

# Citizen Participation, Digital Agency, and Urban Development

Simone Tappert <sup>1</sup>, Asma Mehan <sup>2</sup>, Pekka Tuominen <sup>3</sup>, and Zsuzsanna Varga <sup>4</sup>

<sup>1</sup> Institute for Social Planning, Organisational Change and Urban Development, University of Applied Sciences Northwestern Switzerland, Switzerland

<sup>2</sup> Huckabee College of Architecture, Texas Tech University, USA

<sup>3</sup> Centre for Consumer Society Research, University of Helsinki, Finland

<sup>4</sup> College of Social Sciences, University of Glasgow, UK

**Correspondence:** Simone Tappert ([simone.tappert@fhnw.ch](mailto:simone.tappert@fhnw.ch))

**Submitted:** 3 November 2023 **Published:** 16 January 2024

**Issue:** This editorial is part of the issue “Citizen Participation, Digital Agency, and Urban Development” edited by Simone Tappert (University of Applied Sciences Northwestern Switzerland), Asma Mehan (Texas Tech University), Pekka Tuominen (University of Helsinki), and Zsuzsanna Varga (University of Glasgow), fully open access at <https://doi.org/10.17645/up.i327>

## Abstract

Today’s exponential advancement of information and communication technologies is reconfiguring participatory urban development practices. The use of digital technology implies new forms of decentralised governance, collaborative knowledge production, and social activism. The digital transformation has the potential to overcome shortcomings in citizen participation, make participatory processes more deliberative, and enable collaborative approaches for making cities. While digital tools such as digital mapping, e-participation platforms, location-based games, and social media offer new opportunities for the various actors and may act as a catalyst for renegotiating urban space and collective goods, digitalisation can also perpetuate or even attenuate existing inequalities and exclusion. This editorial introduces the thematic issue “Citizen Participation, Digital Agency, and Urban Development” which focuses on the trajectories and (dis)continuities of citizen participation through digitalisation and elaborates this with examples from Europe and Asia on how the digital transformation impacts, challenges, or reproduces hegemonic power relations in urban development.

## Keywords

activism; citizen participation; digitalisation; multi-stakeholder; urban development

## 1. Introduction

Since the communicative turn in the 1990s, citizen participation has become a cornerstone of planning and developing urban spaces (Fischer & Forester, 1993; Harris, 2019). In its critical dimension, citizen

participation is defined as a pluralist, multi-stakeholder approach that recognises the political nature of planning and the competing interests between stakeholders and stresses the importance of local knowledge production (Blue et al., 2019). The aims of participatory urban development approaches are multifaceted, from establishing trust to fostering community building and identification, resolving conflicts, promoting deliberation, and empowering citizens (Pokharel et al., 2022).

The digital transformation and the advancement of information and communication technologies have reconfigured participatory practices of planning and developing urban spaces. Digital technologies are a crucial building block for enhancing deliberation and enabling a more communicative action-oriented process of planning and city creation (Houghton et al., 2015). The use of digital interfaces, digital tools, online platforms, or social media channels creates different engagement channels that enhance processes of local networking, exchange, discussion, community learning, and action and thereby allow for a citizen-centric approach with the potential of democratising public decision-making processes (Fredericks et al., 2018; Hovik & Giannoumis, 2022). Social movements and citizen-led initiatives use new technologies to renegotiate urban space and public goods, and to generate counter-spaces and resistance, leading to new paradigms such as radical openness, networked intelligence, and crowdsourced deliberation.

However, the expectation that digitalisation will overcome historical patterns of shortcomings in citizen participation in urban development, such as the inclusion of marginalised groups or allowing citizens to impact policy decisions, has yet to be achieved. “Digital participation is often subject to the weaknesses or challenges of conventional participation” (Hovik & Giannoumis, 2022, p. 3), and a lack of access to digital technology, skills, and resources may reinforce the marginalisation of already disadvantaged groups and socio-spatial inequalities within cities or produce new mechanisms of exclusion.

## 2. Thematic Overview of the Issue

With the exception of two articles, this thematic issue is part of the European Cooperation in Science and Technology (COST) Action CA18204 which is entitled “Dynamics of Placemaking and Digitization in Europe’s Cities.” The issue includes ten articles with examples from Europe and Asia, bringing together a wide range of research exploring digital tools, practices, and programs fostering citizen participation and activist initiatives in different contexts. Overall, the articles comprise three thematic clusters: the first four articles focus on the development of digital tools and the digital enhancement of participatory approaches, dealing with citizen-centred perspectives and stakeholder cooperation. The second group discusses how digital tools such as platforms, public participation GIS, and social media are appropriated by activist initiatives and movements to challenge hegemonic urban planning and governance practices and, in the case of Iran, political regimes. The third group delves into the more technical aspects of digital participation, exploring the role of data analytics, user experience, and human-computer interaction in shaping participatory processes. These articles highlight the ways in which technological interfaces can be optimised for greater user engagement, feedback, and collaborative problem-solving.

