

Book Review: Planning Cities with Nature: Theories, Strategies and Methods

LEMES DE OLIVEIRA, Fabiano; MELL, Ian (Eds.). *Planning Cities with Nature: Theories, Strategies and Methods*. Cham: Springer Nature, 2019.

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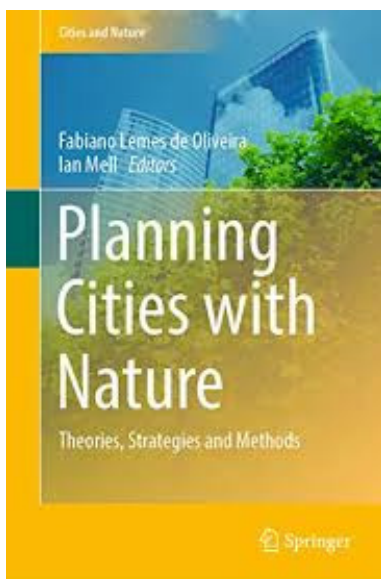
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Many articles and essays about urban ecology have similar introduction, their opening sentence states that, for the first time in human history, the number of urbanites

is larger than the number of peasants. This turning point is an extraordinary moment in the endless adventure experienced by human beings worldwide. Although common sense and, unfortunately, many scholars classify cities as opposed to nature, cities are nature. “Cities are as artificial as hives” is a particularly fortunate definition by British philosopher John N. Gray, who reminds us of our animal origin and of our gregarious behavior. Such *sui generis* ape species, which is the inextricable amalgam of biology and culture, has cities as its most wonderful and terrible creation.

From Philosophy to Ecology: ecologists classify cities as heterotrophic ecosystems presenting small area (approximately 3% of the earth portion on the planet) but immense inbound and outbound environments. Inputs & outputs. We cultivate the planet to feed billions of humans and their cattle; therefore, millions of acres of forests are sacrificed at the altar of monocultures. The ugly smoke that rises and hides the stars is everywhere and it covers the biosphere with a deadly veil. It is in the blood of sparrows (ANGEOLETTO et al., 2019) and indifferently circulates through the veins of smokers and of those who abhor nicotine. But let’s not unreasonably curse cities. They are the habitat of thousands of species, and they are also “plants” where the fertile imagination of human apes engenders ideas and environmental solutions such as green wedges (OLIVEIRA, 2017).

We (the authors of the current review) are not technological optimists. Only a fool would believe that the craziness, desires, consumption, ambitions and biosphere impacts of 8 (nowadays) or 11 billion humans (in the twilight of the 21st century) can only be met through good engineering. However, there is room for a rather modest optimism and the book entitled *Planning Cities with Nature* is an interesting guide to the urban stage of human life.

The book was edited by architect Fabiano Lemes de Oliveira (urbanism professor of the Architecture and Urban Studies Department of Politecnico di Milano) and by geographer Ian Mell (environmental and landscape planning professor at University of Manchester). It resulted from a workshop entitled *Re-naturing Cities: Theories, Strategies and Methodologies*, which gathered approximately 40 scientists from Brazilian and British universities - who were selected based on their curricula - at Federal University of Goiás in July 2017. In addition to workshop participants, the editors invited other authors to broaden the thematic scope of chapters in the book.

The book is structured into 19 chapters, which are divided into four main parts and a concluding section about the future of city re-naturalization processes (Chart 1). The chapters are signed by urban ecologists, architects, urbanists, planners, biologists, geographers, designers and engineers (Chart 2). The workshop was funded by the Newton Fund Research Links Program, British Council and Goiás State Research Support Foundation (FAPEG - Fundação de Amparo à Pesquisa do Estado de Goiás).

Fabiano Lemes and Ian Mell highlight the enormous interest in the topic “naturalization” (quotation marks by the organizers, because it is a metaphor) of cities right in the introduction of the book. Planning with and for nature is a complex, although essential, task to solve urban challenges such as improving human primate welfare and increasing the support to biological diversity in cities.

