Mobility and Migration as Constituting Elements of Urban Society: Migration as a Gendered Process and How to Challenge Digital Universalism

MARIANNA CHARITONIDOU
ETH Zurich

Keywords: placemaking, gender studies, migration studies, social sustainability, big data, mobility justice, displacement, urban scale digital twins

The paper aims to present an ensemble of new theoretical frameworks that would allow historiographies of architecture and urban design to take into consideration the question of migration as a gendered process. Unauthorised immigration has emerged as a generalised fact in all Western economies in the post-Second World War era. In such a context, mobility and migration are constituting elements of urban society. Taking as a starting point the fact that domesticity is a construction of the nineteenth century, the main objective of this paper is to shed light on how migration challenges the concepts of user, domesticity and citizenship. Migrant incorporation triggers processes of place-making which open up new social and conceptual spaces in the city. Over the last four decades, there is a changing paradigm in migration studies. This shift is related to the fact that migration studies are gradually paying more and more attention to the gender composition of the migration streams. This trend of studying conjointly gender and migration phenomena becomes more and more dominant. Special attention is paid to methods of gender and migration scholarship that draw on social science approaches, treating gender as an institutional part of migration studies and establishing legitimacy for gender in migration studies. The paper reflects upon the implications of establishing methods based on the endeavour to merge migration studies, urban studies and gender studies for the perception of the concepts of placemaking, displacement and domesticity, on the one hand, and for how the mobility from city to city is understood within the contemporary transnational context, on the other hand. Particular emphasis is placed on the relationship between the migration processes and social sustainability. Additionally, the paper examines the role of new media technologies in rethinking the dynamics of migration. It also analyses how we could shape strategies of using urban scale digital twins and big data for decision-making in urban planning that are able to challenge digital universalism.

TOWARDS A FEMINIST READING OF MIGRATION: EXPLORING THE INTERSECTIONS BETWEEN MIGRATION, URBAN AND GENDER STUDIES

The feminist reading of migration allows for the inclusion of gender as a central aspect of migration flows, labour patterns, trajectories, and experiences. The research methodologies concerning both migration studies and gender studies have changed considerably since the 1980s, shifting from discipline-specific studies of women immigrants and sex roles toward multidisciplinary analysis. As Silvia Pedraza has underlined, "[d]espite the overwhelming presence of women in migration flows, until recently the role of women in migration had been totally neglected."[1] The main objective of the paper is to render explicit how the intersections between migration studies, urban studies and gender studies can provide a new reading of the concepts of domesticity, citizenship and displacement. This trend of conjointly studying gender and migration phenomena becomes more and more dominant. Important for these endeavours aiming to merge the methods of gender scholarship and those of migration scholarship is the intention to draw upon approaches of social science, on the one hand, and to treat gender as an institutional part of immigration studies, establishing legitimacy for gender in immigration studies, on the other hand. The integration of gender analysis in migration studies first emerged in the 1970s and early 1980s. Symptomatic of this shift is the 1984 special issue of *The International Migration Review* devoted to the topic "Women in Migration", and especially the article entitled "Birds of Passage are also Women…" authored by Mirjana Morokvasic.[2] The feminist gender-based migration studies understand gender as a system of relations which is influenced by migration. By the 1990s, one can observe an intensification of the tendency of understanding migration as a gendered process, promoting gender as a dynamic and constitutive element of migration and immigrant integration.

A book that is useful for understanding how the methods of gender studies and those of migration studies can be combined is *Gender and Migration in Southern Europe: Women on the Move* edited by Floya Anthias and Gabriella Lazaridis.[3] The aforementioned book constitutes an attempt to explore the intersections of the methods of migration studies,

Mediterranean studies, area studies, gender studies and social science in general. A worth-noting argument of this book is that "the importance of transnational connections requires us to look beyond the interaction between countries of origin and destination towards wider migratory networks."[4]

The 2006 special issue of *The International Migration Review* devoted to the theme "Gender and Migration Revisited" aimed to shed light on the intersection between gender studies and migration studies. The key insights of the essay entitled authored by Suzanne M. Sinke lie in the intention to bring together key questions concerning gender studies into historical research, emphasizing "the need for longitudinal analysis in any study of gender and migration, and not[ing] some approaches to the concept of time used by historians."[5]

Saskia Sassen's understanding of immigration as "a process constituted by human beings with will and agency, with multiple identities and life trajectories beyond the fact of being seen, defined and categorised as immigrants for the purposes of the receiving polity, economy and society"[6] is useful in order to better grasp the impact of migration on the status of public space, leading to a more open conception of it and to the reconceptualization of the notion of place beyond traditional definitions, while challenging the boundaries between what is public, communal and domestic.