### 2.1. Development of Tools for Participatory Approaches

Spoormans, de Jonge, Czischke, and Pereira Roders focus on an understudied phenomenon: the significant attributes of residential neighbourhoods from 1965–1985, assessed by various stakeholders with a digital

tool. The research is based on case studies in Amsterdam and Almere, the Netherlands. The results shed light on architecture that includes over 30% of the residential stock in the Netherlands but for which there is no consensus on its cultural significance. The article evaluates the benefits of the digital tool and provides recommendations for its improvements.

García-Esparza and Nikšič discuss the participatory assessment of living environments from the perspective of residents, analysing Slovenian and Spanish cases using a digitally embedded photovoice approach. The cases show how the use of digital tools broadens participation, promotes dialogue between communities and stakeholders, and improves community-centred urban planning processes. The approach proves valuable in understanding residents' attachment to their environment, values, and perspectives and can be adapted to different urban and rural settings, highlighting the importance of valuing local knowledge for future sustainable and culturally rich projects.

Kirdar and Çağdaş explore digital participation in urban planning, leveraging computational systems to amplify expert involvement. Their study hones a Bayesian decision support model for urban vibrancy, focusing especially on the likeability of streetscapes, with the Eminönü Central Business District in Istanbul, Turkey as the focal point. They use a Bayesian belief network (BBN)-based decision support system to find places where urban intervention is needed and “what-if” BBN scenarios to figure out what might happen. They argue that despite the promise of this approach, there are challenges in user interaction with spatial BBN tools. Their research integrates conditional and spatial considerations, marking a notable stride in digital participation in urban decision-making.

The article by Palmese, Carles Arribas, and Antolín delves into placemaking and soundscapes in Madrid's Puerta del Sol Square, Spain. Sound, as an influential factor in interpreting human-environment interactions, is examined through aesthetic and phenomenological listening. The complexity of these relationships goes beyond traditional definitions of subject and context. By employing the soundwalk method, the research investigates the in-situ soundscape's influence on urban living. The article concludes by proposing a comprehensive map that melds experiences with citizen insights, presenting an enriched view of a place's auditory environment.

## 2.2. Activism

Suter, Kaiser, Dušek, Hasler, and Tappert approach the Decidim platform, widely used in citizen participation initiatives, from the perspective of digital rights to the city. They study the institutional adoption of the platform and its impacts on local practices and negotiations for governing urban space. The argument situates Lefebvre's influential theorisation of “right to the city” in the context of the Swiss cities of Zurich and Lucerne. The aim of the article is to articulate how digital tools like Decidim can be introduced successfully, acknowledging the citizens' needs and what the limitations of their use are.

Harsia and Nummi study the use of public participation GIS tools to improve citizen participation in the renewal process of a marginalised urban area. The case study is situated in a notorious open-air shopping centre in Helsinki, Finland, and concentrates especially on how to increase the polyphony of urban planning. They argue for planning activism and a bottom-up approach to collect participatory data and to improve

the questionnaires used in the participatory work. The article provides a timely critique for understanding the questions of inclusion and diversity in a more dynamic and accurate manner.

Mehan uses the example of the recent feminist movement in Iran to explore how social media and digital art are being used to challenge social norms and reclaim space. She highlights symbolic acts of resistance and using digital spaces for activism. While digital platforms offer opportunities for communication and advocacy, they also come with limitations such as surveillance and misinformation. The Woman, Life, Freedom movement in Iran is an important example of digital feminist activism that has challenged gender norms and pushed for equality.

### **2.3. Interaction and Analytics in Digital Participation**

Mavrič and Čebren Lipovec focus on the negotiations of contested spaces and dissonant heritage in Koper/Kapodistria in Slovenia. Their aim is to explore specifically how the type of communication (in this case Facebook groups) affects and reflects the processes shaping the urban environment. In Koper, eventful and often tense historical narratives have re-emerged in interesting ways in the digital realm in recent years. The authors approach these historical layers by building a detailed analysis of the complex relationship between social media tools and specific historical locations.

The article by Polko and Kimic delves into the National Map of Security Threats in Poland, a GIS-based tool introduced in 2016. It enables the digital mapping of crime and threats, utilising citizen-contributed volunteered geographic information. The map identifies 26 threat categories, but a study conducted in 2022 emphasises traffic, alcohol, drugs, and, surprisingly, greenery as the main concerns. This rise in greenery-related concerns underscores its importance in future urban safety planning.

The article by Smaniotto Costa, García-Esparza, and Kimic examines three participatory budgeting projects in Lisbon (Portugal), Warsaw (Poland), and Valencia (Spain). The projects showcase diverse participatory practices united by a common goal of creating a more responsive, environmentally friendly urban environment. The authors show that information and communication technologies, including social media, play a key role in supporting stakeholder engagement and online voting. The examples show that digital citizen participation in urban planning goes beyond the choice of tools and should focus on providing channels for dialogue and knowledge sharing.

