URBAN DESIGN International
https://doi.org/10.1057/s41289-023-00214-3

EDITORIAL

Urban design and walkability revisited

Mahyar Arefi[1,2] · **Patricia Aelbrecht**[3]

Accepted: 7 February 2023

Creating walkable and pedestrian-friendly places stands out as a prominent goal in urban design pedagogy and practice. Gordon Cullen's (1971) serial vision through what he called a "sequence of revelations," and also the "art of relationships" remind us the importance of designing memorable and walkable environments with purpose. On the other hand, the ongoing battle between suburban sprawl and compact cities (Dieleman and Wegener 2016) predominantly prompts replicating projects that foster car-free, walkable, mixed-use developments instead of segregated land uses and leapfrog developments surrounded by parking lots.

Against the backdrop of those generic goals, witnessing terrorist attacks on urban streets worldwide when least expected, pedestrians using their mobile devices all the time while walking or commuting, or whether the sidewalks and local streets meet the aging populations' specific demands for living healthier, longer lives, among others represent new signals and major transformations that bring to mind new research questions in the walkability discourse. This issue of UDI highlights five new articles that shed light on some aspects of these concerns surrounding pedestrian-friendliness and walkability.

The first article entitled "Street networks or functional attractors? Capturing pedestrian movement patterns and urban form with the integration of space syntax and MCDA" by Yang and Qian made observations from five selected districts (commercial, historic, Muslim Market, Tang West Market, and Dongguan) in the City of Xi'an. Using space syntax, they explored the association between the district's network structure, and functional attractors. Interpreting the urban form, not just as a sheer configuration of buildings and street networks, the authors argue that urban design serves as "a dual process" involving both the macro and micro long-term and real-time configurational and functional factors. In a way, with their methods of viewing the urban form and urban morphology, this research suggests a new way of seeing the urban form. This proposed method does not merely see the urban form as a static indicator of superstructures and street networks but also as an epistemology where functional and spatial structures complement each other, and thereby, provide a dynamic model among potent urban form indicators.

Compared to the previous article that uses real-time data and space syntax along with sensitivity analysis as an innovative method of analyzing the urban form, the second article "Ramming attacks, pedestrians, and the securitization of streets and urban public space: a case study of New York City" by Hess and Mandhan explores another contemporary concern in urban design. The last decade or so has witnessed gruesome ramming attacks on pedestrians that have unfortunately caused human lives. Thus, by revisiting the business-as-usual of current policies, the authors delve deeper into security efforts that can enhance human protection in everyday life in public space. Using New York city as a case study, the authors address and formulate the problem and seek answers to these concerns. Conducting interviews with a number of key informants, the authors highlight effective local safety programs such as vision zero that calculate safety risks for pedestrians. Ultimately, joining forces between securitization planning and pedestrian safety programs seem to be a step in the right direction. Alongside these more long-term provisions, installing bollards in sensitive areas has helped adding security measures.

"Measuring age-friendliness based on the walkability indices of older people to urban facilities" by Bayar and Yilmaz focuses on how urban public spaces accommodate to older populations as yet another key concern associated with pedestrian-friendliness in urban settings. The authors consider age-friendliness as a complementary aspect of pedestrian-friendliness. Using Istanbul as a case study, the authors discuss why a few distractions in Istanbul turn out to be more age-friendly than the rest of the city. Defining

✉ Mahyar Arefi
mahyararefi@gmail.com

[1] Jundi-Shapur University of Technology, Dezful, Iran

[2] Former International Affiliate Prof. Jundi-Shapur Univ. of Tech., Dezful, Iran

[3] Cardiff University, Cardiff, UK

Published online: 14 February 2023

age-friendliness in terms of the ability of older people to reach the urban facilities without depending on a mode of transportation, they analyze the city based on a morphological index that represents mixed-use, diversity, slope, residential use, and intersection nodes. Measuring the age-friendliness of different districts in Istanbul, the proposed index shows how the population of over 1 million people over the age of 65 in Istanbul can obtain their daily goals within their geographic locations. The authors also identify a few municipalities in Istanbul that have come on board with joining or incorporating an age-friendly policies for their constituents for future reference.

The fourth article "Multidimensional analyses of walkability in city centers by using mobile methodologies: Beşiktaş and Delft experiences" by Erturan and Aksel explores the spatial, phenomenological and perceptual dimensions of a walkability in a comparative case study of a Turkish and a Dutch city. The authors group the main walkability indicators into six subcategories: security, traffic and safety, comfort, accessibility, attractiveness, and mixed-use. Using the mobile tracking method (Go-Along), the authors highlight the significance of pedestrian perceptions or thinking process toward place conditions, i.e., feelings of safety, comfort, attractiveness, and accessibility. In their walking attitudes, they also underline the significance of the mobile devices in offering new ways of analyzing walkability patterns.

Finally, using network-based built environment modeling, the last article entitled "Pedestrian accessibility in spatial gridiron organizations: a measure by regarding visual graph analysis" by Rajabi, Mohammadi, and Montazerolhojah seeks to evaluate the spatial interactions of pedestrian accessibility in historic public spaces of the city of Taft in Iran. This type of analytical toolkit enabled the authors to back track the ways in which pedestrians interact between different places or nodes, but also calculate the number of people who chose different patterns of routine access among them. Furthermore, the "graph theory accessibility index" allowed the authors to compare different types of public space based on the pedestrian access and also their proximity. This tool, in turn, allowed them to compare how different public spaces influence the pedestrians to choose different paths for their walking purposes in a gridiron circulation network.

References

1. Cullen, Gordon. 1971. *The concise townscape*. Oxford: Architectural Press.
2. Dieleman, Frans, and Michael Wegener. 2016. Compact city and urban sprawl. *Built Environment* 30 (4): 308–323.