Jeffrey Hou has employed the concept of 'transcultural place-making' in order to "address the dynamic processes of cultural changes [and the] [...] cross-cultural interactions in the context of migration and diversity."[7] The concept of 'placemaking' addresses "not only the intercultural exchanges but also the cultural transformations that takes place in urban places and through urban placemaking."[8] As Aine O'Healy has remarked, in *Migrant Anxieties: Italian Cinema in a Transnational Frame*, the concept of 'placemaking' is useful for interpreting the "'crossings' [that] mediate the unfolding drama and dilemmas of transcultural cohabitation for local audiences."[9] Two conferences held recently that are enlightening regarding the questions raised in this paper are the 4th International Conference on Urban Studies (ICUS) held between 8 and 9 December 2017,[10] and the conference entitled "Migration and Mobility in a Digital Age: Paradoxes of Connectivity and Belonging Conference" held between 10 and 11 April 2018 at The Heyman Center of Columbia University and organized by Sandra Ponzanesi.[11]

The debates around the potentials of transnational history are also useful for shaping new methods aiming to combine the perspectives of migration studies, gender studies and urban studies. The transnational perspective is related to issues concerning the legitimacy of globalization. More specifically, the transnational thematic in social sciences is based on the intention to shed light on the historical dimension while analysing the structure of international exchanges of ideas and

values.[12] According to the transnational approaches the international comparison is understood as a subject rather than a method.[13] A risk that we often encounter is the application of analytical methods that are associated with contexts other than those in which we apply them.[14] The transnational approach and its implications play an important role in the contemporary debates that intend to challenge the methods comparative history. The interpretation of the transnational circulation presupposes a relational analysis of the production and dissemination of knowledge. According to this perspective, researchers should examine the specific relationships between the concepts under study and their terrain of emergence and evolution. This could help shape methods that are most appropriate for the study of the specific research object(s). The close examination the conditions related to the territory within which the research object(s) is/are located is very important when trying to structure a transnational historical discourse.[15]

BIG DATA AND SOCIAL SUSTAINABILITY WITHIN OUR DATA-DRIVEN SOCIETIES: HOW TO CHALLENGE DIGITAL UNIVERSALISM

To incorporate the question of social sustainability within our data-driven societies, it is important to bear in mind that when working with big data thinking locally means thinking critically. To shape a critical approach towards the interconnection between the migration and gender aspects of urban phenomena it is indispensable to use data concerning both migration and gender aspects, taking into consideration the specificities and implications of the local contexts in which data are created. Big Data and AI are now used like universal tools, and applied to more or less every problem—often by people with no specialist background in any scientific field. These applications are typically consuming quite a lot of resources and not transparently documented to the public. It is, therefore, often not so clear what is the quality and level of improvement of the applications from the point of view of the citizens, which should be served. When we study how data are collected and instrumentalised it would be useful to bear in mind Christine L. Borgman's remark that "entities become data only when someone uses them as evidence of a phenomenon, and the same entities can be evidence of multiple phenomena."[16]

A notion that is of great significance for this endeavour to reveal the is that of 'local reading', that Yanni Alexander Loukissas has explored in his work, including his article entitled "Taking Big Data apart: Local readings of composite media collections" published in 2017 in *Information, Communication & Society*,[17] and his recently published book entitled *All Data Are Local: Thinking Critically in a Data-Driven Society*.[18] The myth of 'digital universalism' is based on the false conviction that

"once online, all users could be granted the same agencies on a single network, all differences could dissolve, and everyone could be treated alike."[19] As Loukissas has remarked, "[i]f left unchallenged, digital universalism could become a new kind of colonialism in which practitioners at the 'periphery' are made to conform to the expectations of a dominant techno-logical culture."[20] To challenge digital universalism, we should call for a "de-Westernization of critical data studies."[21] Sarah Williams, in her recently published book entitled *Data Action: Using Data for Public Good,* uses the term "Data Colonialism" to refer to "the asymmetry in data in data ownership and the power that comes with it"[22] withn the contexts in which private institutions are more and more in control of data instead of the governemt.

