

Smart Engagement and Smart Urbanism: Integrating "The Smart" Into Participatory Planning and Community Engagement

Jung, Jin-Kyu; Kang, Jung Eun

Veröffentlichungsversion / Published Version

Zeitschriftenartikel / journal article

Empfohlene Zitierung / Suggested Citation:

Jung, J.-K., & Kang, J. E. (2023). Smart Engagement and Smart Urbanism: Integrating "The Smart" Into Participatory Planning and Community Engagement. *Urban Planning*, 8(2), 1-5. <https://doi.org/10.17645/up.v8i2.7034>

Nutzungsbedingungen:

Dieser Text wird unter einer CC BY Lizenz (Namensnennung) zur Verfügung gestellt. Nähere Auskünfte zu den CC-Lizenzen finden Sie hier:

<https://creativecommons.org/licenses/by/4.0/deed.de>

Terms of use:

This document is made available under a CC BY Licence (Attribution). For more information see:

<https://creativecommons.org/licenses/by/4.0>

Editorial

Smart Engagement and Smart Urbanism: Integrating “The Smart” Into Participatory Planning and Community Engagement

Jin-Kyu Jung ^{1,*} and Jung Eun Kang ²

¹ School of Interdisciplinary Arts and Sciences, University of Washington Bothell, USA

² Department of Urban Planning and Engineering, Pusan National University, Republic of Korea

* Corresponding author (jkjung5@uw.edu)

Submitted: 21 April 2023 | Published: 27 April 2023

Abstract

The smart city epitomizes a new paradigm shift in urban planning, policy, and cities. Smart cities require and are powered by smart city principles to succeed, including smart technologies, smart infrastructure, and smart governance; however, they also need to engage closely with the citizens who are most affected by the deployment of the smart city and who also embrace the diverse perspectives, experiences, and opportunities of living in smart cities, i.e., smart engagement. What would be forms of collaborative democracy and inclusive citizen participation in smart city planning? To what extent can smart city planning respond and address inequality, justice, and social and digital division? How can we create community-based climate change planning with the smart? What would be a smart community platform that supports smart engagement, and how do cities around the world establish smart city policy and assess the impact on smart engagement? This thematic issue aims to answer these questions by exploring new visions, facets and methods, practices, and tools for enabling smart engagement. Drawing on research from various countries and cities across the world, the contributions bring new prospects of smart engagement and smart urbanism and illuminate how the theory, plan and policy, and practices of smart engagements are binding to the extent of citizen participation and engagement in smart cities.

Keywords

community engagement; inclusive planning; smart engagement; smart governance; smart urbanism

Issue

This editorial is part of the issue “Smart Engagement With Citizens: Integrating “the Smart” Into Inclusive Public Participation and Community Planning” edited by Jin-Kyu Jung (University of Washington) and Jung Eun Kang (Pusan National University).

© 2023 by the author(s); licensee Cogitatio Press (Lisbon, Portugal). This editorial is licensed under a Creative Commons Attribution 4.0 International License (CC BY).

1. Introduction

Space evolves and always becomes something. The theory of space lays the foundation for us to gain new insights into urban space. The meanings of space are contextualized not only by physical but also by social, cultural, political, historical, and now digital environments of people’s everyday experiences. We take a somewhat conscious approach and practice of deciphering urban spaces through back-and-forth negotiations between different conceptualizations to fully reveal and (re-)value urban “spatiality” that might not be so visible from its current outward appearance. Re-imaging urban spatiality requires a creative re-thinking of space, and it is criti-

cal or even a pre-requisite for understanding urban transformation like smart cities and smart urbanism.

The smart city discourse represents a new paradigm shift in urban planning and cities. Smart cities require and are powered by smart city principles to succeed, including smart technologies, infrastructure, and governance; however, they also need to engage closely with the citizens in embracing the diverse perspectives, experiences, and opportunities of living in smart cities. Creative engagements/encounters with ordinary citizens are essential for unbinding possibilities of creating inclusive smart communities that enhance citizen participation, providing meaningful educated information, advocating for greater equity in public policies, and ultimately

empowering citizens (Coe et al., 2001; Harvey, 2000; Visvizi & Lytras, 2019; Zukin, 1995).

