Citizen Empowerment and Innovation in the Data-Rich City, Chiara Certomà, Mark Dyer, Lorena Pocatilu and Francesco Rizzi (Eds.), (Cham, Switzerland: Springer International Publishing AG, 2017), Pp. 208, $USD 107.07 (Hardcover)

Citizen Empowerment and Innovation in the Data-Rich City promises an empirically-based analysis of the current transformation of the data-rich cities with particular attention paid to innovative people-centered solutions in urban planning. The book specifically aims “to explore a new perspective on the actual possibility for technological innovations in urban infrastructure and functioning processes to effectively involve ordinary citizens in collective knowledge-production and decision-making” (p. 4).

The book recognizes that, notwithstanding the large amount of data, it is still unclear how citizens can actually benefit from recent developments in urban technologies, as well as how such data-rich cities can “enable a collaborative culture of citizen engagement to emerge” (p. 5). In an ideal scenario, urban planners, policymakers, governments and non-governmental organizations will combine technological capabilities and social innovation to help produce a smarter world (Albino et al., 2015). That world will be seen on the ground in smarter cities composed of smarter communities that support the livelihood and liveability of cities and the general well-being of all citizens (Concelio and Rizzo, 2016). The chapters’ contributors, however, recognize that the path to such an idyllic urban-tech environment is not an easy one. Yet, the book stands out within the context of current research on smart cities and information communication technologies (ICT) applied to urban planning, by reinforcing the argument debated, for example, in Michelucci et al. (2016), that citizens need to be involved in a multilevel dialogue about their cities and develop a sense of co-ownership through co-decision-making.

In an urban environment highly supported by digital data, from street sensors to municipal open data sources, the discussions encouraged by this book are both timely and insightful for current knowledge on urban technology. For example, Kahila-Tani et al. (2017) argue that, although citizen participation has been justified through democratic privileges, the influence of participation on politics, decision-making and actual outcomes has been seldom explored. Kahila-Tani et al. (2017) claim that deeper research on the effectiveness and usability of participation tools, such as public participation geographic information systems (PPGIS), is required in urban planning.

As it would be beyond the scope of this review to detail each chapter, I have instead engaged with those chapters in each part which contribute most to urban planning scholarship. The chapters included in Part I debate the merits of a greater bottom-up model to compliment top-down urban planning approaches. Chapter 1, for instance, argues that the availability of technology “may not be sufficient to generate a culture of collaborative urbanism” (p. 4). In addition, the chapter criticizes the implementation of urban plans through projects and/or policy proposals to “address the challenge of unity” (p. 17), which hinders, hence, a culture of citizen engagement from becoming a more pragmatic modus operandi in urban planning. The authors of these chapters convincingly state that “increasing privatization across residential, economic and even cultural sectors removes a sense of public entitlement and erodes the footprint of the civic” (p. 17). This is in line with Brenner and Theodore (2005), who argue that a shift towards the entrepreneurial city pursued by some Western countries was certainly
a notable evolution, bringing about a number of breakthroughs in urban planning and in the character of relationships between governmental institutions, private interest groups and the urban citizenry. The attempt to construct a framework for collaborative urbanism is also explored in the subsequent chapter.

Chapter 2 touches upon the mismatch that exists between urban design and urban governance, which results “in a minuscule number of documented case studies where public participation played any significant part into the design and planning of urban communities” (p. 20). The chapter’s contributors also claim that, when participation in strategic city planning happens, “it tended to relate to major economic and business stakeholder groups leaving the two other legs of sustainability (social and environmental) largely unrepresented” (p. 20). In this regard, Buijs et al. (2017) contend that civic participation in urban planning for green infrastructure, for instance, is paramount, as “citizens may contribute to the environmental, social, and institutional resilience of cities” (p. 1). To deal with the shortcomings of participation in urban plan-making and plan implementation processes, the authors propose a framework for collaborative urbanism. This framework contributes to existing knowledge on co-production in urban planning and on collaboration in planning (Watson, 2014), as it “aims to create the capacity among citizen and stakeholder groups to critique infrastructural provision and participate in strategic design thinking” (p. 20). Collaborative urbanism and civic participation are developed further in Part II.

