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Editorial: Resilient urban futures

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Editorial on the Research Topic
Resilient urban futures

A 2017 United Nations Urban Policy Paper for Habitat III (United Nations Conference on Housing and Sustainable Urban Development, 2017) identified four challenges for resilience. One challenge is to improve the interdependencies of governance, another aims to include and enable local communities in decision making, a third focuses on knowledge capacity building, and the last on design integration. These opportunities are cross-disciplinary. They call upon government institutions and their consultants to rethink their roles as strategists, and to co-share the responsibility for adaptation with agile communities aware of their vulnerabilities. The approach reflects the growing complexity of urban systems and the role of local communities in the stewardship of local landscape systems (Haase et al., 2018). In this sense, the challenges have the potential to be both transitional and transformational (Loorbach and Shiroyama, 2016), and thereby address the demands of the UN SDG 11 for social equality and ecological robustness.

Historically, settlements or cities were organized as local meeting places, regional trading centers, defensive loci, or utopian social ideals. Today, they have evolved into open systems characterized by a complex network of governance, technology, environment, culture, and economics that sustain human activity (Stevens and Salmon, 2017). Amidst this rich undercurrent, city planning has come to rely on positivist planning processes supported by specific disciplinary expertise in areas such as residential development, public space design, finance and insurance, management of land ownership, and infrastructure, water, energy, and transport systems. But it has fallen short in capturing the holistic essence of urban and landscape systems. The prevailing problem may be the disconnection between city planning, knowledge development, spatial design, community agency, and the diverse landscapes that constitute human habitats. The fragmentation of these threads of urban activity has left a legacy of disparities in social equity, which exposes communities to the adverse impacts of climate change, and thereby jeopardizes a city's resilience. While urban research has driven technological innovations in built form, infrastructure, and open space, urban resilience demands a re-focus on adaptation possibilities that integrate landscape, individual awareness, community and institutional governance structures (Elmqvist et al., 2019). A resilient urban future should acknowledge the interconnected challenges highlighted by the UN—fostering interdisciplinary approaches over siloed governance, empowering communities alongside institutional leadership, promoting environmental education, and ensuring that design complements planning as a blueprint for navigating the complexities of modern urbanism.

This Research Topic of the Journal Frontiers delves into detailed research on urban transition and transformation through the resilient design and planning of cities.

It presents four research papers that share perspectives on the research methods at the interface of interdisciplinary collaborations. These studies hold the potential to foster equity and encourage community environmental knowledge, thereby supporting a resilient transition of our urban landscapes. The Research Topic de-emphasizes traditional urban planning and architecture practices, focusing instead on the challenges and methodologies that could reshape inter-disciplinary practices to strengthen future urban resilience.

Walsh and Allan's article examines the interplay between community knowledge and design. Once dominated by top-down strategic planning, design has emerged as a pivotal tool for communities to identify opportunities for activism and enhance their understanding of the landscape. Their research, centered on a Sydney neighborhood park managed by local authorities with a tendency toward mono-culturation for maintenance ease, proposes the biodiversity of grasslands as a catalyst for community-driven change. The study advocates for design tactics aimed at management rather than form-making, emphasizing the multifaceted benefits of carbon sequestration and community knowledge enhancement.

Janse van Rensburg and Puren's paper on permaculture illustrates the necessary shift in disciplinary and governance perspectives. Traditionally a rural practice, the successful integration of permaculture into urban settings demands a re-evaluation of urban systems and procurement processes. This represents not merely a novel concept for urban development but a paradigm shift that erases the boundaries between food production and urban life, essential for bolstering self-sufficiency in food and water management amid climate change challenges.

The research on flood resilience by Takin et al. highlights the advantages of a green infrastructure approach to flood management. It critically examines the potential of decentralized flood governance systems and the pivotal role of public engagement in such systems. By emphasizing coordination and communication, the study positions community involvement and authoritative guidance as key to enhancing resilience against future flooding events.

Herath et al.'s discussion on the "triple whammy" of housing affordability and disadvantage advocates for a localized approach to these issues. By drawing connections between community vulnerabilities, resilience potential, and socio-economic status, the paper underscores the significance of tailored, context-specific solutions over broad, generic policies.

Through these discussions, it is evident that methods and processes of governance and interdisciplinary collaboration will be vital in addressing the multifaceted challenges of urbanism, community development, green infrastructure, and food landscapes. It demonstrates that an holistic approach highlights the critical connection between landscape systems and community culture as fundamental for interconnecting and promoting ecological wellbeing and social equity.

Tackling the complexities of urban resilience demands moving beyond traditional governance and planning. It calls for transdisciplinary collaboration, community empowerment, environmental education, and a harmonious blend of design and planning. Such an integrated approach is essential for creating cities that are resilient, equitable, and sustainably aligned with the ecological and social objectives outlined by the UN, offering a forward-looking blueprint for modern urbanism.

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Conflict of interest

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