The smart city discourses often focus on a techno-centered digital solution to urban problems/issues to make cities more responsive, efficient, sustainable, and intelligent. It considers the use of technical or technological infrastructures and interventions as a means to ensure optimum efficiency with regard to urban planning and sustainable development (Goodman et al., 2020; Hollands, 2008; Roche, 2014). However, smart cities can also be built based more on collaborative, democratic approaches in which cities provide access to data and allow citizens to be part of the urban innovation process, thus building city governance through open and participatory people-centric approaches (Cardullo & Kitchin, 2019; Helgason, 2002; Lee & Lee, 2014; O’Grady & O’Hare, 2012). Community engagement and citizen participation are not exclusive to smart cities and smart city planning (Arnstein, 1967; Innes & Booher, 2004; Staeheli, 2005); however, smart cities have shed new light on these concepts and practices by providing new means to enable inclusive public citizen participation in the urban and community planning process. There is a potential for smart engagement to represent the kind of direct democracy and participatory planning that define a vibrant civil society, with citizens engaged as active participants in the inclusive planning process with the ability to connect humans through physical, digital, online, and hybrid engagement.

This thematic issue aims to explore various new visions, facets and methods, practices, and tools of smart engagement, in which smart technologies, infrastructure and governance, and inclusive planning processes foster social inclusion, democratization, communications, and engagements with the citizens. They bind the prospect of smart communities in which citizens are actively involved in designing smart cities as users/consumers, as well as participants and co-producers. This thematic issue also responds to the need to understand how citizen engagement in smart city planning is practiced in different contexts, in particular, drawn from empirical case studies from transnational perspectives and evidence.

2. Overview of the Thematic Issue

The first article by Anderson and Jung (2023) explores alternative possibilities for cooperative, equitable, and participatory forms of smart urbanism grounded in community and place-based resources and priorities. They connect these possibilities to ongoing debates and experiments with commons and commoning in relation to two examples from community organizing in Seattle, Washington, USA—King County Equity Now and The Black Brilliance Research Project. They are gesturing toward more generative open-ended “smart” processes that engage a heterogeneous and *already* existing significant amount of community-embedded and place-based knowledge, capabilities, and institutional capacities, and

how these could be central within smart urbanist orientations. They suggest “smart commoning” as a conceptual and processual question rather than a practical or technocratic one and what and how it may afford us, not just a simple critique to the often troubling agendas behind smart urbanism or the gaps between smart ambitions and their implementation, but an effort for thinking deeply about the smart technologies, processes, models, and rules of shared engagement and forms of commitment and resource cultivation that could augment and develop existing urban place-based community knowledge and capacity and social infrastructures. It prompts us to think about how and what smart digital technologies, innovations, and processes can be used to enhance these.

By undertaking an integrative review of the literature and national planning policies across Britain, Charlton et al. (2023) provide an updated narrative around smarter engagement in planning that can recontextualize the meaningful translation of data into decisions via human judgment and knowledge. They present a “digital turn” in the planning systems with the emerging discussions around PlanTech in policy, industry, and research and keenly point out the need for the policy to adopt “phygital” (both digital and physical) methods to ensure high-quality citizen input and to improve their engagement in planning. Their proposed conceptual model for participatory phygital planning identifies seven characteristics of smart engagement (e.g., interoperability, integration, intelligence, inclusion, intentionality, interfaces, and invisibility) and three pillars for smart engagement (e.g., well-informed residents, well-resourced planners and municipalities, and methods for public participation).

Choo et al. (2023) analyze the various approaches to citizen engagement in South Korea, particularly the living labs. The article identifies the barriers that discourage sustainable citizen engagement and the inclusiveness of smart city plans (SCPs). In South Korea, the Act on the Promotion of Smart City Development and Industry requires all local governments to have an SCP before initiating a smart city project, and more than 20 percent of all cities in Korea have adopted SCPs as of 2022 (The Ministry of Land, Infrastructure, and Transport, 2021). The living lab, as an active approach for citizen participation in urban planning, is widely utilized in South Korea’s SCPs; however, Choo et al. argued that most local governments have hitherto only conducted living labs in a limited capacity, for example, only for identifying issues but have never moved up to more participatory planning stages, such as problem-solving and implementation.

Two articles particularly point out a need for more representations of marginalized populations in the planning process. By reviewing planning documents and engagement data from five small cities in the USA, Kashem and Gallo (2023) analyze how racial and ethnic minority communities are participating in the planning process and what kinds of smart community engagement methods are being applied. Shtebunaev et al.

