



Selected Papers of #AoIR2023:
The 24th Annual Conference of the
Association of Internet Researchers
Philadelphia, PA, USA / 18-21 Oct 2023

EVOLVING SPATIALITIES OF DIGITAL LIFE: TROUBLING THE BOUNDARIES OF THE SMART CITY/HOME DIVIDES

Casey Lynch
University of Twente

Miriam E. Sweeney
University of Alabama

Introduction

Research on emerging digital geographies has tended to take ‘the city’ as a primary scale of analysis (Luque-Ayala, 2019), producing new insights around the smart city (Kitchin, 2014), platform urbanism (Barns, 2019a; Sadowski, 2020a), urban automation (Macrorie, Marvin, and While, 2020; Cugurullo, 2021), urban algorithmic governance (Leszczynski, 2016; Safransky, 2020) and other manifestations of a broader ‘digital urbanism.’ A related strand of scholarship has traced the emergence of various forms of smart home technologies (Maalsen, 2020, 2022; Goulden, 2021) and related domestic and intimate encounters with digital systems (Brause and Blank, 2020; Cockayne, Leszczynski, and Zook, 2017; Lynch, 2021). Within this work, some scholars have troubled scalar logics that might oppose the city to the home, such as by focusing on the ‘mundane’ (Leszczynski, 2020; Pink et al. 2017) or ‘everyday life’ (Barns, 2019b; Lynch and Farrokhi 2022) in human engagements with the digital in ways that cut across neat spatial divides. Despite this, much scholarship in digital geographies continues to focus on the city *or* the home as largely separate sites of analysis, or have otherwise avoided explicitly theorizing the relation between urban and domestic space in processes of digitalization.

Yet, feminist scholars have long troubled any neat separation of urban and domestic space as they have deconstructed the public-private binary and situated the home as a key site of social and political analysis and action (Marston, 2000; Katz and Monk, 1993). Most recently, Blunt and Sheringham (2019: p. 829) have called for research on home-city geographies “that encompasses the interconnectedness and porosity of urban domesticities and domestic urbanism.” Bringing together home studies and urban studies, this research agenda aims to “address the interplay between lived experiences

Suggested Citation (APA): Lynch, C. & Sweeney, M .E. (2023, October). *Evolving spatialities of digital life: Troubling the Boundaries of the Smart city/home divides*. Paper (or panel) presented at AoIR2023: The 24th Annual Conference of the Association of Internet Researchers. Philadelphia, PA, USA: AoIR. Retrieved from <http://spir.aoir.org>.

of urban homes and the contested domestication of urban space” (Ibid., p. 829-830) by exploring the complex entanglement of urban dwelling and mobility, including migration. Yet, as Koch and Miles (2021: p. 1384) point out, “Blunt and Sheringham’s discussion... does not consider the role that digital technology often plays in these processes.” Digital systems increasingly mediate intimate encounters in and beyond the home (Koch and Miles, 2021), determine access to (and experiences of) housing in the city (Fields, 2022), extend surveillance and securitization practices into the home (Jackman and Brickell, 2022), and are key to enactments of home by migrants in global cities (Cowen et al, 2020).

Four Conceptual Lenses

This conceptual/theoretical paper brings recent scholarship on digital geographies together with feminist insights on the relationship between domestic and urban space in order to explore emerging smart city domesticities and the urban entanglements of the smart home, and question how these categories are troubled by processes of digitalization. It explores the question of the smart home/city by reading it through a series of established analytical frames for reflecting on the relationship between domestic and urban space, namely: governance, domestication, thresholds, and dwelling.

1. *Governance*: Exploring domestic digital technologies as tools of governance that mediate the interplay of the city and home opens up new potentials for connecting the banal management of daily domestic life to the broader political agendas that organize society at both structural and interpersonal levels. The “datafied” smart home depends on deep levels of surveillance that embed the home in “diverse, extended systems of consumption and governmentality” that extend beyond the traditional understandings of domestic boundaries and governance (Dodge and Kitchin, 2009: 1362).
2. *Domestication*: What does it mean to feel at home in the digitally mediated city? Domestication explores how information networks structure belonging and intimacy in the city through the mechanisms of personalization that are traditionally associated with the home. Personalization relies on targeted advertising, surveillance, and data assemblages to create overlapping notions of place, cultivating an intimate connection between individuals and the city.
3. *Thresholds*: Thresholds draw focus to the myriad ways those boundaries are not simply transgressed but actively reproduced and/or renegotiated in processes of digitalization. In this section, we read recent literature on digital home-city spatialities through the lens of the threshold, tracing the ways distinctions between public and private spaces are actively reproduced and negotiated.
4. *Dwelling*: While the previous sections have traced how digital technologies are increasingly transgressing and/or reproducing traditional spatial divisions between home and city, a dwelling lens looks to complicate such divisions altogether through a focus on everyday experience.