CHART 1- Book sections and chapters

SECTIONS	CHAPTERS
Part I – Cities and Nature in History	<ol style="list-style-type: none"> 1. Understanding Landscape: Cultural Perceptions of Environment in the UK and China. 2. Green Wedges: The Resilience of a Planning Idea 3. Demystified Territories: City Versus Countryside in Andrea Branzi’s Urban Models 4. The Introduction of Nature in the Austrian Radicals Practice 5. University Campuses: Experimentations on the Relations Between City and Nature in Brazil
Part II – Planning Models, Theories and Methods for Re-naturing Cities	<ol style="list-style-type: none"> 6. Towards a Spatial Planning Framework for the Re-naturing of Cities 7. Green Network as a Key of Urban Planning with Thermal Comfort and Well-being 8. Relationships Between Urban Green Areas and Health in China, Brazil and UK 9. Planning a Green City: The Case of Helsinki, 2002-2018.
Part III – The Right to Green: Multiple Perspectives	<ol style="list-style-type: none"> 10. The Democracy of Green Infrastructure: Some Examples from Brazil and Europe 11. Re-naturing the City for Health and Well-being: Green/Blue Urban Spaces as Sites of Renewal and Contestation 12. Do Built Environment Assessment Systems Include High-Quality Green Infrastructure? 13. Establishing Payment for Environmental Services in Urban Areas 14. Perspectives on Green: Recent Urbanization Works and Measures in Brazil and India
Part IV – Systemic Planning for Resilient Green and Blue Cities	<ol style="list-style-type: none"> 15. Understanding and Applying Ecological Principles in Cities 16. People-Policy-Option-Scale (PPOS) Framework: Reconceptualising Green Infrastructure Planning 17. For More Sponge Cities 18. Green Infrastructure in the Space of Flows: An Urban Metabolism Approach to Bridge Environmental Performance and User’s Well-being
Conclusions	<ol style="list-style-type: none"> 19. Re-naturing our Future Cities

CHART 2 – Chapters’ authors

CHAPTERS	AUTHORS
1	Ying Li, and Ian Mell
2	Fabiano Lemes de Oliveira
3	Pablo Martínez Capdevila
4	Alessandro Melis
5	Klaus C. Alberto
6	Fabiano Lemes de Oliveira
7	Ornella Iuorio, and Loyde A. Harbich
8	Klaus C. Alberto, Loyde A. Harbich, and Ying Li
9	Matti O. Hannikainen
10	Silvio Caputo, Verônica Donoso, Fabiana Izaga, and Pedro Britto
11	Mary Gearey, Lynette Robertson, Jamie Anderson, Paula Barros, and Deborah Cracknell
12	Danielle Sinnett, Tom Calvert, and Nick Smith
13	José Antônio Tietzmann e Silva, Josyanne P. Giesta, Luciane M. de Araújo, and Mariana R. R. dos Santos
14	Fabiana Izaga, José Guilherme Schutzer, and Komali Kantamaneni
15	Heather Rumble, Fabio Angeoletto, Stuart Connop, Mark A. Goddard, and Caroline Nash
16	Ian Mell, Camila Sant’Anna, Karin Schwabe Meneguetti, and Julia Rodrigues Leite
17	Karla Emmanuela Ribeiro Hora, and Maurício Martines Sales
18	Daniela Perrotti, and Ornella Iuorio
19	Ian Mell, and Fabiano Lemes de Oliveira

Chapter 1 presents the historical perceptions about landscape in urban development processes in the United Kingdom and China. The authors reflect about how urban ecology has been integrated to city development practices and how people interact with urban landscapes.

Chapter 2 thoroughly analyzes a planning idea from the early twentieth century, namely: the green wedges. The author describes green wedge models deriving from the initial concept of it. Green wedges are a resilient planning idea; they have been adapted to deep changes experienced by cities in recent decades, since they can help meeting urban demands such as the demand for green areas.

Chapter 3 analyzes the relationship between city and countryside in urban proposals by Italian architect Andrea Branzi. The analysis goes from *No-Stop City* (1969-1971), which is a political critique of the capitalist city, to *Agronica* (1995), which presents a symbiotic urban model according to which a hybrid territory simultaneously allows agricultural crop development and urban service provision.

Chapter 4 analyses the use of nature in representations by radical architects Raimund Abraham, Hans Hollein and Walter Pichler from the early 1960's to the late 1970's. Radicals strongly disagreed with the reductionist and technocratic view of the Modernist Movement.