(2023) identify key considerations for planners and smart city practitioners to engage with the youth, specifically teenagers, who are assumed to possess the necessary digital skills; however, they are often overlooked in the participatory planning processes. Their findings show continuous barriers to participation for minority and marginalized populations and the need to provide different modes of public engagement opportunities for a diverse group based on their preferences, including multiple platforms, such as online, radio, newsletters, blogs, and newspapers, and also in various languages. Young people are usually marginalized as not present but as “future” citizens. Teenagers, as “present” citizens, are aware of and perceive digital technologies and smart cities, and they have critical perspectives on smart city models and future smart city visions and aspirations. The engagements with marginalized groups in smart city planning require a proactive and even transformative process that includes diverse voices, allowing alternative conversations about values and visions of smartness in creating future cities.

Devine-Wright and Davies (2023) rightly so warn of uncritical and generic use of concepts like “smart” and “quadruple helix” and how they may become “empty signifiers” (Caprotti & Cowley, 2019) and, in their terms, “rhetorical devices” used by government and academia to promote and legitimate, rather than improve, challenge, and transform existing engagement practices. To understand how citizen engagement in smart initiatives is actually practiced in different contexts and frameworks, this article examines two recently established but contrasting smart districts within the broader Smart Dublin program that explicitly embraces a quadruple helix partnership model among government, academia, and industry. Their findings echo what we see from other articles in this thematic issue that indicates a disjuncture between the goal of creating a meaningful two-way engagement process used to incorporate citizens’ voices into SCPs and actions. The residents in Smart Dublin share that the interventions were seen as only lightly addressing the root causes of the issues, as an example of “smart washing.” These persistent digital divides can be accentuated during and post-pandemic and may not be considered in the rolling out of digital engagement, which may become barriers to participatory planning.

How can a smart city environment help people to choose healthy walking? The article by E. J. Kim and Gong (2023) analyzes the environmental factors that make people walk healthier, such as greenery, waterfront areas, and low traffic volumes. It demonstrates the use of information technology that collects, analyzes, and represents environmental information in real-time from environmental sensors and the potential of smart technology. A mobile route-finding application is an excellent example of smart technology to promote healthy walking and living.

Park and Fujii (2023) present the second case study of an increasingly adopted citizen-centric living lab method-

ology based in South Korea. The first living laboratory in the country, the *Seongdaegol* Living Lab, demonstrates active engagement and improved knowledge about community through the participation of the living lab and how it elevates civic pride and creates a more positive attitude toward applying the living lab to smart city development. However, it reminds us that challenges to implementing living labs in SCP still need to be addressed, such as the need for a transparent governance structure, managing diverse stakeholders, keeping participants engaged and motivated during the process, and scalability of solutions.

Y.-K. Kim, Lee, et al. (2023) seek alternative community street lighting by applying the natural surveillance principle of crime prevention through environmental design in a historic community in Busan, South Korea. The article explores the applicability of Relux Pro, a program that identifies the gaps in lighting and simulates the improvement of night lighting in the community. It is a smart visualization tool that can be used for citizen engagement in the participatory planning process, where the communication tools are most effectively used.

Another contribution from Busan, T. H. Kim, Park, et al. (2023) make a strong case for the need to plan climate-smart cities and how consciously planned climate policy can support climate actions to respond to the impacts of climate change. The article focuses on analyzing the gap between heat wave effects and heat wave adaptation policy in municipalities in South Korea. Using a fuzzy analytic hierarchy process, their results suggest the need to establish heat wave adaption policies based on continuous feedback on the predictions of future heat wave effects, acknowledging that adaptation policies have not sufficiently matched the level of heat wave effects closer to the long-term future.

From the city of Odense, Denmark, the final article of the thematic issue by Carstensen and Skow-Petersen (2023) introduces the GPS-tracking project intended to understand marginalized citizens’ spatial behaviors and map out their spatial patterns. The perspectives of marginalized citizens, representatives of marginalized citizens, municipal professionals, and city planners are gathered through three separate workshops reflecting the processes and outcomes of the GPS project. Expectedly so, the project’s validity, relevance, and applicability are assessed differently by three different participating groups. Although there are limitations, for example, the limited capacity that the GPS maps can provide insights into spatial dynamics and how they can only give time-limited partial snapshots, the project provides us with the potential to create a collaborative platform for trans-disciplinary and cross-sectoral collaboration space that citizens can share their visions of the inclusive city. Although the (smart) technology itself cannot create a holistic picture of the urban problems, the (mapped) space created by the technology proves effective in empowering marginalized citizens: affordance of

smart technology for creating a participatory process and space.