A term that is relevant for the questions addressed in this article and is dominant in the current debates about big data is that of 'data universalism'. As Stefania Milan and Emiliano Treré maintain, in "Big Data from the South(s): Beyond Data Universalism", the myth of 'data universalism' refers to "the tendency to assimilate the cultural diversity of techno-logical developments in the Global South to Silicon Valley's principles."[23] Milan and Treré, in their aforementioned article, criticize the "hyperbolic narratives of the 'big data revolution.'"[24] A key question they intended to address is the following: "how does datafication unfold in countries with fragile democracies, flimsy economies, impending poverty?"[25] In the aforementioned article, they argue that "the main prob-lem with data universalism is that it is asocial and ahistorical, presenting technology [...] as something operating outside of history and of specific sociopolitical, cultural, and economic contexts."[26] Another important question that emerges when we aim to investigate urban phenomena, gender issues and migration conjointly is the following: Can big data and predic-tive analytics improve social and environmental sustainability?

FROM MIGRATION STUDIES TO MOBILITY STUDIES: MOBILITY JUSTICE AND SOCIAL SUSTAINABILITY

A question that is dominant within the current debates con-cerning migrant flows is that of whether the term 'mobility' or the term 'migration' is more relevant. As Sandra Ponzanesi highlights in her article entitled "Migration and Mobility in a Digital Age: (Re)Mapping Connectivity and Belonging", "[m]obility studies is an emergent interdisciplinary field that focuses on social issues of inequality, power, and hierarchies in relation to spatial concerns, such as territory, borders, and scales."[27] The special issue of *Television & New Media* devoted to the theme "Migration and Mobility in a Digital Age: (Re) mapping Connectivity and Belonging" published in 2019 aimed to address the interconnection between migration and digital technologies, exploring the impact of new media technologies on the experience of displacement. Other scholars, such as Jennifer Hyndman, argue that the term displacement is more relevant than mobility.[28]

Mobility studies are understood as more socially sustainable in the sense that they are considered to relate to a more holis-tic approach than migration studies. A term that was recently coined by Mimi Sheller to respond to the dilemma whether the term migration or mobility is more socially equitable is the term mobility justice. The main idea behind the use of this term is the intention to render explicit that while mobility is a fundamental right for everyone, it is experienced unequally along lines of gender, class, ethnicity, race, religion, and age. As Ponzanesi has remarked "[m]obility justice as a concept is concerned with improving peoples' lives by enabling mobili-ties as a common basis for social justice."[29] Benjamin Bratton, in the chapter of his book entitled The Stack: On Software and Sovereignty devoted to "City Layer", remarks that "for Stack urbanism, mobilization precedes and supersedes settle-ment."[30] Another aspect that should be taken into account is the growing interest of migration researchers "in issues of urban governance."[31]

THE SHIFT FROM TECHNICAL TO SOCIO-TECHNICAL PERSPECTIVES: URBAN SCALE DIGITAL TWINS VIS-À-VIS THE SPECIFICITIES OF THE URBAN AND SOCIO-POLITICAL CONTEXTS

'Digital twin' is a term used to refer to the digital representa-tion enabling comprehensive data exchange and can contain models, simulations and algorithms describing their counter-part and its features and behaviour in the real world. A 'digital twin' is a digital representation of a physical process, person, place, system or device. The term 'digital twin' firstly emerged in the field of manufacturing sector. It was first used by Michael Grieves to refer to digital simulation models that run alongside real-time processes.[32] 'Digital twins' are conceptualised as digital replicas of physical entities. Digital twins become pos-sible thanks to the use of technological advances as sensing, processing, and data transmission. Digital twins apart from the field of urban analytics, they are also used in the domain of the so-called computational social sciences.

