move beyond simplistic categorisations of citizen participation to acknowledge the complex multi-hybrid terrain of digital transformations. The framework suggested serves as a starting point for this. Further research on the implications and practices of digital citizen participation needs to be conducted to validate and adapt the framework in varying contexts.

Acknowledgements

The case study from Zürich, Switzerland, is part of a research project funded by the Swiss National Science Foundation. The case study carried out in Lubbock, Texas, received substantial support from the Huckabee College of Architecture at Texas Tech University. The Helsinki case study has been funded by NordForsk (grant no. 100855) and Business Finland (Co-Creation Radar).

References

Ahonen, V. L., & Rask, M. T. (2019). Osallistuvan budjetoinnin mallit ja trendit Suomessa vuosina 2009–2018. https://www.kuntaliitto.fi/julkaisut/2019/1985-osallistuvan-budjetoinnin-mallit-ja-trendit-suomessa.

Allmendinger, P. (2017). *Planning theory*. Palgrave.

Amt für Städtebau Stadt Zürich (AfS). (2022). *Testplanung Seeufer Wollishofen. Abschlussbericht*. https://www.stadt-zuerich.ch/hbd/de/index/staedtebau/planung/entwicklungsgebiete/seeufer-wollishofen.html#schlussbericht.

Anastasiu, I. (2019). Unpacking the smart city through the lens of the right to the city: A taxonomy as a way forward in participatory city-making. In M. de Lange & M. de Waal (Eds.), *The hackable city: Digital media and collaborative city-making in the network society* (pp. 239–260). Springer.

Arnstein, S. R. (2019). A ladder of citizen participation. *Journal of the American Planning Association, 85*(1), 24–34. https://doi.org/10.1080/01944363.2018.1559388.

Blokland, T., Hentschel, C., Holm, A., Lebuhn, H., & Margalit, T. (2015). Urban citizenship and right to the city: The fragmentation of claims. *International Journal of Urban and Regional Research, 39*(4), 655–665. https://doi.org/10.1111/1468-2427.12259.

Brenner, N. (2001). The limits to scale? Methodological reflections on scalar structuration. *Progress in Human Geography, 25*(4), 591–614. https://doi.org/10.1191/030913201682688959.

Brenner, N. (2004). *New state spaces: Urban governance and the rescaling of statehood*. Oxford University Press.

Burns, R., & Welker, P. (2023). Interstitiality in the smart city: More than top-down and bottom-up smartness. *Urban Studies, 60*(2), 308–324. https://doi.org/10.1177/00420980221097590.

Cabannes, Y., & Lipietz, B. (2018). Revisiting the democratic promise of participatory budgeting in light of competing political, good governance and technocratic logics. *Environment and Urbanization, 30*(1), 67–84. https://doi.org/10.1177/0956247817746279.

Ertiö, T.-P., Tuominen, P., & Rask, M. (2019). Turning ideas into proposals: A case for blended participation during the participatory budgeting trial in Helsinki. In P. Panagiotopoulos, N. Edelmann, O. Glassey, G. Misuraca, P. Parycek, T. Lampoltshammer & B. Re (Eds.), *Electronic participation: 11th IFIP WG 8.5 International Conference, ePart 2019, San Benedetto del Tronto, Italy, September 2–4, 2019, proceedings* (pp. 15–25). Springer. https://doi.org/10.1007/978-3-030-27397-2_2.

Harvey, D. (1989). From managerialism to entrepreneurialism: The transformation in urban governance in late capitalism. *Geografiska Annaler, 71*(1), 3–17. https://doi.org/10.1080/04353684.1989.11879583.

Helsinki City Board. (2017, November 3). Kaupunginhallitus. Helsingin kaupunginhallituksen pöytäkirja 40/2017, Asia/44, Osallisuusmallin toimeenpano ja rahoitus. https://www.hel.fi/static/public/hela/Kaupunginhallitus/Suomi/Paatos/2017/Keha_2017-11-13_Khs_40_Pk/EFD2A757-4ED3-C16C-A893-5FDE2A300001/Osallisuusmallin_toimeenpano_ja_rahoitus.pdf.

Herzfeld, M. (2016). *Cultural intimacy: Social poetics and the real life of states, societies and institutions* (3rd ed.). Routledge.

Horelli, L., Saad-Sulonen, J., Wallin, S., & Botero, A. (2015). When self-organization intersects with urban planning: Two cases from Helsinki. *Planning Practice & Research, 30*(3), 286–302. https://doi.org/10.1080/02697459.2015.1052941.

Kemp, A., Lebuhn, H., & Rattner, G. (2015). Between neoliberal governance and the right to the city: Participatory politics in Berlin and Tel Aviv. *International Journal of Urban and Regional Research, 39*(4), 704–725. https://doi.org/10.1111/1468-2427.12262.

Kimic, K., & Polko, P. (2022). Greenery as a matter of security for citizens involved in digital crime mapping by the use of GIS-based tool in Poland. In J. Fialová (Ed.), *Public recreation and landscape protection – with environment hand in*

hand …: Conference proceedings, 9–10 May 2022 (pp. 152–156). http://dx.doi.org/10.11118/978-80-7509-831-3-0152.

Linkes Seeufer für Alle (LSFA) [@linkesseeuferfueralle]. (n.d.). *Posts* [Instagram Profile]. Instagram. https://www.instagram.com/linkesseeuferfueralle/?hl=de.

