

# **BOOK REVIEW**

**Richard T. T. Forman: URBAN ECOLOGY. SCIENCE OF CITIES.** – Cambridge University Press, New York, Paperback, 2014, 462 p., ISBN 978-0-521-18824-1.

Idea of ecology of large areas (landscape ecology) led Richard Forman, professor of Harvard Graduate School of Design, to the integration of several fields in order to build the groundwork for a new synthesis of spatial components of land. Research overlapping in ecosystem ecology, road ecology, urban-area ecology, nature conservation, land-use and planning introduced new manipulative tools within our knowledge of land mosaic dynamics in Forman's approach. His frequent participations in many scientific meetings across Europe during the seventies and eighties of the last century certainly contributed to the acceleration of his vision in the specific field science treated interactions between nature and culture (Forman, 1999). He was present at the conference where the International Association of Landscape Ecology (IALE) was based, the landscape-ecological symposium on the territory of the former Czechoslovakia (1982) - maybe the reason why there are a few cited authors from this territory in his book (14 authors from the Czech Republic, 1 author from Slovakia). I am sure that all this activity shifted his views towards progressively elaborated and produced books (Landscape Ecology, 1986, co-authored with M. Godron, Land Mosaics: The Ecology of Landscapes and Regions, 1995, and Urban Regions: Ecology and Planning Beyond the City, 2008). I think that Richard Forman became one of both, American and European godfathers of landscape-ecological research lines (Kovář, 2008).

Remarkable relationships can be found in the book *Urban Ecology - Science of Cities* to the exciting works of Jane Jacobs (*Death and Life of Great American Cities*, 1961, and *The Economy of Cities*, 1970). The same question appears at the background of writing by both protagonists of the theme: How can we improve entire urban area: its streets, lawns, parks, riversides, sewer systems, and industrial sites? Moreover: What causalities determine the level of urban development of this complex system (urban water, soil, air, plant, and animal foundations, man made city, suburb...) throughout the history?

Dense structure of the book: Foreword; Preface; Acknowledgements; Part I. Framework: 1. Foundations; 2. Spatial patterns and mosaics; 3. Flows, movements, change; Part II. Ecological Features: 4. Urban soil and chemicals; 5. Urban air; 6. Urban water systems; 7. Urban water bodies; 8. Urban habitats, vegetation, plants; 9. Urban wildlife; Part III. Urban Features: 10. Human structures; 11. Residential, commercial, industrial areas; 12. Greenspaces, corridors, systems; Epilogue; Appendices; Index.

The basic paradigm of Richard Forman represents the use of the ecosystem perspective for cities as adaptive sophisticated systems. It provides the tools to assess degrees of sustainability and stability in all kinds of its sense. His second contribution is the land mosaic model which provides the instrumentation for building vital network of cities and towns. Cities are viewed as the urban landscape - spatial system of hierarchical scales where humans interact with natural conditions to construct a place for living. All the fundamental interactions are perceived through the eyes of a landscape architect equipped with sensitive feeling for urban landscape pattern in relation to its functioning. It is well known that planners and/or managers are asking questions relevant to their day-to-day decisionmaking e.g., How much green structures could reduce the impacts of climate changes?, How can we design cities to increase human wellbeing? What construction techniques can be put into practice to minimize energy loss?, How much connectivity is needed in an urban segment to support biodiversity?, The book provides grounds to employ

the field of science, urban ecology for designers and planners. It is illustrated by photographs, analytical diagrams, drawings, schemes, maps and graphs in appropriate design of the chapter context. The book as an example of interdisciplinary embracing of a complex subject, its wider portrayal of important branch of (macro)ecology suitable for undergraduates, graduates, researchers, professionals in science and applied research and for management practice.

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## **REFERENCES**

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