## **BOOK REVIEWS**

Roberts, J. Timmons and Bradley C. Parks. 2007. *A Climate of Injustice: Global Inequality, North-South Politics, and Climate Policy.* Cambridge, MA: MIT Press. 404 pages, ISBN-13: 978-0-262-18256-0 Cloth (\$65.00). ISBN-13: 978-0-262-68161-2 Paper (\$26.00).

In *A Climate of Injustice*, Roberts and Parks use a theoretically and empirically integrated approach to examine non-cooperation on climate change policy. They argue that in order to understand why nation-states are either willing or unwilling to participate in climate protection policies is fundamentally tied to international inequality and patterns of mistrust between nation-states. Particularly, for the case of climate change, Roberts and Parks frame their argument with the idea of the "triple inequality" of vulnerability, responsibility, and mitigation. They further argue that each one of these components is fundamentally tied to larger issues of economic, political, and social injustice in the world-system.

Roberts and Parks's analysis is unique and innovative as it combines a variety of theoretical and empirical perspectives. They apply a wide range of interdisciplinary approaches by integrating structuralist theorization, like world-systems theory, with more mainstream theories in International Relations that have typically been used to explain international cooperation. Roberts and Parks also employ classic quantitative techniques, such as OLS regression and path analysis, along with qualitative case-study investigation. This holistic and integrative approach makes *A Climate of Injustice* an excellent tool in a variety of settings, including graduate and undergraduate classes.

A Climate of Injustice begins by demonstrating that responses to climate change are inherently tied to larger problems of global inequality in both direct and indirect ways. Directly, the shortage of technical, financial, and administrative capacity in poor nations puts them at a severe disadvantage in climate policy negotiations. Indirectly, Roberts and Parks argue that global inequality fosters perceptions of generalized mistrust, differential worldviews, and perceived unfairness between nations. In short, the authors argue that global inequality leads to "structuralist" world views. The preliminary chapters serve to ground readers in theoretical explanations of the North-South stalemate on climate policy, primarily by exploring three dominant perspectives: structuralist theories about the behaviors of states, intermediate theories of international environmental politics, and issues related to the problem structure of climate change. These explanations are combined to produce a model of North-South non-cooperation, where global inequality hinders the adoption of shared understandings of "fair" solutions.

Roberts and Parks then move on to their "triple inequality" of climate change. They explore these three facets in four separate chapters, using a variety of empirical techniques. The authors adopt a qualitative approach in one of the chapters, exploring the historical and structural causes of Hurricane Mitch in Honduras, a trio of hurricanes in Mozambique, and rising waters in the island nation of Tuvalu. Although these case studies represent very different climate disasters, they share common attributes which serves to guide later quantitative analysis, such as unequal (and often unsure) land tenure characteristics, income inequality, and environmental vulnerability.

Cross-national exploration of climate-disaster vulnerability is undertaken in the following section. The authors take a large step forward for risk and vulnerability analysis by redefining

how we should measure vulnerability, particularly in less-developed countries. They state, "that rich nations pay for climate change with dollars and poor nations pay with their lives" (37). Roberts and Parks measure vulnerability by incorporating this critique of economistic approaches by three factors, number of people killed, made homeless, and affected by climate-related disasters, from 1980 to 2002. The authors test whether disadvantaged insertion into the world economy, as indicated by a narrow export base, impacts various measures of vulnerability, such as geographical vulnerability (living on the coast) and social vulnerability (income inequality) and overall climate risk. Using path analysis and OLS regression, Roberts and Parks conclude that a narrow export base is strongly predictive of national patterns of risk for climate disasters. Although critics might argue that using narrowness of export base as a sole indicator of disadvantaged insertion in the world economy is a severe limitation in their analyses, their "admittedly imperfect" measure does posses a significant degree of explanatory power when applied to climate change vulnerability, responsibly, and mitigation.

In exploring climate change responsibility, Roberts and Parks assert that the industrialized world, particularly the United States is clearly responsible for a disproportionate amount of carbon dioxide emissions and the consequent global warming. They cover four major fairness principles for climate change policy that have been argued for during recent climate negotiations; grandfathering, carbon intensity, per capita, and historical responsibility. Most importantly, the authors argue that in the current policy climate, none of these fairness principles will work alone. They then focus on the four principle ways of measuring emissions that come from these fairness principles, and test for factors driving variation in responsibility across these four outcomes. Roberts and Parks find that regardless of how we measure climate change, there are geographic and economic factors that are consistently linked with increasing emissions, such as state location in cold climates and economies focused on manufacturing. These common factors may help point to "fairness focal points" in future policy negotiations. Their analyses also provide further support for theories of ecologically unequal exchange and the ecological debt perspective, as trade was shown to have differential impacts on emissions based on world-system position.