A term that is very present in the current debates around urban sustainability is that of urban scale digital twins, which refer to the virtual replicas of cities that can be used as simula-tion environments (Figure 1). What is worth mentioning is that the digital twins are able to get updated following the changes of the physical equivalents. This becomes possible thanks to the pairing between the virtual and the physical world. To understand what is the main idea behind the creation of digital twins we should bear in mind that "[a]n ideal digital twin would be identical to its physical counter-part and have a complete, real-time dataset of all information on the object/system."[33] As Martin Tomko and Stephan Winter have highlighted, "the digital side of the coupled systems (the "digital twin") morphs into the physical environment by communication and control, a phenomenon studied by cybernetics."[34] What makes "digital twins" operative is the "bi-directional coupling between the

Figure 1. Digital twin of Hervanta, Tampere. Source: https://www.sitowise.com/customer-story/digital-twins-open-new-world-urban-development.

physical artifact and their digital counterpart", as well as the "bi-directional coupling across the digital, physical, and social spheres."[35] Tomko and Winter, to shed light on the importance of this "bi-directional coupling", use the term "coupled ecosystem" and "cyber-physical-social eco-system"[36] to refer to the coupling the physical and the digital system. The bi-directional coupling between the real and the digital artifacts becomes possible thanks to the use of "snapshot[s] of the current or past representations", which serve "to predict by extrapolation."[37]

Some questions that are at the centre of the critical data studies and are closely explored in the questions addressed in this paper are the following: how big data are collected? In which sense data are an operational part of an economic system? Which social groups take advantage of the creation of big data. According to Loukissas, "[a]spiring to the ideology of big data means seeking to collect everything on a subject, downplaying the importance of data's origins, and assuming that data alone can entirely supplant other ways of knowing."[38] Recently, in the field of urban planning the notion of urban scale digital twin has acquired a central place. Useful for understanding that the evangelism that accompanies the discourse around smart cities is not something new but has a long history is the remark of Bratton that "[w]ell before smart cities evangelism, the modernist call for a more intense technologization of design's disciplinary doxa, blending urban and cybernetic programs, was a predominant discourse."[39]

An important shift within the field of smart cities that should be taken into account is the transition from the technical to the socio-technical perspective . As Michael Batty has remarked, "one of the quests in city modelling is to merge social and economic processes with the built environment and to link functional and physical processes to socio-economic representations."[40] The shift from technical to socio-technical perspectives goes hand in hand with the effort to construct urban scale digital twins that aim to "reflect the specifics of the urban and socio-political context."[41] Despite the fact that often the dissemination of urban scale digital twins focuses on their aspiration to enhance the participation of citizens in the decision-making processes through the integration of their input to the urban planning strategies, this is not valid in most of the cases. Some of the reasons for which this is not valid are the following: on the one hand, the creation of urban scale digital twins is based on a limited set of variables and processes, and, on the other hand, the way they abstract sets of variables and processes neglects the social aspects of urban contexts (Figure 2). Despite the aspirations of urban scale digital twins to enhance the participation of citizens in the decision-making processes relayed to urban planning strategies, the fact that they are based on a limited set of variables and processes makes them problematic.