Rather than highlight one or another frame as the most appropriate or accurate, we consider how each lens opens a distinct set of questions about the evolving spatialities of digital life and the ways they are enacted, negotiated, and potentially contested. To further illustrate this point, we briefly apply these lenses to the case of the Eco Delta Smart City in Busan, South Korea, an experimental smart city development built from the home up. Drawing on publicly available planning documents, journalistic reporting and published scholarship about the development, we use the case to demonstrate the different sets of questions that emerge through application of each of the four lenses.

Conclusion

Our theoretical exploration of the evolving spatialities of digital life has implications for research on “smart” spaces that are attuned to the ambiguity and indeterminacy of everyday life. Rather than using the home or the city (or another spatial unit) to define the scope or theme of research, we argue that using the lenses of *governance*, *domestication*, *thresholds*, and *dwelling* highlight the evolving geographies of digitalization in which home and/or city emerge in new ways as contingent, experiential, and far from certain. Troubling these boundaries may provide new footholds for digital scholars hoping to critically describe, map, and intervene on the processes of digitization that shape everyday life.

References

- Barns, S. (2019). *Platform urbanism: negotiating platform ecosystems in connected cities*. Springer Nature.
- Brause, S. R., & Blank, G. (2020). Externalized domestication: smart speaker assistants, networks and domestication theory. *Information, Communication & Society*, 23(5), 751-763.
- Cockayne, D., Leszczynski, A., & Zook, M. (2017). #HotForBots: Sex, the non-human and digitally mediated spaces of intimate encounter. *Environment and Planning D: Society and Space*, 35(6), 1115-1133.
- Cowen, D., Mitchell, A., Paradis, E., & Story, B. (Eds.). (2020). *Digital Lives in the Global City: Contesting Infrastructures*. UBC Press.
- Cugurullo, F. (2021). *Frankenstein urbanism: eco, smart and autonomous cities, artificial intelligence and the end of the city*. Routledge.
- Jackman, A., & Brickell, K. (2022). ‘Everyday droning’: Towards a feminist geopolitics of the drone-home. *Progress in Human Geography*, 46(1), 156-178.
- Katz, C. & Monk, J. (1993). Making connections: Space, place and the life course. In Katz, C. and Monk, J., Eds, *Full circles: Geographies of women over the life course*, New York and London: Routledge, 264–78.

- Kitchin, R. (2014). The real-time city? Big data and smart urbanism. *GeoJournal*, 79(1), 1–14. <https://doi.org/10.1007/s10708-013-9516-8>
- Koch, R., & Miles, S. (2021). Inviting the stranger in: Intimacy, digital technology and new geographies of encounter. *Progress in Human Geography*, 45(6), 1379-1401.
- Leszczynski, A. (2016). Speculative futures: Cities, data, and governance beyond smart urbanism. *Environment and Planning A: Economy and Space*, 48(9), 1691-1708.
- Leszczynski, A. (2020). Digital methods III: The digital mundane. *Progress in Human Geography*, 44(6), 1194-1201.
- Luque-Ayala, A. (2019). Urban. In *Digital Geographies*, Ash, Kitchin, and Leszczynski Eds. (pp. 24-35). SAGE.
- Lynch, C. R. (2021). Artificial Emotional Intelligence and the Intimate Politics of Robotic Sociality. *Space and Polity*, 25(2), 184-201.
- Lynch, C. R., & Farrokhi, B. (2022). Digital Geographies and Everyday Life: Space, Materiality, Agency. In *The Routledge Handbook of Methodologies in Human Geography* (pp. 196-206). Routledge.
- Maalsen, S. (2020). Revising the smart home as assemblage. *Housing Studies*, 35(9), 1534-1549.
- Maalsen, S. (2022). 'We're the cheap smart home': the actually existing smart home as rented and shared. *Social & Cultural Geography*, 1-20.
- Macrorie, R., Marvin, S., & While, A. (2021). Robotics and automation in the city: a research agenda. *Urban Geography*, 42(2), 197-217.
- Sadowski, J. (2020a). Cyberspace and cityscapes: On the emergence of platform urbanism. *Urban Geography*, 41(3), 448-452.