Chapter 5 analyzes and addresses spatial strategies applied to planning Brazilian university campuses in three historical moments from the 1930's to the first decade of the 21st century. The author emphasizes the relationship between space strategies and nature; he concludes that the third expansion moment was less committed to the goal of integrating academic community and nature.

The author of Chapter 6 analyzes the roles spatial planning and some planning models should play in promoting integration between urbanization and nature. Unlike the trend to address the green space planning process as an aspect of general planning models, this chapter advocates for a more holistic and integrative appreciation of the interaction of multiple theoretical forces that help defining and applying city models.

Chapter 7 addresses interactions between flora and urban environments, and about their impact on individuals' well-being. Green space networks can enable many benefits. However, their planning cannot be solely based on qualitative criteria. The authors present quantitative tools to measure thermal comfort at different planning scales.

Chapter 8 addresses interactions between green areas and health in China, Brazil and the United Kingdom. The authors advocate for the implementation or expansion of green areas such as forests, squares, parks, backyards or front yards. Given the essential role played by urban flora in human health and well-being, increasing investments in green areas can help reducing inequalities in the access to urban vegetation, mainly in Brazil and China.

Chapter 9 addresses the role played by green spaces in urban planning in Helsinki, based on the analysis of the 2002 and 2016 municipal master plans. The city has opted for allocating some of its green areas for development purposes, whereas it simultaneously enhanced other green patches in order to increase biodiversity conservation.

The authors of Chapter 10 address inequality in the access to green areas, an issue often seen in cities of capitalist developing countries. The authors outline some recommendations

to help cities achieving an equitable nature provision, which is also a way of enhancing democracy.

According to authors of Chapter 11, increasing citizens' access to green and blue areas is of paramount importance for public health and urban sustainability. Four green and blue infrastructure types are presented and analyzed in the aforementioned chapter: urban wetlands, landscaped urban squares, public aquariums and green wedges.

Chapter 12 analyzes thirteen green infrastructure assessment systems. Most of them have flaws; however, they can contribute to green structure improvement processes.

Chapter 13 addresses difficulties in the implementation of green infrastructures in private areas. The authors suggest the application of strategies such as paying for urban environmental services to help consolidating these structures in cities.

The authors of Chapter 14 outline a study about issues associated with green infrastructures in peripheral areas in cities such as São Paulo, Rio de Janeiro (Brazil), Vijayawada and Guntur (India). The authors highlight difficulties in implementing these structures, such as conflicts between peripheral area residents and technicians in charge of implementing the projects.

The authors of Chapter 15 compare studies about urban ecology in the United Kingdom and Brazil. Studies about the ecology of cities in the United Kingdom often aim at enabling conditions to increase urban biodiversity. Brazil, in its turn, has relatively rich urban flora and fauna; however, such diversity is threatened by accelerated urbanization processes.

The authors of Chapter 16 propose reconceptualizing landscape planning based on the People-Policy-Options-Scale (PPOS) methodology. PPOS implementation can enable an inclusive and multi-directional dialogue focused on assuring that social, ecological, economic and political factors are integrated to the planning and management of green infrastructures.

The authors of Chapter 17 propose an environmental perspective about urban rivers and advocate for nature-based solutions to help developing new landscapes based on the reconciliation between urban design and natural elements. Rivers have been part of urban morphology since ancient times. Urban rivers and streams are often buried under pipes and concrete, a fact that certainly leads to the loss of their ecosystem services.

According to Chapter 18, studies focused on assessing the flow of resources required to maintain cities – their urban metabolism – can help enhancing sustainability in urban design and planning processes.

Finally, in Chapter 19, the editors analyze topics addressed in the book. They aptly highlight the merit of the other authors in demonstrating that investments (not only in resources, but also in ideas and methodologies) in environmental infrastructures are essential to help developing resilient, biodiverse and healthier cities.

The productive dialogue among scientists from Latin America, Europe and Asia, who reflect about urban and environmental dilemmas, as well as about possibilities of planning with, and for, the nature of cities in these continents, it is another merit to be highlighted in the book entitled *Planning Cities with Nature*.

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