CONCLUSION OR SASKIA SASSEN'S GLOBAL CITY VERSUS MANUEL CASTELLS'S INFORMATIONAL CITY

An ensemble of questions that are dominant within the field of network science, and especially within the work of Spanish sociologist Manuel Castells concern the transition from spatial perspectives on urban data to topological perspectives.[42] Two researchers that have played and continue to play a protagonist role for the debates related to topological perspectives on urban data are Michael Batty and Manuel Castells. Castells's approach is useful for deciphering the tension between the real and the ideal at stake during this process of abstracting sets of
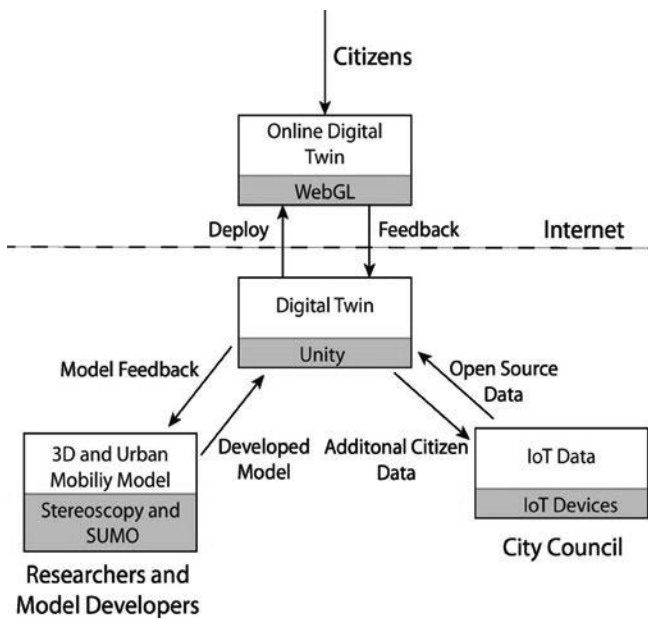
Figure 2. Online digital twin interaction diagram. Source: Gary White, Anna Zink, Lara Codecá, Siobhán Clarke, "A digital twin smart city for citizen feedback", *Cities* 110 (2021), 5. https://doi.org/10.1016/j.cities.2020.103064

Figure 3. Infrastructures of an informational world city. Source: Agnes Mainka *et al*, "Maturity and usability of e-government in informational world cities", in Walter Castelnovo, Elena Ferrari, eds., *Proceedings of the 13th European Conference on e-Government University* (Como, IT: Academic Conferences and Publishing International Limited Reading, 2013), 296.

variables and processes in the case of urban scale digital twins. Castells distinguishes four categories of power in the network society: networking power, network power, networked power, network-making power . He argues that the fourth category of power, that is to say the network-making power, is the "paramount form of power in the network society."[43]

A turning point for his work is the theory he develops in *The Informational City: Information Technology, Economic Restructuring and the Urban-Regional Process.*[44] As Felix Stalder has highlighted, in *Manuel Castells. The Theory of the Network Society,* according to Castells's theory, cities should be understood as processes and not as places.[45] Saskia Sassen argues that the "[g]lobal city is not a desciptive term [but] an analytical construct that allows one to detect the global as it is filtered through the specifics of a place, its institutional orders, and its sociospatial fragmentations."[46] In contrast with Sassen's global city,[47] Manuel Castells's informational city emphasizes the significance of the "incessant flows of information, goods, and people"[48] (Figure 3).

At the centre of Castells's approach are the following three concepts: firstly, the space of flows; secondly, the space of places; and, finallt, the timeless time. According to Castells, the network society is organised around these three concepts. To render explicit how the notions of time and space were transformed due to the transition to the so-called information age, Castells drew upon the work of several scholars in the field of social sciences such as Anthony Giddens,[49] Scott Lash, John Urry,[50] and David Harvey[51] among others. Through the notions of informational city, metropolitan region and dual city, Castells redefined the field of urban sociology. The main objective of Castells's approach is to render explicit how urban dynamics work.
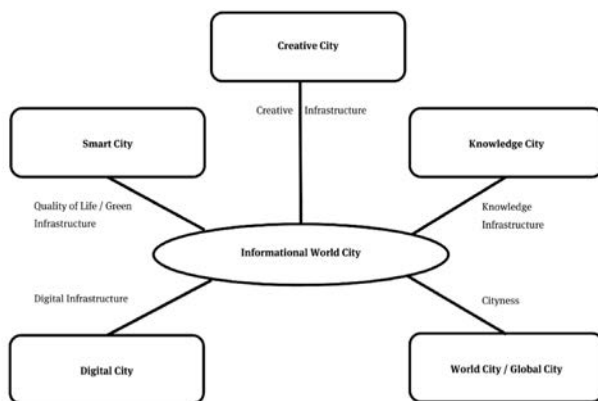
ENDNOTES

1.   Silvia Pedraza, "Women and Migration: The Social Consequences of Gender", *Annual Review of Sociology,* 17 (1991), 303. https://www.jstor.org/stable/2083345

2.   Mırjana Morokvasic, "Birds of Passage are also Women...", *The International Migration Review,* 18(4) (1984): 886-907. https://doi.org/10.2307/2546066

3.   Floya Anthias, Gabriella Lazaridis, eds., *Gender and Migration in Southern Europe: Women on the Move* (London; New York: Routledge, 2000).

