

order to disconnect mobility from the modern subject. By first conceptually deconstructing our predicament, and then adopting practices like bicycling and walking, we can crack open the regime of automobility and sow lived seeds of transformation.

Paterson's book makes eminent sense. We need a wholesale alteration of our political economy and culture if we are to avoid digging a more unsustainable trough toward our socioecological future. Moreover, only a politics that works both within and outside our systems of thought and practice can possibly be relevant for our present age. The only weakness of *Automobile Politics* is the language within which it is cast. The book is tough going in parts. So immersed in various literatures is the author that he cannot stop himself from embedding his ideas in disciplinary contexts and dueling with various interlocutors. Too often, he will deviate to a discussion about a specific author in the midst of developing an argument and split conceptual hairs. Even when the concept or author under discussion is familiar, such diversions are not always welcome. At times, they distract from Paterson's central argument, which is powerful and important.

Thomson's and Paterson's books provide useful entryways into meaningful environmental politics. Both focus on a specific topic—trash and cars, respectively—and both trace their studies to broader elements of environmental affairs. Furthermore, both offer critiques of contemporary practices and proffer alternative understandings and actions. Thomson presents a straightforward analysis of trash transport, while Paterson interrogates the meaning of cars and their contribution to our current regime of unsustainability. Let us hope that both books win wide readership, and that readers will be inspired to work that much harder toward transforming our world into a more humane and ecologically saner place in which to live.

Beyond Smoke and Mirrors: Climate Change and Energy in the 21st Century. By Burton Richter. New York: Cambridge University Press, 2010. 242p. \$99.00 cloth, 29.99 paper. doi:10.1017/S1537592710003622

— Oran R. Young, *University of California at Santa Barbara*

In this nontechnical and lively book, Burton Richter—a Nobel laureate in physics—sets out to provide “an accessible overview of what we know and don't know about climate change, what options we have to reduce greenhouse gas emissions in the energy sector of our economy, and what policies we should and should not adopt to make progress” (p. ix). Richter declares his own position at the outset in saying that “I do believe in beginning to invest in reducing greenhouse emissions as a kind of environmental insurance for my two young granddaughters” (p. x). But the book is not primarily a call to action. Rather, it lays out the issues and the options in a manner designed to make it possible for the thoughtful reader to arrive at

his or her own conclusions regarding climate change and what to do about it.

Part I, labeled “Climate,” sets forth a brief but clear account of the Earth's climate system and the state of play in efforts to understand the dynamics of this system. For the most part, this account reflects the current understanding of the science community. On one important point, however, Richter's position is increasingly controversial. He concludes that we should try for stabilization of greenhouse gases (GHGs) in the Earth's atmosphere “at no more than double the pre-industrial level which would be about 550ppm of CO₂ compared with the 270ppm of the eighteenth century” (p. 56). This choice, which he is careful to label “a personal guess” (p. 57), is now a focus of increasing controversy. The center of gravity in the science community is moving toward a goal of 450ppm or even 350ppm, and the scientific reasoning underlying this shift has become a focus of attention in the politics of climate change. It may well be that the choice of 550ppm is a pragmatic one, reflecting a judgment regarding what will be politically feasible during the foreseeable future. But many now believe that stabilization at 550ppm will leave us with a high probability of temperature increases that will have devastating impacts, especially in large parts of the global South.

Part II, labeled “Energy,” is the heart of the book; it lays out the options for reducing emissions of GHGs in a clear and authoritative manner. At the outset, Richter considers the question of “how fast to move” (p. 60) and discusses the disagreements among leading economists (e.g. William Nordhaus and Nicholas Stern) in answering this question. He attributes these differences to the choice of a (social) discount rate and makes the apposite observation that “I came to wonder if the notion of discount rates makes any sense when looking hundreds of years into the future” (p. 61). But there is more to this matter than a disagreement about discount rates. The fact is that we lack any well-grounded estimates of the probability that major changes in the climate system will occur, the costs to society associated with these changes, and the costs to society of taking action now to avoid serious impacts. Under the circumstances, Richter is undoubtedly right to set these disagreements aside and to proceed with an assessment of the options available to us for reducing GHG emissions.

There are four main options for reducing emissions: 1) demand-side management, 2) efficiency or “doing the same with less” (p. 184), 3) capture and storage of emissions, and 4) substitution or replacement of fossil fuels with other sources of energy. Overall, Richter takes the sensible view that “[w]e need to use all of them and remember that the goal is emissions reduction, not merely replacing fossil fuels” with other sources of energy (p. 184).

