Creating built environments: bridging knowledge and practice divides


Ilaria Geddes

To cite this article: Ilaria Geddes (2022): Creating built environments: bridging knowledge and practice divides, Cities & Health, DOI: 10.1080/23748834.2022.2050104

To link to this article: https://doi.org/10.1080/23748834.2022.2050104

Published online: 23 Mar 2022.
BOOK REVIEW


'Creating Built Environments' is published by Routledge and, as recounted in its postface, is the outcome of the author’s experiences in research, pedagogy and practice in the built environment across diverse cultural and geographical contexts. Roderick J. Lawrence is an Honorary Professor at the Geneva School of Social Sciences and a member of the scientific advisory board of the Swiss Academies of Arts and Sciences ‘Network for transdisciplinary research’. He has served as a consultant to the OECD and the ECE, as well as a scientific advisor to the WHO. He was the founding Director of the Certificate of Advanced Studies in Sustainable Development at the University of Geneva from 2003 to 2015.

The book applies a relational, systems thinking approach to the analysis of built environments as a framework to deal with their complexity when attempting to understand them and create them. It argues that a fundamental rethinking of the interrelationships between professionals and laypeople, between people and their habitat, and between human and natural ecosystems is needed if professionals, academics, public authorities and civil society are to respond successfully to the complex social and environmental challenges faced in urban environments. Transdisciplinarity is seen as the means through which collaboration takes place to create built environments that are healthy, socially just and sustainable. The book is divided into 2 parts following an introduction, which summarises the key messages. The first part is thematic and dedicated to five interrelated strategic domains, each presented in a discrete chapter: nature, health and well-being, food, housing, and creating change. The second part presents conceptual frameworks and methodologies for interdisciplinary and transdisciplinary contributions in the final two chapters of the book. These conceptual foundations and methods underpin the book’s analysis of people-environment relations and its approach to bridging research and professional practice through the co-creation, co-production and co-management of built environments.

Chapter 1 (Constructing with Nature in Mind) summarises previous ideas and propositions to interpret the relationships between built environment and nature, and proposes instead a different approach based on the principles of human ecology, which emphasise the interrelations between abiotic, biotic and anthropo-logic of ecosystems. It discusses the use of Analogies, such as the organic ones formulated by Louis Sullivan, Patrick Geddes, Lewis Mumford or Jane Jacobs, and Arthur Dahl’s Eco Principle as applicable to either natural or human-made functional systems, as well as the role of fundamental values in defining people-environment relations and the co-benefits of Ecosystem Services. The role of relational thinking in supporting the application and achievement of the SDGs is promoted as a means to ensure understanding and evaluation of the synergies and trade-offs among the goals and their targets. Three innovative projects (from Seoul, Taiwan and Singapore) are presented as constructive and successful examples of interventions considering the symbiotic interrelations between built and natural elements of urban ecosystems.

In Chapter 2 (Planning for Health and Well-Being), the author interprets health as a holistic concept to be embedded in built environment projects. Five models of people-health-environment relations are summarised: the sanitary-environment model, the socio-behavioural model, the bio-medical model, the techno-economic model and the ecological public health model. The author discusses how systems thinking is aligned with the principles of human ecology in understanding causation of health outcomes as a complex interaction among diverse factors rather than a linear cause-effect mechanism. The chapter also presents the concepts of Niche and Planetary Health to return to Ecosystem Services, focusing here on health co-benefits, and the SDGs, specifically SDG3 (Good Health and Well-being) and its interrelations with other goals. ‘New York Fit City’ and the ‘WHO Euro Healthy Cities Project’ are presented as effective cross-sectoral programmes supporting active living, health promotion and sustainable development at different scales. The chapter concludes by addressing the importance of the residential context for health, in particular housing as it faces the dual challenge of its own ageing while hosting ageing populations.

Chapter 3 (Food for Thought) highlights the pressing societal challenges relating to food production and consumption in the urbanizing world. The author argues that achieving the SDGs requires bold rethinking of the interrelations between food supply, land-use planning and urbanisation, and proposes that the concept of food security should be replaced by that of food sovereignty, discussing how the relocation of agricultural production near and within cities may promote this by providing availability and affordability of healthy foods. The chapter discusses the concepts and practices of food culture, gardening, food security, food sovereignty and urban farming, and presents some recent and older contributions to the understanding of the relations between food and cities. Again, the author returns to focus on the SDGs (in this case specifically SDG2: Zero Hunger), offering evidence on the failure of the agro-industrial sector to provide a sustainable supply of affordable healthy food. Alternatives are suggested and argued for in the spirit of transdisciplinarity: agroecology and permaculture, and
food cooperatives. The related case studies presented at
the end of the chapter provide successful examples of
their application: Incredible Edible Todmorden, civic
farming in a variety of initiatives across Detroit and
vertical urban farming in Singapore.