## **3. Conclusion**

This rich set of articles underscores the potential of digital technologies in creating liveable, sustainable, and resilient cities through participatory approaches, with citizens playing a central role in actively shaping urban futures. The thematic issue shows how important it is to employ both analogue and digital participatory approaches to address and include the diverse voices and needs and how local knowledge production can be harnessed through digital tools to enrich urban development processes.

The emphasis on activism, particularly in the digital realm, is noteworthy. Digital tools have equipped activists with powerful means to contest the prevailing power structures, as showcased in the discussions on counter-hegemonic spaces and practices. In particular, social media stands out as a potent tool for

mobilisation, awareness, and resistance. Its decentralised nature allows for the emergence of grassroots movements that can challenge and, at times, subvert established norms and power dynamics. Yet, the role of social media also warrants critical scrutiny, given its potential both to amplify and to suppress voices, depending on the algorithms and policies that govern these platforms.

One of the more important outcomes of this thematic issue is that technology is not a panacea. Although it provides innovative solutions and unheard-of opportunities for citizen engagement, the current power structures and decision-making processes ultimately mediate its impact. Digital tools, no matter how advanced, can be rendered ineffective if they are deployed within rigid, top-down governance structures resistant to genuine public participation. In such contexts, the very tools meant to democratise and diversify can inadvertently perpetuate existing hierarchies and exclusions.

### Acknowledgments

We would like to thank all the authors, peer-reviewers, and the journal's staff and editor for making this thematic issue possible. This thematic issue is based upon work from COST Action DOPMADE, CA18204, supported by COST (European Cooperation in Science and Technology).

### Conflict of Interests

The authors declare no conflict of interests.

### References

- Blue, G., Rosol, M., & Fast, V. (2019). Justice as parity of participation. Enhancing Arnstein's ladder through Fraser's justice framework. *Journal of the American Planning Association*, 85(3), 363–376.
- Fischer, F., & Forester, J. (1993). *Argumentative turn in policy analysis and planning*. Duke University Press.
- Fredericks, J., Hespanhol, L., Parker, C., Zhou, D., & Tomitsch, M. (2018). Blending pop-up urbanism and participatory technologies: Challenges and opportunities for inclusive city making. *City, Culture and Society*, 12(1), 44–53.
- Harris, M. (2019). *A future for planning: Taking responsibility for twenty-first century challenges*. Routledge.
- Houghton, K., Foth, M., & Miller, E. (2015). Urban acupuncture: Hybrid social and technological practices for hyperlocal placemaking. *Journal of Urban Technology*, 22(3), 3–19.
- Hovik, S., & Giannoumis, A. (2022). Linkages between citizen participation, digital technology, and urban development. In S. Hovik, G. A. Giannoumis, K. Reichborn-Kjennerud, J. M. Ruano, I. McShane, & S. Legard (Eds.), *Citizen participation in the information society: Comparing participatory channels in urban development* (pp. 1–24). Springer.
- Pokharel, A., Milz, D., & Gervich, C. D. (2022). Planning for dissent. *Journal of the American Planning Association*, 88(1), 127–134.

### About the Authors



**Simone Tappert** is an urban anthropologist and senior researcher at the School of Social Work, University of Applied Sciences Northwestern Switzerland. Her research, teaching, and consultancy activities focus on urban social sustainability, co-creation, transformative neighbourhoods, community work, and digitalisation in European cities.



**Asma Mehan** (PhD) is a researcher, educator, and architect working at the intersection of architectural humanities and critical urban studies. She is currently an assistant professor at the Texas Tech University College of Architecture. She is the author of the books *Tehran: From Sacred to Radical* (Routledge, 2022) and *Kuala Lumpur: Community, Infrastructure, and Urban Inclusivity* (Routledge, 2020). She has authored over 50 articles and essays in scholarly books and professional journals in multiple languages, such as English, Persian, and Italian, on critical urban studies, architecture, urban planning, housing, and heritage studies.



**Pekka Tuominen** is a social and cultural anthropologist specialising in urban transformation, the sociocultural qualities of space, and the moral dimensions of urbanity. He is currently senior research fellow at the University of Helsinki for the Nordforsk-funded COLDIGIT research consortium. His current research concentrates on urban transformation, segregation, and citizen participation in Helsinki.



**Zsuzsanna Varga** is a cultural historian specialising in Central European history and literature. She works as senior lecturer at the University of Glasgow in the Department of Central and East European studies. Her past research focused on East European travel writing, while recent work covered film history (*Popular Cinema in East Central Europe*, 2017) and urban literary history (*Bilingual Authors, Multilingual Printing Presses and 'Informal Capital': Pest-Buda in the Early Nineteenth Century*, 2022). Her current work focuses on studies in urban literary heritage.