In the assessment that follows, the author makes a number of important points and offers several opinions that will seem controversial to some readers. There are “no

silver bullets” in this realm, and so “[w]e need to recognize that solving the problem will be hard and the solution will have to start with approaches on many fronts” (p. 71). A good place to begin is with efficiency. Although there are enormous opportunities for reducing emissions through increased efficiency, we often fail to take advantage of them, even when we could save money by doing so. There are a number of reasons, but Richter rightly observes that major contributors include the existence of misguided subsidies and our practice of using the world’s atmosphere “as a free dump for greenhouse gases” (p. 88). If electricity producers had to pay for the use of this dump, as he notes, “the situation would change in a flash” (p. 88). But this observation shifts the focus from an examination of the options to a consideration of the politics of climate change.

In summarizing the merits of the options, Richter says that he is “skeptical about achieving big emissions reductions without nuclear and hydro power, but even with them would feel much more confident if CCS [carbon capture and storage] could be made to work” (p. 188). He dismisses corn-based ethanol as simply a subsidy to farmers and (perhaps more controversially) concludes that we cannot count on renewables like wind and solar to solve the problem anytime soon. He takes issue with what he calls the ultra greens who “seem to have forgotten that the objective is to cut greenhouse gas emission[s], not just to run the world on windmills and solar cells” (p. 2). Many thoughtful readers will take issue with Richter’s support for nuclear power and CCS, but he does make an argument that needs to be taken seriously in this regard.

Part III, on “Policy,” is somewhat disappointing. Starting from the dubious proposition that “[t]oday the public is engaged and there is a broad consensus that the United States has to join the effort to mitigate global warming” (p. 210), the author limits himself to a consideration of the pros and cons of alternative policy instruments (e.g., cap and trade vs. emission fees) and calls for the development of a strengthened international agreement to replace the 1997 Kyoto Protocol. As a result, he does not tackle the politics of climate change. Although he applies the idea of the tragedy of the commons to the Earth’s atmosphere, there is no serious effort in this book to come to terms with a range of problems that block efforts to achieve substantial emissions reductions, including 1) the free-rider problem with respect to burden sharing, 2) the influence of vested interests, 3) the role of perverse subsidies, and 4) the effects of path dependence that make it hard to alter business as usual.

Perhaps this accounts for Richter’s disarmingly frank conclusion that “[s]ince I have become involved in energy and proliferation issues I have learned one new thing: politics—particularly international politics—is much harder than physics” (p. 216). Nevertheless, this book constitutes an excellent point of entry for anyone seeking an accessible and well-informed account of the options avail-

able to us in efforts to reduce emissions of greenhouse gases. While some readers will disagree with his judgments regarding specific options (e.g., the argument that we should push nuclear energy despite the proliferation problem), we are in his debt for reminding us regularly that the central concern is reducing GHG emissions and presenting the options in a manner that allows the reader to make informed judgments about the best way to tackle the climate problem.

A Climate of Injustice: Global Inequality, North-South Politics, and Climate Policy. By J. Timmons Roberts and

Bradley C. Parks. Cambridge, MA: MIT Press, 2007. 384p. \$65.00 cloth, \$28.00 paper.
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— Paul Baer, *Georgia Tech*

In *A Climate of Injustice*, J. Timmons Roberts and Bradley C. Parks offer a theoretical synthesis and empirical analysis that illuminates several aspects of the linked problems of climate change and development. The authors begin from a world systems perspective and attempt to synthesize some of its key insights with other theoretical approaches; they then draw testable hypotheses from their theoretical models, and evaluate them empirically through regression analysis. The main argument of the book is that the conflict between developed and developing nations in global climate negotiations—sometimes called a “stalemate” (p. 23), sometimes an “impasse” (p. 218)—results more than anything else from the *inequality* of the North and South, rooted in the structural legacy of colonialism. Its policy conclusion is that innovative approaches to reducing this inequality will be necessary to induce southern cooperation in solving the climate problem.

I find the book to be insightful, both clear and rigorous, and admirably ambitious; its contributions to the field are substantial. Its attempt to integrate multiple strands of international relations theory will be of interest to a wide range of people interested in global climate policy and international environmental politics more broadly. However, as I will attempt to show, the book somewhat oversimplifies—and, arguably, mischaracterizes—the North-South conflict in the climate negotiations. (Note that I co-authored a book with Tom Athanasiou [*Dead Heat*, 2002] that makes a similar argument, and my critique of Roberts and Parks applies to that work as well.)

After Chapter 1 introduces the book’s themes, Chapter 2 provides an extensive narrative of the reasons why the South might not want to cooperate in addressing climate change. As demonstrated through a survey of recent trade negotiations and other international regimes, global inequality produces not only different understandings of what is fair, but a pattern of beliefs and behaviors by southern governments that are rooted in mistrust and an ongoing history of northern “opportunism.” The authors are