Last, the Roberts and Parks empirically address who is participating in environmental treaties and global efforts to reduce emissions. They develop an index of twenty-two international environmental agreements from 1963-1999 and examine the factors affecting the participation of 192 countries. They include the influence of proximate political factors, like civil society pressure, and deeper social and historical determinants of state action, such as narrowness of export base. Indeed, their multi-stage approach proves useful as both of the factors mentioned above are closely linked to participation in environmental treaties.

A Climate of Injustice serves to provide a new route through which we can study climate change. Roberts and Parks use an integrative approach to demonstrate that climate change is fundamentally an issue of global inequality; thus the solutions will likely require unconventional policy interventions, such as wealth redistribution policies and the use of "green" and "brown" aid for less-developed nations. A Climate of Injustice reminds readers that climate negotiations take place in an unequal world, and that historical legacies have created a hostile environment in which these negations take place. Roberts and Parks argue that reaching shared perceptions of fairness will be crucial as world-wide consensus and participation is needed to combat this global problem. By bridging theories, looking at both root and proximate causes, and employing

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inventive qualitative and quantitative analyses, Roberts and Parks begin the quest for climate justice and expose the root cause of non-cooperation on climate change, global inequality.

Kelly Austin Department of Sociology and Anthropology North Carolina State University kfawcet@ncsu.edu

Christopher Dick Department of Sociology and Anthropology North Carolina State University ccdick@sa.ncsu.edu

Spencer, Roy W. 2008. Climate Confusion: How Global Warming Hysteria Leads to Bad Science, Pandering Politicians, and Misguided Policies That Hurt the Poor. New York: Encounter Books, New York. 191 pages. ISBN-10: 1594032106, ISBN-13: 978-1594032103; \$21.95 (Hardcover).

This book is very readable and accessible to non-specialists, but presents some interesting issues for world-systems analysis. It presents the weather processes and uses these as the context of the major points of the debate on climate change. Thus, it locates the contribution of human activities to climate change and clearly argues that the debate is not about the fact of global warming. Rather, it is about explaining the changes and visualizing their consequences. It cites the resiliency of nature and humans. Thus, there should be no need to renounce the modern lifestyle that entails utilizing the resources from the environment - including its role as "sink" of byproducts. In the cycle that leads to the greenhouse effect, Climate Confusion argues that the contribution of human activities is small compared to that of natural processes. A balanced view would lead to a reasonable approach in devising measures or policies relative to global warming. People can influence what goods and services to consume (and the technologies needed to produce them - including the "kinds of pollution" [168] they produce to affect global warming). Constituents can vote for representatives who would formulate public policies that are acceptable or desirable.

For all its clarity and cogency to allay fears of climate change, the book also highlights the intractable problem of uncertainty in deciding on policy measures. As solutions, policies are "largely depend upon an informed public" (168). The uncertainty is not only with regard to the scientific analysis of climatic processes. It also operates through what has become the prevailing view through social epistemology. The book provides illustrative observations and comments on how scientists who do not subscribe to this view are treated differently (in a congressional hearing). The mass media are shown to characterize those who do not subscribe to the now widely accepted view on global warming.

Between the lines, a loop appears to undergird the intractability of the problem - and in two strands. If constituents (the public) are to decide what kind of pollution they can afford, so to speak, they face the difficulty of having to judge which group of scientists (say, those who are alarmed with global warming or those who are not) has the correct analysis of the problem.

Laymen (some of whom might be the policymakers) are being asked to evaluate the analyses of specialists! On what basis could they do this, given that the specialists themselves cannot do away with uncertainties? A related point is the juxtaposition of what is "good for human progress" (170) with what is "bad for the environment" (170). Humans would valorize the environment in terms of their interests and values. But problems would arise at the practical and local level. The tastes and preferences of consumers in one part of the globe could impact populations that might have different conceptions of their interests and welfare - let alone human progress. The interconnectedness of events lies at the bottom of the scenario where humans as producers and stewards (rather than as consumers and polluters) are not a monolithic bunch. There are differing - even outright conflicting - interests across the globe. Hence, the calibration of what is good for humans (let alone progress) in differing local contexts (but nevertheless subject to global-scale processes) is a daunting task. Climate Confusion provokes deep questions more by its observations and comments on the behavior of social actors than by its persuasive presentation of the science concerning climate change. How does the public choose the "valid" knowledge and standards? The difference between scientists who look for trends and those who take feedback loops into account - meteorologists among them - comes to the fore.

