simply a matter of revising the ESA (see Terry Moe, "The Politics of Bureaucratic Structure," in John E. Chubb and Paul E. Peterson, eds., *Can the Government Govern?,* 1989, pp. 267–329). In fact, there are reasons to expect that environmental legislation will be written with the intent of limiting flexible interpretation. This is especially true if one considers the atypical electoral politics that delivered such a progressive class to Congress in the 1970s when most of the major statutes that shape environmental policy were passed.

In their final chapter, they provide a number of suggestions that might improve, at least at the margins, the generation, transmission, and use of knowledge. Many of their recommendations fall under the heading of "increasing democracy" in environmental decision making. For example, they argue for the inclusion of local knowledge and public preferences in decision making so that expert knowledge, faulty and partial as it is, no longer has singular status as the appropriate knowledge base for environmental policy. They argue for increased participation in environmental policymaking through mechanisms like consensus conferences, joint fact finding, and science shops. In addition, they call for more transparency in the ways that knowledge is produced (e.g., scientists should clarify how they came to their conclusions) and in the way it is applied in government (e.g., making government more open and giving the public better access to federal science). One thing that is not clear from their recommendations is how much will change if these recommendations are followed. Many of their suggestions draw on approaches that, though they may not be mainstream, are part of current practice. Thus the question of how broken the current system is becomes somewhat muddied.

In general, the book seems targeted mostly at a practitioner audience who is more interested in a menu of potential remedies for problems in environmental policymaking than in academic assessment of how well suited our political system is to finding, sorting, and applying credible information to policy formation. The book tends to be cursory in its treatment of relevant academic work and overlooks a number of approaches that might have led to a more balanced assessment of environmental policymaking. For example, the authors do not address Kevin Esterling's account of the political economy of expertise that puts pressure on interest groups to provide members of Congress with reliable information (see Kevin Esterling, *The Political Economy of Expertise: Information and Efficiency in American National Politics,* 2004). Nor do they engage with the extensive literature on issue networks that explains how issue networks can act as a testing ground for new ideas, thus taking some of the burden of knowledge assessment off the shoulders of generalist policymakers.

Not only do the authors overlook mechanisms in the political system that might support some of the criteria they care about, but they also are somewhat one-sided in their treatment of their case material. For instance, in pointing out an increasing diversity of sources of knowledge available for environmental policymaking, Ascher, Steelman, and Healy call attention to the complexity and uncertainty that this adds for policymakers. Though they imply that we are worse off for this diversity, they never explicitly compare this new state of affairs with the past. In fact, diversity might be useful in that it can provide a mechanism through which policymakers can tease out biases in any single source of information. Similarly, in describing the difficulties of setting water policy in the Klamath Basin, the authors describe how stakeholders remedied the reductive approach enshrined in the Endangered Species Act by creating a stakeholder decision-making group that brought a broader set of concerns to the decision process. Though Ascher, Steelman, and Healy are critical of the role of the ESA in shaping early decision making in Klamath, the case could also be read as an example of the flexibility of our political system that allows decision makers and stakeholders to adapt decision-making procedures to suit the particular problem at hand. The tendency to draw out of the analysis only negative examples creates an image of a policymaking system that is, perhaps, more hamstrung than is actually the case.

While most scholars of environmental policy will agree with the authors' overall argument—that there are problems with the application of knowledge in environmental policymaking that might be improved through an increase in democratic access to decision making—it is not clear that this book sheds new light on environmental policymaking. To the extent that the book aims to reach a practitioner rather than an academic audience, this may not be a shortcoming in that practitioners are more interested in practical implications and concrete remedies than academic debates. A strength of the book, then, is its ability to cover a breadth of analytic territory that might not be possible if they were more painstaking in their treatment of the important academic literature that precedes them.

**Security and Environmental Change.** By Simon Dalby. Cambridge, UK: Polity. 2009. 200p. $64.95 paper.

**Global Environmental Change and Human Security.** Edited by Richard A. Matthew, Jon Barnett, Bryan McDonald, and Karen L. O'Brien. Cambridge, MA: MIT Press. 328p. $50.00 paper.
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— Idean Salehyan, *University of North Texas*

Since the end of the Cold War, environmental problems, such as global climate change, deforestation, and the depletion of fisheries, have gained attention as threats to peace and security. For instance, the decision to grant Al Gore and the Intergovernmental Panel on Climate Change the Nobel Peace Prize in 2007 was predicated on the notion that climate change presents a serious challenge to



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ecosystems, as well as a threat to international security. Some, including UN Secretary-General Ban Ki Moon, have linked the crisis in Darfur to drought, the expansion of deserts, and competition over scarce resources between farmers and pastoralists. Most scholars rightly note that the link between environmental degradation and conflict is complex and often indirect, and this issue has certainly received a great deal of attention in the academic and policy literatures.

