Editorial

The innovative role of cities in solving global problems with local solutions

The impacts of climate change are being felt around the world, whether through increased flooding and more intense and frequent storms, wildfires that encroach on inhabited areas or more pronounced heat waves that are intensifying urban heat island effects in cities. With almost 70% of the world's population projected to become city dwellers by 2050 (UN-Habitat, 2022), we will be living in a much warmer and highly urbanized environment in the near future.

Yet despite increasing evidence of the need to act quickly, real action at a collective international level remains slow. Although progress was made at the recent United Nations Climate Change Conference to the Parties (COP28) in Dubai, such as the Global Stocktake, climate financing, the Loss and Damage Fund, and recognition of climate risks to food security and agriculture, COP28 also highlighted the disconnect between the significant transformations that are urgently required and the contradictory and competing actions and interests of national and international actors (Aryal et al., 2023).

At the same time, COP28 brought together leaders from subnational governments including cities, towns, and regions around the world, which are given a voice on the international stage through the Local Governments and Municipal Authorities (LGMA) constituency (ICLEI, 2023). One of the key outcomes of COP28 in the urban space was the recognition that countries must engage with local and subnational governments to achieve their roadmaps for transformation, with pledges for climate financing for urban infrastructure and the announcement of a new Local Action Climate Summit, among other positive steps made (LGMA, 2023). Although this is clearly an achievement to be proud of, cities have long been innovators, not only in tackling climate change, but in addressing many other pressing issues related to sustainability, equity and quality of life.

This innovation at the local level is exemplified in the Mayor's Desk, a recently published book, which is a collection of twenty interviews with city mayors around the world. Undertaken by Senior Fellow at the Lincoln Institute of Land Policy Antony Flint (2024), the interviews provide many concrete examples of the bottom-up strategies and best practices that cities have employed to deal with climate change, the Covid pandemic and many other global problems that are common to most cities including mobility, health and well-being, housing shortages, and racial and social inequality. There is representation across five continents although the majority is based in North America and Europe, reflecting a common bias in research and publications. Or more positively, it may simply have been the desire to showcase a diversity of notable innovations and solutions that can be replicated by other cities. At the start of the book, this diversity is evident through the way in which each city is tagged with their unique approach to solving a key challenge. However, there is a much richer set of issues discussed and solutions provided within each interview. As I will demonstrate below, many of these topics are also the subject of innovative research in EPB.

Starting with climate change, this was clearly a key topic for discussion in many of the cities (Flint, 2024), from recognition of the problem to solutions that directly address climate change. For example, the city of Berkeley (USA) was one of the first cities to adopt a climate action plan. Another particularly notable example is the city of Burlington, which was the first city in the USA to

source all of its energy from renewables since 2014 and aims to reach net zero by 2030. By owning an electricity plant, the city has been able to offer incentives for electric vehicles and heat pumps to essentially electrify the city. Political will and the expertise within the city department are the main reasons why this has been possible as well as progressive building regulations. Another interesting example is the city of Freetown (Sierra Leone), which is a leader in the C40 global network of cities (https://www.c40.org/) that are working together to address climate change. As part of their leadership, the city appointed a chief heat officer to deal specifically with managing projects related to climate adaptation as part of a global project involving other cities that are piloting this approach. They have also engaged citizens in reaching their goal of planting a million trees by involving them in their tracking and care; by 2030 they aim to plant 5 million while 20 million new trees is the target for 2050. Similar tree planting initiatives are also part of the greening strategies of Delhi (India). EPB is increasingly receiving more papers on urban heat islands, greening and mobility/ infrastructure challenges related to electric vehicles; see, e.g., Johnson et al. (2021), Mashhoodi et al. (2021), Kamata and Kang (2023) and Jung et al. (2024). This trend is likely to continue in the future.

Another topic related to climate change that was discussed in the Mayor's Desk (Flint, 2024), but which is also more generally about the ability of cities to respond to any challenge, is that of resilience. For example, initiatives such as Resilient Boston Harbor and Climate Ready Boston (in the USA) are intended to improve the city's ability to cope with flooding, sea level rise and other climate impacts. The city of Phoenix (USA) is innovating in its use of water, reusing nearly all wastewater and implementing a range of methods to use water more efficiently. On the other side of the spectrum is the city of Cincinnati (USA), which recognizes that it is a 'climate-change safe haven' and may see inward migration as other areas of the country become more strongly impacted by climate change. In addition to bolstering their own resilience, they are also investing heavily in climate technologies, with one of the largest solar farms in the country as well as innovations in the area of biochar. Resilience is not a new topic for EPB but there has been renewed interest of late as evidenced by the two recent special issues on 'Resilient Cities' undertaken in collaboration with the Asian Development Bank Institute in 2021 (Volume 48, Issue 5) as well as the one on 'Smart Cities and Climate-Resilient Urban Planning' in 2022 (Volume 49, Issue 5).

The interviews in the Mayor's Desk also cover topics that have been dealt with in EPB for many years. An example is mobility and issues related to transportation, accessibility, and walkability. Many of the cities are striving for the same goals, that is, good public transport systems and neighborhoods that are walkable; Oakland was one of the first cities in the USA to initiate a Slow Streets program in which streets were closed to cars. Segregation and equity/fairness have also been areas of research interest in EPB, and geography more generally, for a very long time, see e.g., the special issue on 'Conceptualizing, Modelling, and Visualizing Residential Segregation' in 2018 (Volume 45, Issue 6) and the special issue on 'Spatial Inequalities and Cities' that will appear in EPB in 2024. Cities such as Birmingham, Cambridge and Washington DC (USA) are all innovating in this space through affordable housing programs and targeted investment. There are many other issues discussed in the course of the interviews, too many to mention here, but the number of different initiatives and programs in place is genuinely encouraging, with many positive impacts already evident through these interventions.

After reading the book, I was, however, surprised on two fronts. The first was related to smart cities (Batty, 2020). Mentioned only briefly in Warsaw but fully embraced in Seoul though technology and Artificial Intelligence, this concept did not appear as often as I would have expected. EPB has had numerous papers mentioning smart cities since the term first emerged during the 2000s. The second surprise was that I could find no reference to the United Nations Sustainable Development Goals (SDGs) despite the fact that SDG11 is focused on urban areas. That said, SDGs are only beginning to be a topic of research in EPB; see, e.g., and Thomas et al. (2021) and Hsu et al. (2023). However, it does seem to reinforce the disconnect between national monitoring programs

and what is happening at the local level, even though implementation of the SDGs requires engagement with local communities and subnational governments in order to be successful. In addition to SDG11, many other SDGs touch upon issues that are also of relevance for cities, including poverty, inequality, health and the circular economy, all of which were mentioned in different contexts by many of the cities interviewed. Hence, many of the cities are already contributing to achieving the SDGs even if not explicitly tagged in this way.

Overall, the Mayor's Desk provides a very inspiring collection of stories and experiences from city leaders who have been, or continue to be, faced with numerous urban challenges that compete for priority and resources. Papers in EPB have touched upon many of these challenges, endeavoring to provide scientific solutions or models that can help cities to become more sustainable. Bringing this science to practice is ultimately one of the biggest challenges that we face as researchers. Yet seeing the range of innovations being implemented around the world should inspire us to be part of the multilevel cooperation that is needed to achieve climate transformation and urban sustainability in the near future.

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