Plurality by acknowledging and providing for the
different needs of varied population groups is the core
idea of Chapter 4 (Housing Matters for All). Here, the
author argues against long-standing generalisations of
housing for universal design and its commodification.
Instead, housing should be designed to accommodate
different domestic cultures and lifestyles; something
which both the private and public sectors have often
failed to do. The chapter starts by highlighting the impact
and the ethical implications of the commodification of
housing and presents two cases of cooperative and
collective housing (in Zurich and Stockholm) which have
achieved affordability, availability, accessibility and
adaptability to accommodate a variety of residential
requirements across the lifecycle. The concepts of
Adaptable Housing and Lifespan Housing are presented,
leading to a discussion on the need to rethink housing
construction processes, recalling the contribution of
Bernard Rudofsky and later scholars to highlight the
know-how that laypeople may bring to housing design.
The chapter concludes by focusing on housing for sus-
tainable development with particular reference to the
informal sector and provides an in-depth overview and
variety of perspectives on the upgrading of the Enkanini
informal settlement in South Africa.

Chapter 5 (Creating Incremental and Radical Change)
discusses how built environments support responses to
demographic, ecologic and societal challenges. It presents
a framework that clarifies the distinction between adap-
tive and radical responses to the challenges, as well as five
scenarios for land-use planning in the European region
(Great Escape, Evolved Society, Clustered Networks,
Lettuce Surprise U and Big Crisis). The author argues
for the fundamental role of land-use planning in imple-
menting adaptive responses to a variety of risks, support-
ing the inclusion of collaborative approaches and
community-led changes as a core principle of sustainable
urban governance. He describes the concepts of
Tinkering and Radical Change, giving the example of
collaborative transport planning in Antwerp as a
successful large-scale community-led initiative.
Addressing extant chronic problems, as in the case of
many large housing estates constructed after 1945,
requires community involvement, political buy-in and
a redefinition of the role and contribution in society of
built environment practitioners. The case of the
Bijlmermeer housing estate in Amsterdam, and its long
process of redevelopment, is used to draw a summary of
conditions that support the transformation of built envir-
onments. The co-creation of scenarios for change is pre-
sented as a tool to enable people to think about
alternative futures along with Living Labs as experiments
to transition to sustainability. Finally, the author presents
Theory U as complementary to the Eco Principle,
highlighting how transition to sustainable development
depends on many variables, including and especially
human values.

In Chapter 6 (Conceptual Frameworks), relational
thinking is presented as enabling a reinterpretation of
the multiple relations between politicians, practitioners,
researchers and laypeople in planning and development.
It therefore presents a variety of relevant concepts and
conceptual frameworks: Elinor Ostrom’s Polycentric
Systems, a variety of humanistic contributions, Human
Ecology, Knowledge Cultures and Convergence, arguing
for the need to rethink ‘agency’ and recognising persist-
tent problems with the awareness that construction and
renovation can be catalysts for adaptation and radical
change. The author uses the concept of Convergence to
construct a framework for transdisciplinary contribu-
tions, which would enable concerted action to address
societal challenges and extent situations through co-
design, co-creation and co-production, promoting incre-
mental or radical change. The final Chapter 7 (Methods
and Methodology) advocates for built environments to
become arenas for change towards a different future:
‘knowledge is produced by both research and practice’,
the author states discussing the synergies between design
and transdisciplinary methods and their application as
a prerequisite for change. The latest advances in research
on design methods are presented and the use of Case
Study Research reviewed along with innovative education
programmes, inclusive participatory methods, the con-
cept of ‘scaffolding’, simulations, anticipative
approaches, creative thinking and the concept of ‘meta-
bolisms’. The author concludes reiterating the role of
relational thinking in implementing the SDGs and the
fundamental contribution of human habitats to
a sustainable and socially just future.

‘Creating Built Environments’ provides a coherent
framework to apply systems thinking to the construction
and renovation of human habitats. It enlightens and
clarifies the complexity of urban environments as out-
comes and mediators of the relationship between human
and natural ecosystems, and it resolves the tensions
around the production of knowledge needed to create
a more sustainable, healthier and equitable future. The
book makes a compelling argument for bridging research
and practice through transdisciplinarity by presenting
a wealth of knowledge and appropriate case studies,
which are successfully representative of its application.
The clarity of the narrative interlinking a variety of com-
plex concepts, frameworks, methods and approaches,
and their application in practice, makes the book enjoy-
able to read for both academics and practitioners, as well
as decision makers and civil society. The structure of the
book makes it possible for the reader to ‘pick and choose’
chapters of specific interest to read, but it is particularly
interesting as a whole to fully understand how the differ-
ent domains, concepts and methods are interlinked.
‘Creating Built Environments’ is a truly inspiring book
in its bold call to rethinking the relationships that define
both our urban environments and the means we use to
create them and improve them: it proposes some
extremely innovative approaches to the production of built environments while retaining the theoretical and scientific integrity needed to ensure the right way forward.

Notes on contributor

Ilaria Geddes is a Special Scientist at the Department of Architecture at University of Cyprus. She is the Research Coordinator of the Erasmus+ project Knowledge Alliance for Evidence-Based Urban Practices (KAEBUP) and contributes to teaching courses on Mediterranean Cities and Research Methodologies. Her research focuses on diachronic analysis of city development, urban theory, urban planning and the integration of diverse methodologies in urban studies. She is the co-president of the Cyprus Network of Urban Morphology (CyNUM) and an Editorial Advisor to the journal Cities & Health.