These two books do a wonderful job of synthesizing the literature on the environment and human security, and provide intriguing frameworks for analysis. They agree on a number of fundamental issues. While climate change has gained a lot of attention recently, both books take a much broader view of environmental change and resource depletion, taking special note of the challenges posed by $CO_2$ emissions. Both also adopt a "human security" perspective, in which the physical, material, and psychological well-being of people rather than states (i.e., "national security") is the focus on the analysis. Finally, these books reject simple Malthusian arguments that propose a direct causal arrow between resource scarcity and violence. Each takes a more nuanced perspective, arguing that owing to historic injustices and entrenched inequalities, communities are differentially vulnerable to environmental disasters. For instance, the 2010 earthquakes in Haiti and Chile had vastly different consequences for these countries, given their relative level of development.

Simon Dalby's *Security and Environmental Change* presents a comprehensive overview of the ways that environmental challenges affect human security at multiple levels, including individuals, countries, and the planet as a whole. Dalby persuasively argues that one cannot separate human beings from their natural environment. It is a fallacy to argue that the environment needs to be protected from us and vice versa; rather, there is a close relationship between people and nature. The environment is continually changing as it is shaped and reshaped by natural as well as human activity. The author argues that we are now in the Anthropocene, or the era in which human activity is a fundamental driver of the environment. What is important, he argues, is that we do not abuse nature in ways that are ultimately harmful to human welfare, for example, by burning so much carbon that the air becomes unbreathable and the climate unbearable.

Chapter 1 provides an intellectual history of the environmental security field, from Malthus to climate change. The argument that current consumption and population growth are unsustainable is not new. Yet in a field that is often polemical, Dalby takes a balanced position, presenting a wide range of perspectives. Although some have argued that population growth, climate change, and natural disasters will lead to large-scale armed conflict and war, the scientific literature does not support the most alarmist claims. Indeed, as argued in Chapter 2, a focus on militarized threats may actually be counterproductive. Instead, focusing on challenges to human well-being offers a more useful way to think about environmental problems and suggests cooperative solutions. Chapter 2 goes on to discuss different ways of conceptualizing security, ranging from a narrow focus on military threats to a much broader focus on human livelihoods. Subsequent chapters offer a glimpse into past instances of environmental threats to security and look forward to the future. Past environmental problems make it clear that the human security implications of environmental change are varied and complex. The introduction of invasive species, the spread of disease, the disruption of traditional agriculture with the expansion of markets, and modern dependence on fossil fuels—each environmental challenge has had profound impacts on ecological and human systems. Looking to the future, one can envision many possible scenarios, and the book does a fine job of reviewing scientific forecasts. Much of Chapter 4 focuses on climate change and possible future scenarios, such as the melting of the Greenland and Antarctic ice sheets and more frequent and intense tropical cyclones. Chapter 5 looks at how globalization and urbanization—trends that are likely to continue—have shaped human vulnerabilities. Ecological scarcities are no longer local concerns but can affect global food production systems upon which city dwellers are dependent. Moreover, dense population concentrations located near water (e.g., New Orleans) or in arid regions face special challenges. Within these cities, the urban poor, residing in slums and shantytowns, face more hardship than the affluent.

What can and should be done about these threats? Here, Dalby becomes more of an environmental activist, forcefully arguing for a reframing of the environmental security discourse. While militaries can play an important role in disaster relief efforts, overt securitization is not terribly useful. As he writes, "if the poor are portrayed as a threat to the prosperous . . . then violence, boundary fences, and conflict are likely. If, however, a broader understanding of security is invoked, one that recognizes the interconnectedness of humanity and the vulnerabilities of many people due to the increasingly artificial circumstances in which we live, then possibilities for less violent and more constructive responses open up" (p. 129). Dalby calls for deep international cooperation on environmental and security issues, peacebuilding, and dramatic changes to our means of production, including a shift away from what he terms "carboniferous capitalism." Although he does not delve into great detail regarding policy changes, it is clear that he advocates a radical shift in our current understanding of environmental security.