3. Conclusion

A common characteristic of many smart city programs and projects is the reliance on technologies, and they are often considered the foundation of smart cities (e.g., ICTs, sensors, cameras, IoTs, computers, GIS, and maps). Even newer smart technologies are being implemented in new smart city development (e.g., big data, cloud, AI, blockchain, and digital twins). It is essential to understand how these new digital smart technologies and infrastructures become pervasive and interconnected and how they are embedded in urban space and people's everyday life. However, from an urban (planning and geography) perspective, also based on our own experiences of living in the city, we, however, know that cities have a full culture, politics, competing interests, and even wicked problems/tensions (Leszczynski, 2018), and they are complex and ever-evolving, full of interdependent, contingent and relational actors, processes, and relationships. Cities are also challenging to predict and develop in capricious ways. To us, it is a question of "smart urbanism," as the way/mode of life, attitude, values, and patterns of behavior fostered in smart urban life and setting. Smart urbanism enhances citizen engagement and improves how the smart city includes citizens in the policy and planning process, as the selected articles within this thematic issue highlight.

The thematic issue provides evidence of why we need smart city planning based on a more nuanced and relational understanding of cities and generate more questions. How can we proactively re-think our own vision of smart urbanism and smart engagement? For whom and for what purposes should smart cities be developed? Are there benefits for certain populations or areas of the city and not for other people and space? What about significant urban problems left out of traditional smart city models, such as marginalizing communities, failing schools and health systems and jobs, and so on? How can smart cities create more democratic and emancipatory smart governance? Considering several contributions from non-Global North, how can we create equal geography of smart cities across the city, region, and the world through just distribution and implementation of smart city ideologies, practices, and technologies? Different motivations and visions are embedded in other smart city planning and models. Urban imaginations of the future city are continuously realized/materialized.

The contributions in this issue clearly show us that there is a vital role in active and participatory digital citizenship in smart cities. They regard engaging with the citizens living in the city as central to smart city-making. Smart urbanism as a project of "futuring" anticipates socio-spatially (in)equitable cities and produces them. Smart urbanism is an opportunity to sell a desired future centered around digital technologies (Datta, 2019)

and control a potentially disorderly future through data-driven technologies. As Elwood (2020) and Leszczynski (2016) suggest, though, we want to approach smart urbanism beyond "hope and fear" framings. There might be time to make a difficult decision, for example, demoting the end goals of "efficiency and optimization" in favor of "meaningful inefficiencies" that favor connection and reflection—the opposite of dominant smart city trends (Halegoua, 2020, p. 148).

Smart engagement values "technology" to make citizens and communities "smart(er)." Yet, it also recognizes the importance of sociality/spatiality, ties, and relationship existing in the community contexts. It is important to continue to think about how these innovative technologies, tools, policies, practices, and visions demonstrated in this thematic issue can facilitate democratic, inclusive, and participatory processes to include (smart) citizens and local communities in the smart city planning and decision-making process. A creative digital engagement with ordinary citizens in their everyday life creates an ideal smart urbanism.

Acknowledgments

We would like to thank all contributing authors in this thematic issue and the reviewer who provided thoughtful suggestions. We also extend our appreciation and acknowledge the tremendous support of the Urban Planning editorial staff in preparing this thematic issue.

Conflict of Interests

The authors declare no conflict of interests.

References

- Anderson, C., & Jung, J.-K. (2023). For a cooperative "smart" city yet to come: Place-based knowledge, commons, and prospects for inclusive municipal processes from Seattle, Washington. *Urban Planning*, 8(2), 6–16.
- Arnstein, S. R. (1967). A ladder of citizen participation. *Journal of American Planning Association*, 35(4), 216–224.
- Caprotti, F., & Cowley, R. (2019). Varieties of smart urbanism in the UK: Discursive logics, the state, and local urban context. *Transactions of the Institute of British Geographers*, 44(3), 587–601.
- Cardullo, P., & Kitchin, R. (2019). Being a "citizen" in the smart city: Up and down the scaffold of smart citizen participation in Dublin, Ireland. *GeoJournal*, 84(1), 1–13.
- Carstensen, T. A., & Skow-Petersen, H. (2023). GPS tracking data on marginalised citizens' spatial patterns: Towards inclusive urban planning. *Urban Planning*, 8(2), 133–144.
- Charlton, J., Babelon, I., Watson, R., & Hafferty, C. (2023). Phygittally smarter? A critically pragmatic agenda for