Linkes Seeufer für Alle (LSFA). (2021). *Stadtidee: Linkes Seeufer Für Alle – Nachbarschaftsevent*. Stadtidee "Mitwirken an Zürichs Zukunft". https://mitwirken.stadt-zuerich.ch/processes/stadtidee/f/21/proposals/387.

Linkes Seeufer für Alle (LSFA). (2022). *Umsetzung: linkes Seeufer Für Alle – Nachbarschaftsevent*. Stadtidee "Mitwirken an Zürichs Zukunft". https://mitwirken.stadt-zuerich.ch/processes/stadtidee/f/313/results/188.

Lubbock City Council. (2023a). City council meeting minutes and agendas. https://ci.lubbock.tx.us/departments/city-secretary/council-minutes.

Lubbock City Council. (2023b). City government. https://ci.lubbock.tx.us/.

McFarlane, C. (2012). Rethinking Informality: Politics, Crisis, and the City. *Planning Theory & Practice*, 13(1), 89–108. https://doi.org/10.1080/14649357.2012.649951.

Mehan, A. (2023). The role of digital technologies in building resilient communities. *Bhumi: The Planning Research Journal, 10*(1), 33–40. https://doi.org/10.4038/bhumi.v10i1.92.

Mehan, A., & Mostafavi, S. (2023). Portcityscapes as liminal spaces: Building resilient communities through parasitic architecture in port cities. In S. Haq & A. Sharag-Eldin (Eds.), *ARCC 2023 conference proceedings: The research – design interface* (pp. 631–639). Architectural Research Centers Consortium.

Mehan, A., Nawratek, K., & Tahar, F. (2022). Beyond community inclusivity through spatial interventions. *Writingplace: Journal for Architecture and Literature, 6*, 136–147. https://doi.org/10.7480/writingplace.6.6361.

Mostafavi, S., & Mehan, A. (2023). De-coding visual cliches and verbal biases: Hybrid intelligence and data justice. In M. del Campo (Ed.), *Diffusions in architecture: Artificial intelligence and image generators* (pp. 150–159). Wiley.

Pierce, J., Martin, D. G., & Murphy, J. T. (2011). Relational place-making: The networked politics of place. *Transactions of the Institute of British Geographers, 36*, 54–70. https://doi.org/10.1111/j.1475-5661.2010.00411.x.

Polco. (2019). https://polco.us/.

Polko, P. (2022). Citizen's involvement in the shaping of local security by the use of a digital crime mapping tool based on GIS. *Politeja, 19*(4) (no. 79), 203–218. https://doi.org/10.12797/Politeja.19.2022.79.12.

Polko, P., & Kimic, K. (2024). National Map of Security Threats as a citizen involvement tool for planning safer urban public spaces. *Urban Planning, 9*(1), 7156. https://doi.org/10.17645/up.7156.

Rask, M., Ertiö, T., Tuominen, P., & Ahonen, V. (2021). Final evaluation of the city of Helsinki's participatory budgeting: OmaStadi 2018–2020. BIBU project. https://bibu.fi/final-evaluation-of-helsinki-participatory-budgeting/.

Rose, N. (1996). The death of the social? Refiguring the territory of government. *Economy and Society, 25*(3), 327–356. https://doi.org/10.1080/03085149600000018.

Roy, A. (2009). The 21st-century metropolis: New geographies of theory. *Regional Studies, 43*(6), 819–830. https://doi.org/10.1080/00343400701809665.

Smith, N. R. (2014). Beyond top-down/bottom-up: Village transformation on China's urban edge. *Cities, 41*, 209–220. https://doi.org/10.1016/j.cities.2014.01.006.

Statistik Stadt Zürich. (2023). *Quartierspiegel Wollishofen*. https://www.stadt-zuerich.ch/content/dam/web/de/politik-verwaltung/statistik-und-daten/publikationen-dienstleistungen/publikationen/quartierspiegel/pdf/Quartierspiegel_021-Wollishofen_2023.pdf.

Szyszka, M., & Polko, P. (2020). Interactive maps of social problems and security threats illustrated with an example of solutions currently used in Upper Silesia. *Sustainability, 12*(3), 1229. https://doi.org/10.3390/su12031229.

Vadiati, N. (2022). Alternatives to smart cities: A call for consideration of grassroots digital urbanism. *Digital Geography and Society, 3*. https://doi.org/10.1016/j.diggeo.2022.100030.

Varış Husar, S. C., Mehan, A., Erkan, R., Gall, T., Allkja, L., Husar, M., & Hendawy, M. (2023). What's next? Some priorities for young planning scholars to tackle tomorrow's complex challenges. *European Planning Studies, 31*(11), 2368–2384. https://doi.org/10.1080/09654313.2023.2218417.

Ward, K., Imbrescio, D., Martin, D., Stone, C., Whelan, R., Miraftab, F., & Cochrane, A. (2011). Urban politics: An interdisciplinary dialogue. *International Journal of Urban and Regional Research, 35*(4). https://doi.org/10.1111/j.1468-2427.2011.01055.x.

Yiftachel, O. (2009). Theoretical notes on "gray cities": The coming of urban apartheid? *Planning Theory, 8*(1), 88–100. https://doi.org/10.1177/1473095208099300.