The edited volume *Global Environmental Change and Human Security* covers many of these same themes. Human security is defined broadly as "something that is achieved when and where individuals and communities have the



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options necessary to end, mitigate, or adapt to threats to their human, environmental, and social rights; have the capacity and freedom to exercise these options; and actively participate in pursuing these options" (p. 18). The introductory chapter does a wonderful job of framing the issue. In this chapter, the editors offer their perspective on human security and discuss how environmental concerns may be linked to both violent conflict and a more comprehensive definition of security.

The rest of the book is divided into three parts. Part II looks at how environmental changes may contribute to insecurity. Chapter 2 by Mike Brklacich, May Chazan, and Hans-Georg Bohle provides a nuanced overview of how natural disasters interact with socially determined vulnerabilities to produce human insecurity. The following chapters in Part II examine such themes as global public health, urbanization, and the challenges faced by slum dwellers, as well as the differential risks faced by New Orleans residents during Hurricane Katrina. In all, these chapters stress that human insecurity is not only a function of environmental changes, as profound as they may be, but also the resilience and adaptive capacity of societies.

Part III focuses on the potential for violent conflict. While stressing that environmental factors alone are not sufficient to produce conflict, Jon Barnett and W. Neil Adger (Chapter 6) review the literature on civil war and propose ways in which environmental changes may lead to contractions in people's livelihoods, in turn facilitating insurgency and political violence. The following chapter, by Richard A. Matthew and Bishnu Raj Upreti, provides an empirical case study, relating environmental stress to patterns of conflict in Nepal. Though offering inconclusive evidence, these chapters provide a starting point for future research on the environment and violent conflict.

Part IV then turns to solutions. Its seven chapters provide a broad range of policy options and frameworks for managing environmental crises and promoting human security and sustainable development. Chapter 8 focuses on ethical perspectives and looks at issues of equity and justice in coping with environmental change. Subsequent chapters look at policy options for reducing environmental threats as well as social vulnerabilities (Chapter 9); take a closer look at population pressures and environmental degradation (Chapter 10); provide an overview of the role of women in promoting security and development (Chapter 11); assess the relationship between human security and prosperity (Chapter 12); examine the role of democratic institutions in promoting sustainable development (Chapter 13); and look at efforts in Latin America to preserve transboundary resources (Chapter 14). These chapters do not necessarily offer a unified view of environmental management and human security, but do suggest several possibilities for future analysis.

The strength of these books lies in their ambitious scope and their broad view of environmental problems and human security. Yet at the most general level, the concept of human security can be overly vague if it is not grounded in concrete indicators. Both books do err on the side of taking an expansive view of security, which is fine as a theoretical exercise, but it does not suggest solid metrics for empirical research. Indeed, readers who are well versed in the literature and who are looking for rigorous empirical analyses will be disappointed by these works. They do break some new ground, but it is more useful to think of them as introductions to the field of environmental security, rather than as examples of cutting-edge research. Nonetheless, they do add depth and nuance to a field that often generates more heat than light. These works are a useful corrective to research that takes a narrow view of security and focuses on traditional threats; significant changes in the natural environmental could be just as catastrophic as conventional war. At the same time, these books avoid environmental determinism or the view that natural phenomena lead directly to violence, displacement, disease, and human misery. Instead, they take human agency, resilience, and adaptive capacity seriously and point to useful ways to face the challenges to come.

**Economic Thought and U.S. Climate Change Policy.** Edited by David M. Driesen. Cambridge, MA: MIT Press, 2010. 352p. $48.00 cloth, $24.00 paper.
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— Jason Scorse, *Monterey Institute of International Studies*

The Foreword of this edited volume of essays on U.S. climate change policy states (p. x): "In this book eleven contributors from the fields of law, public policy, and philosophy offer unabashedly critical analysis of neoliberal ideas in climate change policy, and they suggest more appropriate ways to design policy for the years ahead." But the aim of the book is even more provocative; it can best be summed up by the first sentence in the conclusion on page 297: "This book *shows* how neoliberalism led to the United States' failure to adequately address climate change" (emphasis mine).

While the book shows many things, it does not show *this,* however. And if serious attention to the range of neoliberal thinking on the climate change issue were offered, it would be clear that its bold claim constitutes a gross overstatement. It is all too common in the environmental movement and in some academic circles to misguidedly blame classical or neoliberal economics, and neoliberalism more generally, for a host of the country's (world's) environmental ills, or the failures to respond to them, and *Economic Thought and U.S. Climate Change Policy* continues in this unfortunate tradition.

Before continuing, let me state unequivocally that there are elements of economic thought and economic analysis



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