

Designing for Resilient Futures: Interdisciplinary Perspectives on Architecture, Urban Planning, and Digital Environments

It is a pleasure to present Volume 13, Issue 1 of the FARU Journal, which brings together six original research papers that reflect the breadth and evolving character of contemporary scholarship in architecture, urban design, planning, the built environment, and emerging digital environments. While the contributions span diverse scales, contexts, and methodologies, they share a common concern: understanding how design, planning, and governance can foster resilience, enhance human well-being, and respond creatively to the complex environmental, social, and technological challenges of our time.

The issue opens with two papers that situate resilience within broader territorial and urban contexts. The first investigates community vulnerability and resilience in the coastal region of Bangladesh, demonstrating that adaptive capacity depends not only on environmental conditions but also on inclusive governance, equitable resource management, and meaningful community participation. The second shifts the focus to the urban landscape of Sri Lanka, examining how railway-related leftover spaces influence the subjective well-being of adjacent communities. By proposing a framework that links overlooked urban spaces with measurable well-being outcomes, the study highlights the significance of spatial quality in creating healthier and more liveable cities.

Attention then turns to architecture and human-centered design through two studies that explore the relationship between the built environment and cognitive and psychological well-being. One paper examines the potential of biophilic architectural strategies to enhance salutogenic well-being in elderly care centers, reinforcing the value of integrating nature into environments that support healthy ageing. Complementing this perspective, another study investigates the influence of spatial navigation on visuo-spatial working memory among children with autism, offering evidence that can inform the design of more inclusive educational environments responsive to diverse cognitive needs.

The final two papers extend the discussion towards innovative and emerging directions in design research. One investigates biomimetic coastal green infrastructure, combining ecological principles, expert evaluation, and computational analysis to assess habitat complexity in adaptive reef modules. By introducing the concept of resilient intelligence, the study demonstrates how interdisciplinary approaches can contribute to climate-responsive and biodiversity-sensitive design. The concluding paper broadens the discourse beyond the physical environment, exploring how resilient digital memory infrastructures may be designed to accommodate impermanence within volatile digital ecosystems. Through speculative design, it challenges conventional notions of preservation and invites readers to reconsider resilience as an adaptive process of interpretation, memory, and technological change.

Taken together, the papers in this issue illustrate the expanding horizons of built environment research. They traverse multiple scales, from regions and communities to buildings, users, ecosystems, and digital environments, and employ a rich diversity of research methods, including mixed-methods inquiry, participatory research, behavioural studies, computational analysis, experimental simulation, and speculative design. Despite their disciplinary diversity, the contributions collectively reaffirm the central role of research in addressing pressing societal concerns while advancing knowledge that is both theoretically rigorous and practically relevant.

As Guest Editor, I extend my sincere appreciation to the authors for their valuable contributions and to the reviewers for their careful evaluations and constructive feedback, which have been instrumental in maintaining the scholarly quality of this issue. I also wish to acknowledge the Editorial Board of the FARU Journal for their continued commitment to fostering excellence in research within architecture, planning, design, and the broader built environment.

It is my hope that the studies presented in this volume will stimulate further scholarly dialogue, inspire interdisciplinary collaboration, and encourage new avenues of inquiry towards creating built and digital environments that are more resilient, inclusive, healthy, and sustainable.

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Guest Editor

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