4.   Floya Anthias, Gabriella Lazaridis, "Introduction: Women on the Move in Southern Europe", in idem., eds., *Gender and Migration in Southern Europe: Women on the Move* (London; New York: Routledge, 2000), 12.

5.   Suzanne M. Sinke, "Gender and Migration: Historical Perspectives", *The International Migration Review,* 40(1) (2006), 82.

6.   Sassen, Saskia, "Anti-Immigrant Politics Along with Institutional Incorporation?", in Jenna Hennebry, Margaret Walton-Roberts, eds., *Territoriality and Migration in the E.U. Neighbourhood: Spilling over the Wall* (Heidelberg: Springer, 2014), pp. 20–21.

7.   Jeffrey Hou, *Transcultural Cities: Border-Crossing and Placemaking* (London; New York: Routledge, 2013), 7.

8.   Ibid.

9.   Aine O'Healy, *Migrant Anxieties: Italian Cinema in a Transnational Frame* (Indiana: Indiana Uniersity Press, 2019).

10.   Thor Kerr et al, eds., *Urban Studies: Border and Mobility* (London; New York: Routledge, 2019).

11. Accessed August 13, 2021. https://sofheyman.org/events/migration-and-mobility-in-a-digital-age-paradoxes-of-connectivity-and-belonging-conference

12. Pierre Yves Saunier, "Circulations, connexions et espaces transnationaux" *Genèses,* 57 (2005): 110-126. https://doi.org/10.3917/gen.057.0110

13. Heinz-Gerhard Haupt, Jürgen Kocka, eds., *Comparative and Transnational History: Central European Approaches and New Perspectives* (New York; Oxford: Berghahn Books, 2010).

14. Homi K. Bhabha, *The Location of Culture* (London; New York: Routledge, 2004).

15. Marianna Charitonidou, "Réinventer la posture historique: les débats théoriques à propos de la comparaison et des transferts", *Espaces et Sociétés,* 167 (2016): 137-152. https://doi.org/10.3917/esp.167.0137

16. Christine L. Borgman, *Big Data, Little Data, No Data: Scholarship in the Networked World* (Cambridge, Mass.: The MIT Press, 2015), 28.

17. Yanni Alexander Loukissas, "Taking Big Data apart: Local readings of composite media collections", *Information, Communication & Society*, 20(5) (2017): 651–664. https://doi.org/10.1080/1369118X.2016.1211722

18. Yanni Alexander Loukissas, *All Data Are Local: Thinking Critically in a Data-Driven Society* (Cambridge, Mass.: The MIT Press, 2019).

19. Anita Say Chan, *Networking Peripheries Technological Futures and the Myth of Digital Universalism* (Cambridge, Mass.: The MIT Press, 2014), 7.

20. Loukissas, *All Data Are Local: Thinking Critically in a Data-Driven Society*, 10.

21. Stefania Milan, Emiliano Treré, "Big Data from the South(s): Beyond Data Universalism", *Television & New Media,* 20(4) (2019), 321. https://doi.org/10.1177/1527476419837739

22. Sarah Williams, *Data Action: Using Dara for Public Good* (Cambridge, Mass.: The MIT Press, 2020), 191.

23. Milan, Treré, "Big Data from the South(s): Beyond Data Universalism", 324.

24. Ibid., 320.

25. Ibid.

26. Ibid., 324-325.

27. Sandra Ponzanesi, S. "Migration and mobility in a digital age: (Re)Mapping connectivity and belonging", *Television & New Media,* 20(6) (2019), 548. https://doi.org/10.1177/1527476419857687

28. Jennifer Hyndman, *Managing Displacement: Refugees and the Politics Humanitarianism* (MInneapolis: University of Minnesota Press, 2000); see also Rachel Silvey, "Borders, Embodiment, and Mobility: Feminist Migration Studies in Geography", in Lise Nelson, Joni Seager, eds., *A Companion to Feminist Geography* (Oxford, UK: Blackwell Publishing Ltd, 2005), 142.

