

Rodríguez Martínez, J. 2018. *Presiones humanas, impactos ecológicos, respuestas sociales. Relaciones entre el hombre y la naturaleza*. Ediciones Pirámide, Madrid. 295 pp. Spanish. ISBN: 978-84-368-4017-9.

The rapid changes that are taking place in the general ecosystem's function and structure are perceived as a serious threat caused by human activity. Significant climate deviations, accompanied by a rising rate of atmospheric and water pollution, species loss, habitat destruction and ecosystem disfunction in general are occurring at all spatial scales. The changes, which affect the whole planet and include almost all parameters considered, are known as *global change*, and the fact that they are caused by human activity has suggested that a new division should be created in the geological epochs, the *Anthropocene*.

However, in this era of massive use of social networks, much of the information reaching the general public (and even decision makers) is not scientifically sound, so it is of paramount importance to have a rigorous, science-based understanding of the complex consequences of the relation between humans and ecosystems. This is the main objective of this book: to provide students, and all people concerned with the ecological impact of human activity, with the basic tools for understanding, analysing (and even shaping their own ideas about) the environmental and socio-economic consequences of human activity.

The author, Jaime Rodríguez, is a professor of ecology at the university of Málaga and has previously published a textbook, *Ecología*, intended to provide students with a rigorous understanding of the principles of ecology (see Alcaraz 2011). The present work, as the author states, is clearly educational and can be considered the result of his teaching experiences on the topic at different levels of education.

The book is intended to help recognize and evaluate the global nature of environmental problems and their origin, reach informed personal opinions about them, and put forward possible socio-economic solutions. The author proposes a global or *ecosystemic* (currently a trending term) approach to the interaction between humans and nature. The book is structured as a narrative of an imaginary course taught to a fictitious, heterogeneous group of students. The action, narrated in the first person, has many of the characteristics of a

film script or play, including the thoughts and actions of the teacher and students (a very active and concerned group of people—many teachers would give their eye teeth to find similar enthusiasm in their classrooms). The environmental problems to be considered, chosen and elucidated after lively debates among the students are analysed with the help of the teacher, using many schematic diagrams presented in the style of notes on a blackboard. Complimentary tables and figures help disentangle the thread of the arguments that initiate the topics discussed. Each chapter ends with a brief summary and a presentation of the topics that will be dealt with in the following “lecture”.

After the introduction, in what can be compared as a summary of the script (“Encuentro con los alumnos”, Chapter One), the author presents the background, describing the setting for the action and the characters. The plot develops in eight more chapters corresponding to the lectures of the course. In a collaborative atmosphere, the teacher and the students discuss the main environmental problems, their social and ecological causes and effects and their planetary scale (“Lo que nos preocupa”, Chapter Two), the idea of sustainability, the controversial concept of development, and the idea—almost an oxymoron—of sustainable development (“Epilogo”, Chapter Nine). The book also includes a short reading list and an index of the real people cited in the text.

This book is a valuable tool not only for understanding the socio-ecological models proposed by international bodies (e.g. the *Pressure-State-Answer* model proposed by the Organization for Economic Cooperation and Development, those of the European Environmental Agency, and the Millennium Assessment). The story format makes it easy to read, but it is above all a useful, scientifically rigorous antidote against the polarizing effects of spurious information, which can lead to catastrophist or negationist ideas, or excessively optimistic views of the power of science to deal with the consequences of global change.

## REFERENCES

Alcaraz M. 2011. *Ecología* by J. Rodríguez Martínez. (Book review). *Sci. Mar.* 75: 407-408.

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