

Book Review

Cole, Daniel H., and Elinor Ostrom, eds. 2012. *Property in Land and Other Resources*. Cambridge, MA: Lincoln Institute of Land Policy.

Reviewed by Erling Berge, Department of Landscape Architecture and Spatial Planning, Norwegian University of Life Sciences.

This is a book mostly of literature reviews. Through its 472 pages it takes the reader to the research frontier on 15 topics organised by 6 headings: Property Systems, The California Gold Rush, Air, Wildlife, Land and Water, and Global Commons Issues. It is a book where most students of institutions governing resources (and many others as well) will find something to challenge their established concepts, either as a contrast to the familiar or as a revelation of the complexity of seemingly straightforward everyday issues.

The first section on property systems starts with Eggertsson's survey of some theoretical issues in the theory of how property rights institutions evolve or change. The role of uncertainty about the state of the world and about the mental models political players rely on is an unresolved theoretical problem in the theory of institutional change. He is primarily focusing on knowledge problems in the design of rules and enforcement mechanisms, and on the competition of "world views" or "mental models" among political players being affected by the outcomes of the institutional changes being proposed. The general discussion of property systems is continued by Cole and Ostrom. The conventional division of regimes into State, Common, Private and Open Access is not helpful in channelling attention and guiding institutional development towards the many multifaceted problems of resource governance and their solutions. They point to Hohfeld's classification of rights as an underutilized system for thinking about rights to natural resources and call for sensitivity to the complexities and varieties created by ecosystem dynamics and cultural precepts.

The California Gold Rush has been used as a case showing how property rights emerge when needed. Two papers, Clay and Wright & McDowell, use this

as a point of departure for discussions of the kinds of rights that emerge to spots where people dig for gold. The order that emerges is seen to be shaped by 1) the nature of the good (placer gold), 2) the economics of scarcity (large influx of miners), and to some extent 3) available technology and transport costs.

The third section looks at air as a resource and investigates rights to clean air and rights to pollute. Cole discusses the way public regulation of airspace and usage of the atmosphere as a sink for pollution may establish public as well as private property rights. Dolšák continues by considering the efficacy of various systems of tradable permits to air pollution trying to determine which factors contribute to a well performing tradable permit market system. These two contributions might be linked to Paavola's discussion in the section on Global Commons Issues. He is considering greenhouse gas emissions and the social trap that makes international agreements nearly impossible to agree on and if agreed on nearly impossible to monitor and enforce.

The fourth section discusses rights to wildlife. Shogren and Parkhurst's title "Who owns Endangered Species" is somewhat misleading. The bulk of their article presents various mechanisms for voluntary protection of landscapes to achieve the minimum sizes of contiguous patches and corridors that will suffice for an endangered species. McCay surveys various ways of managing fishing rights. The problem varies according to the nature of the fish, the accuracy of the scientific information about the fish stock, the technology employed, and the history of the fisher communities. For the majority of cases the system of governance, including the varieties of ITQs that have been introduced, is still rapidly evolving and the verdict in terms of social and economic sustainability is suspended.

The fifth section on Land and Water comprises 5 articles. The first article by Fischel surveys the evolution of zoning regulations in the USA since the 1980s. The survey discusses both various explanations for the existence of zoning regulation and their possible effects on welfare in general, and on land and house values in particular. Leigh Anderson and Zerbe discuss a difficult theoretical problem: what is the relation between the (subjective) idea of ownership and the commonly observed disparities between the willingness to pay (WTP) for (additional) property and the willingness to accept (WTA) compensation for alienated property. They summarize their discussion in 2 hypotheses: 1) Exogenously imposed changes in collective choice level rights will affect valuation disparities and reference points regardless of the property regime or type; and 2) Exogenously imposed changes from common property to private property regimes will affect valuation disparities and reference points. Epstein's contribution is a long and informative discussion of the many contentious issues that the development of property rights in land and water has encountered. Defining property rights is no mere academic exercise. Property rights are defined in legislatures and contested in courts. The academic exercise is to understand how these facts of law come into being and how to interpret the difference between what seems like a useful theoretical definition and the facts of law. Rules do not formulate themselves, nor are they self-interpreting. Both in formulation and interpretation they are contested.

This is best seen as a political process, and is discussed in Blomquist's contribution. The multi-functionality of resources translates into a multiplicity of uses of any physical resource as well as a multiplicity of interests in any particular use aspect of a resource. In the last chapter of the section Libecap returns to water rights and water markets. Libecap's interest in this is to explore the way market transactions can reallocate water to higher valued uses in the semi-arid western states with their established system of rights to beneficial and reasonable use subject to state monitoring to ensure this is consistent with the public interest. Alston in his comment argues for a more in depth understanding of the reasons for the locally imposed restrictions on the diversion of water rights out of the district, and also a better way of finding ways of compensating communities that may lose out.

One consideration that neither Libecap nor Alston mentions are the public health concerns. Each person needs a certain minimum of water each day of the year. Number of persons and minimum water availability over a year will then define a minimum requirement for a population before any industrial use of water. This public health minimum may currently be negligible also in the semiarid western states of the USA, but it may in an increasing number of countries become a consideration as draughts become regular occurrences during a year. Public policy needs to keep an eye also on this aspect of water use rights.

In the section on Global Commons in the very last chapter of the book Wyman discusses the plight of citizens of island states threatened by rising sea levels. The question explored is their possible right under international or moral law to relocate to another state. To start thinking about implementation of such rights, uniform tradable quotas of refugees is proposed based on objective ability to receive refugees as well as past emissions of greenhouse gases.

To the present reader the most interesting feature of the book is the recurrent attention to psycho-social and moral considerations. From Eggertson's discussion of knowledge and mental models, by way of Leigh Andersons and Zerbe's model of the role of moral claims to property to Wyman's question about the rights of climate refugees, we are reminded that the working real world rights to land and water are no mere academic exercises in designing the most economically efficient institutions. Property in land and other resources are touching the core of both personal and public identity, and it constitutes a core foundation for public policy and cultural development.