29. Ibid., 549.

30. Benjamin H. Bratton, *The Stack: On Software and Sovereignty* (Cambridge, Mass.: The MIT Press, 2016), 149.

31. Matthias Bernt, "Migration and Strategic Urban Planning", *disP - The Planning Review*, 55(3) (2019), 56. https://doi.org/10.1080/02513625.2019.1671002

32. Michael Grieves, "Digital Twin: Manufacturing Excellence through Virtual Factory Replication", *White paper,* 1 (2014): 1-7.

33. Gary White, Anna Zink, Lara Codecá, Siobhán Clarke, "A digital twin smart city for citizen feedback", *Cities,* 110 (2021), 1. https://doi.org/10.1016/j.cities.2020.103064

34. Martin Tomko, Stephan Winter, "Beyond digital twins – A commentary", *Environment and Planning B: Urban Analytics and City Science,* 46(2) (2019), 397. https://doi.org/10.1177/2399808318816992

35. Timea Nochta, Li Wan, Jennifer Mary Schooling, Ajith Kumar Parlikad, "A Socio-Technical Perspective on Urban Analytics: The Case of City-Scale Digital Twins", *Journal of Urban Technology*, 28(1-2) (2021), 268. https://doi.org/10.1080/10630732.2020.1798177

36. Tomko, Winter, "Beyond digital twins – A commentary", 397.

37. Ibid.

38. Loukissas. *All Data Are Local: Thinking Critically in a Data-Driven Society*, 16.

39. Bratton, *The Stack: On Software and Sovereignty*, 172.

40. Michael Batty, "Digital Twins", *Environment and Planning B: Urban Analytics and City Science,* 45(5) (2018), 819. https://doi.org/10.1177/2399808318796416

41. Nochta, Wan, Schooling, Parlikad, "A Socio-Technical Perspective on Urban Analytics: The Case of City-Scale Digital Twins", 263.

42. Manuel Castells, *The Informational City: Information Technology, Economic Restructuring and the Urban-Regional Process* (Oxford, UK; Malden, MA: Blackwell, 1989).

43. Castells, *Communication Power* (Oxford: Oxford University Press, 2009), 47.

44. Castells, *The Informational City: Information Technology, Economic Restructuring and the Urban-Regional Process.*

45. Felix Stalder, *Manuel Castells. The Theory of the Network Society* (Cambridge: Polity Press, 2008).

46. Saskia Sassen, Foreword, in Mark M. Amen, Kevin Archer, Martin M. Bosman, eds., *Relocating Global Cities: From the Center to the Margins* (Lanham, MD: Rowman & Littlefield, 2006), x; see also Michele Acuto, "Finding the Global City: An Analytical Journey through the 'Invisible College'", *Urban Studies*, 48(14) (2011): 2953-2973. https://www.jstor.org/stable/43082019

47. Saskia Sassen, *The Global City: New York, London, Tokyo* (Princeton, NJ: Princeton University Press, 2013).

48. Stalder, *Manuel Castells. The Theory of the Network Society*, 163.

49. Anthony Giddens, *The Consequences of Modernity* (Cambridge: Polity Press, 1990); Giddens, *Modernity and SelfIdentity* (Cambridge: Polity Press, 1991).

50. Scott Lash, John Urry, *The End of Organized Capitalism* (Cambridge: Polity Press, 1987); Lash, Urry, *Economies of Signs and Space*s (London: Sage, 1994); Simon Bromley, "The space of flows and timeless time Manuel Castells's The Information Age", *Radical Philosophy,* 97 (1999): 6-17. https://www.radicalphilosophy.com/article/the-space-of-flows-and-timeless-time

51. David Harvey, *Social Justice and the City* (Georgia: University of Georgia Press, 2010). Originally published in 1973.

PAPER