Chapter 4 contributes to the state of the art in the application of ICT developments in urban planning and the mobilization of social networks in urban governance. This is done by exploring non-planned forms of citizen empowerment in urban governance through crowdsourcing processes. Kahila-Tani et al. (2017), for example, reinforce the idea that crowdsourcing tools allow more residents to be heard, and the gathered input enables the production of high-quality information which could be useful in urban planning. The chapter ends by suggesting that different socio-technological networks can enable the crowd to define contemporary challenges posed to cities, “which unveils new opportunities for citizen empowerment” (p. 74). The chapter strengthens Kahila-Tani et al.’s (2017) argument on the importance of crowdsourcing in planning, by asserting that citizen-driven crowdsourcing has “an interesting potential in complementing top-down urban governance” (p. 74). The editors’ quest for innovative approaches to strengthen the role of citizens in planning and urban governance gains momentum in Part III of the book with the introduction of a handful of practical experiences. Two chapters are particularly worthy of attention – Chapters 10 and 11.

Chapter 10 describes Digi-Tel, a technology developed by the Municipality of Tel Aviv in Israel, which aims to “engage, involve and connect city residents directly to municipal departments, and enable them to benefit from the efficient two-way use of ICT” (p. 159), thus improving their quality of life. Digi-Tel is more than an urban-tech development to support local governments. It is an example of a people-centered tool focused on the effective involvement of ordinary citizens in knowledge production, as promised by the editors in the preface of the book. According to the author, “the more Digi-Tel apps are provided, improved, [and] delivered…the more the citizens become empowered, responders and care to receive better services of education, community, transportation, infrastructure, local neighbourhood services and more” (p. 175). This tool interacts directly with Tel Aviv citizens by asking them to participate and prioritize the action or program they would like to see
implemented in their neighborhood, from sporting facilities to the planting of trees, the installation of benches and the renovation of public spaces. Planning practitioners, as well as local policymakers, could draw insightful lessons from this case. The major proof of the effective success of this government-oriented citizen program is that 52 percent of eligible citizens have been using the app, engaging directly with city-making initiatives.

Chapter 11, which explores “how ICT can be used to enhance the understanding of the relationship between space, users and social practices” (p. 177), could also be a source of inspiration for planners working to deal with questions relating to how to enhance participatory and collaborative processes in the planning of public spaces. It specifically discusses the digital tool “WAY Cyberparks” as an interactive research methodology that “enables tracking users and their movements in public spaces, and as an interaction interface, it allows through augmented reality to display the information about the possible changes and improvements of the space and its elements” (p. 180). This tool entails a smartphone application, a server/cloud and web services, and has been used in Barcelona (Spain), Lisbon (Portugal) and Ljubljana (Slovenia). When I began my reading, I was intrigued by the definition of a cyberpark and its relationship with “physical parks” (neighborhood parks where everybody can hang out and play). The authors define a cyberpark as a “new type of urban landscape where nature and ICT blend together to generate hybrid experiences and enhance quality of life” (p. 177). This digital tool collects data directly from park users and empowers their direct involvement, thus supporting the design of public spaces.

The chapters are written in a fairly accessible format and they are well interconnected. The real strength of the book lies in its detailed case studies and its exploration of a great deal of online platforms on collaborative urbanism and citizen-driven planning initiatives, developed by various cities and aimed at empowering citizens as co-creators of urban dynamics. The several digital tools discussed throughout the book are more than a one-way form of communication; they allow an egalitarian, multidirectional interaction between citizens and local governments. The main drawback of the book is the non-inclusion of a concluding chapter. I would expect and highly recommend that such an empirically informed book would provide readers with a summary of its key findings, particularly on the contribution of digital data, ICT and the idea of smart cities toward supporting the development, maintenance and enrichment of a culture of civic stewardship and creative citizen engagement. Despite this drawback, the book, in my estimation, contributes to the much-needed critical appraisal of the ongoing transformation of the “smart city” paradigm. It brings a much-needed people-centered approach to the use of technology in urban planning, as opposed to an exaggerated reliance on big data as a panacea for all urban problems.

The book appeals to academics and researchers who are interested in the required transformation in the planning and operation of data-rich cities. Its practical approach makes it useful for all those interested in exploring the ways in which cities can employ ICT to address the social and economic inequality that has an impact upon the everyday lives of urban dwellers. As books do not provide all the answers, I concur with the editors on the need for additional research into how to plan cities in a more digitally democratic, participatory, collaborative and citizen-friendly manner.
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