- smarter engagement in British planning and beyond. *Urban Planning*, 8(2), 17–31.
- Choo, M., Choi, Y. W., Yoon, H., Bae, S. B., & Yoon, D. K. (2023). Citizen engagement in smart city planning: The case of living labs in South Korea. *Urban Planning*, 8(2), 32–43.
- Coe, A., Paquet, G., & Roy, J. (2001). E-governance and smart communities: A social learning challenge. *Social Science Computer Review*, 19(1), 80–93.
- Datta, A. (2019). Postcolonial urban futures: Imagining and governing India's smart urban age. *Environment and Planning D*, 37(3), 393–410.
- Devine-Wright, H., & Davies, A. R. (2023). What role for citizens? Evolving engagement in quadruple helix smart district initiatives. *Urban Planning*, 8(2), 70–80.
- Elwood, S. (2020). Digital geographies, feminist relationality, Black and queer code studies: Thriving otherwise. *Progress in Human Geography*, 45(2), 209–228.
- Goodman, N., Zwick, A., Spicer, Z., & Carlsen, N. (2020). Public engagement in smart city development: Lessons from communities in Canada's Smart City Challenge. *The Canadian Geographer*, 64(3), 416–432.
- Halegoua, G. R. (2020). *Smart cities*. The MIT Press.
- Harvey, D. (2000). *Spaces of hope*. Edinburgh University Press.
- Helgason, W. (2002, November 15). *Inclusion through a digital lens* [Paper presentation]. Thinking Smart Cities Conference, Ottawa, Canada.
- Hollands, R. G. (2008). Will the real smart city please stand up? *City: Analysis of Urban Trends, Culture, Theory, Policy, Action*, 12(3), 303–320.
- Innes, J. E., & Booher, D. E. (2004). Reframing public participation: Strategies for the 21st century. *Planning Theory & Practice*, 5(4), 419–436.
- Kashem, S. B., & Gallo, D. (2023). Smart engagement in small cities: Exploring minority participation in planning. *Urban Planning*, 8(2), 44–56.
- Kim, E. J., & Gong, Y. (2023). The smart city and healthy walking: An environmental comparison between healthy and the shortest route choices. *Urban Planning*, 8(2), 81–92.
- Kim, T. H., Park, C. S., Lee, S.-H., & Kang, J. E. (2023). Gap analysis between the level of heat wave adaptation policy and heat wave effects in South Korean municipalities. *Urban Planning*, 8(2), 120–132.
- Kim, Y.-K., Lee, Y.-K., & Kim, D. (2023). Natural surveillance for crime and traffic accidents: Simulating improvements of street lighting in an older community. *Urban Planning*, 8(2), 108–119.
- Lee, J., & Lee, H. (2014). Developing and validating a citizen-centric typology for smart city service. *Government Information Quarterly*, 31(1), S93–S105.
- Leszczynski, A. (2016). Speculative futures: Cities, data, and governance beyond smart urbanism. *Environment and Planning A*, 48(9), 1691–1708.
- Leszczynski, A. (2018). Digital methods I: Wicked tensions. *Progress in Human Geography*, 42(3), 473–481.
- O'Grady, M., & O'Hare, G. (2012). How smart is your city? *Science*, 335, 1581–1582.
- Park, J., & Fujii, S. (2023). Civic engagement in a citizen-led living lab for smart cities: Evidence from South Korea. *Urban Planning*, 8(2), 93–107.
- Roche, S. (2014). Geographic information science I: Why does a smart city need to be spatially enabled? *Progress in Human Geography*, 38(5), 703–711.
- Shtebunae, S., Gullino, S., & Larkham, P. J. (2023). Planning the smart city with young people: Teenagers' perceptions, values and visions of smartness. *Urban Planning*, 8(2), 57–69.
- Staeheli, L. A. (2005). Can American cities be sites of citizenship? What can we do about it? *Urban Geography*, 26(3), 197–199.
- The Ministry of Land, Infrastructure, and Transport. (2021). *Act on the promotion of smart city development and industry*.
- Visvizi, A., & Lytras, M. D. (2019). *Smart cities: Issues and challenges*. Elsevier.
- Zukin, S. (1995). *The culture of cities*. Blackwell.

About the Authors



Jin-Kyu Jung is a professor in the School of Interdisciplinary Arts and Sciences at the University of Washington Bothell. He is an urban geographer/planner who has a strong interest in critical and qualitative GIS and geovisualization.



Jung Eun Kang is a professor at the Department of Urban Planning and Engineering at Pusan National University, Republic of Korea. She received her PhD from Texas A&M University. She is teaching environmental planning, spatial analysis in urban planning, and disaster management planning. Her research explores city planning, urban form, climate change impacts and responses, and spatiotemporal big data.