

## BOOK REVIEW

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## The Endangered Atmosphere: Preserving a Global Commons

Marvin S. Soroos, University of South Carolina Press, Columbia, S.C., 339 pp., ISBN 1-57003-160-6, \$39.95 (cloth), 19.95 (paperback), 1997.

*The Endangered Atmosphere: Preserving a Global Commons* describes and analyzes four cases of international response to global atmospheric policy issues. The first three—nuclear testing, transboundary air pollution, and stratospheric ozone depletion—are used to set up an analytical discussion of the fourth, climate change.

The historical chapters, which are excellent and could easily stand alone independent of the analytical chapters, provide a detailed history of international decision-making in each case study. Undergraduate and graduate students studying any physical or social science related to atmospheric or environmental policy would learn much from these chapters.

The analytical chapters are not as strong. For instance, while the book cites in its descriptive chapter on climate change the work of the Intergovernmental Panel on Climate Change, its analytical section does not. Instead, it describes a pending environmental catastrophe based on references such as a Worldwatch paper used to support the incorrect notion that hurricanes have increased in recent years. Such factual errors lead one to question whether the book has correctly defined the problem climate change poses to society.

A larger problem of the analysis sections is that they are painted in the black and white of the academic's palette rather than the hues of gray that characterize the practical difficulties of dealing with these complex issues. The two theoretical concepts used to characterize commonalities between the cases—the tragedy of the commons and environmental security—oversimplify, leaving out much that is important from the standpoint of policy.

The tragedy of the commons refers to the tendency for public resources to be over-exploited because the benefits of exploitation go to the individual while costs are shared collectively. In a well-written section, the book summarizes the tragedy of the commons by referring to the tale of a pasture shared by a village. Individuals keep adding cattle to graze even though they realize that the pasture is being severely degraded. They anticipate that whatever restraint they exercise individually for the good of the community will be more than compensated for by the excesses of the less scrupulous.

Each of the four cases diverges quickly from the commons framework. For instance, the test ban treaty had more to do with politics of the Cold War than concern about atmospheric pollution. Transboundary air pollution has more to do with direct harm to

one party living downwind of another than it does with a commons problem. The ozone case perhaps most closely mirrors a commons problem. But it provides a poor analogue for climate change as there were so few producers of CFCs, the politics were comparatively uncomplicated, and CFC substitutes were readily adopted. Finally, the case of climate change is much more complicated than a commons problem because most greenhouse gases are also found naturally in the atmosphere and are not necessarily pollutants, changes in climate produce winners and losers, and uncertainty persists as to the effects of greenhouse gas emissions. Nonetheless, although each case is difficult to fit completely into a commons framework—which the book does admit in places—viewing each through the lens of a commons problem does lead to an interesting discussion.

More problematic is the book's solutions to each of the four issues in terms of "environmental security." Drawing on a military analogy, the book argues that environmental security can be achieved through a choice made by nations unilaterally or collectively between preventative and defensive strategies. The author then argues that the primary choice in each of the four cases is between collective prevention and self-defense. None of the four cases fit this framework particularly well. For instance, in the case of climate change, posing the alternative of reducing CO<sub>2</sub> against building seawalls fails to recognize that the choice facing policy makers is not between mitigation and adaptation, but to what degree they will complement one another.

Academics pride themselves on finding patterns and similarities in the seamless web of human experience. But from the perspective of policy, it is sometimes differences across cases that are most significant for action. The book's excellent historical chapters are not matched in its analysis. In search of conceptual neatness, the book fails to fully engage the issues in a practical manner, rendering the cases almost unrecognizable. While the descriptive chapters are of value to anyone seeking a broad-overview of the four cases, the analysis will likely frustrate a reader seeking an insightful discussion of what is to be learned for the case of climate change from past international atmospheric regimes.—  
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