

Ecologia Humana Uma Visao Global

By Ronaldo Gomes Alvim, Ajibola Isa Badiru,
and Juracy Marques

Feira de Santana, Brazil: UEFS Editora, Associação Brasileira das Editoras
Universitarias, 367 pp., 2014

ISBN: 978-85-99799-91-8

Reviewed by Karl Bruckmeier¹ and Luc Hens²

This book was presented at the “Second International Seminar on Human Ecology” at the State University of San Salvador de Bahia, Brazil, on September 11–14, 2014. Part of the global human–ecological discourse, it includes chapters in Portuguese, Spanish, and English that show the rapid development of human ecology in the Ibero-American countries. Because of the practical problems it discusses, the book is also of interest for a broader audience.

The respective chapters connect to a number of rapidly accelerating problems in the human–environmental realm: the effects of climate changes and mitigating or adapting to them; declining biodiversity; the prevention of chemical spills. There is increasing awareness of ways to address these, and answers are necessary.

As these are complex problems, the conviction grows that the answers require integrated, holistic, and transdisciplinary approaches where scientists and non-scientists cooperate. Moreover, the discussion is in need of transformative knowledge that avoids the fragmentation and compartmentalization of existing academic disciplines. It is also important to address deficits in dissemination and application of the knowledge available. This new knowledge is also required to deal with the overused and over-interpreted idea of sustainable development that is gradually losing its capacity as a guiding idea for social transformation. It needs to be renewed and rethought, even as it is integrated with other concepts. Human ecology offers such an avenue. It includes approaches such as the new social ecology, and offers new transdisciplinary cooperation and synergy to address contemporary problems. In so doing, it stands a good chance to achieve a better quality of life and improved human–environment relations.

¹ National Research University—Higher School of Economics, Moscow, Russia.

² Vlaamse Instelling voor Technologisch Onderzoek, Belgium.

The book describes, analyses, and demonstrates the potential of human ecology as an area of training and research in the interaction between social and ecological systems. The 10 chapters illustrate the multidisciplinary origins of human ecology and provide examples of contemporary applications.

The first three chapters are about the origins of human ecology, its scope and subject area, and its differences to other, related scientific disciplines. Next to its historical roots, human ecology is situated in the interaction between anthropology, planning and architecture, economy, epidemiology, psychology, and sociology, providing a context of economic, social, and environmental analyses that can be applied by decision-makers on a wide array of quality-of-life issues.

The other chapters show how human ecology dovetails in the social, planning, and medical sciences. Of particular interest is Chapter 10, which identifies nine ecosystem services directly influencing human health. They illustrate the importance of improving the relation between local communities and in-situ biodiversity conservation. The chapter adds to the idea that equitable environmental and public health measures are mutually supportive.

Four chapters illustrate the added value of human ecology approaches to issues in sustainable development. Problems on food security, natural resources, quality of life, and risk analysis are discussed. Chapter 6 provides a human ecology analysis of the environmental and social consequences of the tsunami disaster in Japan (May 11, 2011). Different time (from immediately after the disaster to the long term) and geographical (from local to international) scales matter. The chapter integrates data on environmental quality, health effects, human behavior, everyday life, and social and economic aspects of the tsunami disaster. The result is an integrated view, indicating how to deal with disasters and environmental problems in the 21st century.

The 10 chapters have been written by 12 authors who are active in teaching and/or research in human ecology. The book primarily serves the training of their students. Seven chapters are written in Portuguese or Spanish, and three in English. The publication of large parts of the book in Portuguese and Spanish indicates the origin and geographical spread of the discussion, with up-to-date information on the state of human ecology in large parts of Latin America. It shows also the social reality and practice of the human ecology discourse in the era of globalized science. International scientific discourse is not confined to the scientific “lingua franca” of English, but is rooted in other languages that show the original culture of the ideas and the participating scientists.

The value of the book for teaching is evident from its accounting of the history and development in human ecology and its application for the study of present problems. It shows how new concepts are taken up and new problems addressed, making use of the breadth of human ecology thinking in the multiple themes it investigates. In this way it is a valuable addition to Marten's (2001) *Human Ecology*. It equally provides updated information which is scattered over the literature (e.g., Gomes, 2012; Pires et al., 2010). This "integrated multiplicity" of human ecology simultaneously shows its epistemic strengths and weaknesses.

An epistemic strength in all phases of the century-long development of human ecology was the ability to integrate, synthesize, and apply knowledge from a variety of social and natural scientific disciplines and specialized fields of research. The value for this reaching across disciplinary boundaries is visible in the discussion of Lawrence (p. 71): people–environment relations cannot be fully understood from a few disciplines and from specialized disciplinary knowledge. Rather, a wide range of concepts and methods are required.

This does, however, touch on an inherent weakness in human ecology from an epistemological standpoint. Human ecologists continuously struggle with the difficulties of integrating a mass of knowledge that originates from different disciplines, so far working with "weak ties."

The weakness of methods for knowledge synthesis, conceptual integration, formulating new frameworks, and integrating different theories is as evident in human ecology as in other interdisciplinary discourses—and is not addressed further in this book. Also, when complex or wicked social problems are discussed (Chapter 4, Pires), the epistemological and methodological difficulties are visible. As in other contributions in this volume, the integrative potential of human ecology is seen in holistic thinking, global visions, ethical reflections about the relations between humans and other species, systems theory and systems thinking, and (what is called by Pires) building bridges between knowledge fields and knowledge bearers.

This shows, in a nutshell, the intellectual toolbox of human ecology. One would have wished for further discussion that takes up the integrative potential in more systematic epistemological, theoretical, and methodological analysis and reflection. Some of that did in fact take place in the recent discourse and research in social ecology in German-speaking countries (much of that published in English). Yet it is not discussed systematically in this book. Like a confirmation of "here ends the discourse," the broader reflections end abruptly after the chapter of Pires, and the subsequent chapters dive into the manifold themes of applied human ecology, and also a discourse on sustainable development (in Chapter 9, by Castellano and Alvim).

Castellano and Alvim go again through a broad debate, showing the ramification of the sustainability idea and the limits of the debate. They shed light also on the dilemmas and multifaceted problems of population growth and development, asking for a unifying holistic vision (p. 278f). Yet after that, the chapter glides over to a more politically critical discussion of sustainable development, especially for the countries of the global South, suggesting that education alone cannot solve the problems. This end of the debate is like a confirmation that human ecology reflection has not reached its potential.

This book can also be seen as an invitation to look at human ecology in a fresh way—one that addresses the progress of human ecology, not only accounting for its achievements, but also discussing more systematically the challenges of its future development and how to overcome its weaknesses. These weaknesses include the blind spots and “terra incognita” of interdisciplinary theory, problems in methodology and knowledge synthesis, and the limited knowledge on human–environment interactions. Yet, human ecology is informed by many disciplines. It invites methodologically disciplined forms of knowledge synthesis.

References

- Gomes, A. R. (2012). *Ecologia humana: Da visao academica aos temas atuais*. Alagoas: Editora da Universidade Federal de Alagoas.
- Marten, G. G. (2001). *Human ecology: Basic concepts for sustainable development*. London: Earthscan.
- Pires, I. M., Gibert, M., Hens, L. (Eds.). (2010). *Studies in human ecology*. Hanoi: Publishing House for Science and Technology.

This text is taken from *Human Ecology Review*,
Volume 21, Number 2, 2015, published 2015 by ANU Press,
The Australian National University, Canberra, Australia.