Communication between specialists and the public (including the policymakers) matters a great deal. As it were, specialists attempt to mobilize public opinion, which takes shape under the influence of other factors than what science depicts and explains. Thus, this book engages world-systems theory by punctuating the role of location relative to putative causes (e.g., distribution of the type of technology used and backlash, population needs, etc) of environmentally undesirable conditions. At the same time, it shows location practically transcended in terms of perceived and projected effects because of the acknowledged interconnectedness of things environmental. Climate change is emblematic of this point even as resiliency and leapfrogging prospects do not fade in the background. So, getting publics in different sections of the globe properly informed virtually makes "affected populations" - those who can articulate demands or who can have advocates on their side - into constituents of policymaking beyond borders. This corroborates the single-unit view in world-systems.

Florencio R. Riguera Department of Sociology The Catholic University of America 89RIGUERA@cua.edu

Bunker, Stephen G. and Paul S. Ciccantell. 2005. *Globalization and the Race for Resources*. Baltimore: The John Hopkins University Press. 263 Pages, ISBN 0-8018-8242-5 Cloth, ISBN 0-8018-8243-5 Paper.

This book and its authors are likely to be familiar to many readers of this journal. *Globalization and the Race for Resources* won an award from the Political Economy of the World System section of the American Sociological Associations in 2006, and Stephen Bunker and his former student and colleague Paul Ciccantell have published in *JWSR*. Sadly, Stephen Bunker died in 2005 as this book was in press.

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*Globalization and the Race for Resources* is a complicated book based on the very simple, but essential, idea that power—in this case global power—is based on the possession or control of resources. As the authors have it, the world we live in today is the result of the successive efforts over the past six centuries by capitalist nations—Portugal, the Netherlands, Great Britain, the United States, and Japan—to achieve and maintain global trade dominance by gaining control over the natural resources upon which economic growth and social development depend. In this sense the title of the book is a little misleading; these nations have not raced around for the past half millennium looking for and grabbing resources in order to "globalize" the world, but rather to dominate it. Globalization, i.e. the emergence of world-scale social, economic, and political relations, has been the largely unintended outcome, not the point, of these efforts. And while the author's various arguments are certainly relevant to the debates about globalization, a more accurate title for the book might have been "Global Power and the Race for Resources."

In any event, to appreciate the authors' argument one has to recognize that they have little patience with social constructionist ideas about "resources." When it comes to resources these guys mean *resources*, as in the raw materials, such as trees, minerals, coal, water, rubber, and animals that are used to create profitable commodities. And while acknowledging the myriad variations in cultural expression and social organization, they anchor much of their argument on the principle that humans can create only what the natural world will allow. As they write, "Matter and space are naturally given. Technologies that mediate between them and human actions and goals are socially created, but they can only achieve the human goals for which society invents and finances them if they conform to the natural (i.e., biological, geological, locational, physical, and chemical) features of the raw materials they transform" (p. 11).

This naturally occurring and highly unequal distribution of resources across and under the earth and in its oceans establishes, for these authors, the central contradictory dialectic between a nation's attempt to achieve and sustain economic dominance and its need to capture and control those resources. Nations first make use of the raw materials that are close at hand, but as these are exhausted and technologies develop to make use of more exotic and more distant resources, economies of scale must be put into place to make the exploitation of less accessible resources profitable. But these economies of scale inevitably create diseconomies of space which must then be overcome by even greater economies of scale. And so it goes. The authors argue that nations rise and fall depending on their ability to solve—if only for a time—the economies of scale puzzle presented to them at a particular point in history. "Because social production can expand more rapidly than the natural production from which it draws matter and energy and because expanding production requires greater volumes and diversity of materials, each nation that ascended to trade dominance had to devise ways to obtain stable access to larger and more distant sources of more distant kinds of matter" (p. 224-5). These and related theoretical assumptions and principles are sketched in Chapter One, entitled "Matter, Space, Time and Globalization."

Bunker and Ciccantell developed this perspective primarily by studying the history of the exploitation of the Amazon, and they show us what they learned in Chapter Two, "Globalizing Economies of Scale in the Sequence of Amazonian Extractive Systems." In this chapter we learn how the Portuguese came looking to grow sugar, but instead ended up taking cacao, rosewood, manatees, and turtle eggs; the British and Americans came for rubber; and most recently the Europeans, Americans and Japanese came to open and exploit the largest iron ore mine in the world. Perhaps needless to say, each wave of exploitation resulted in various levels of death and

destruction for the Amazon's animals, people, and environment, and the enrichment and empowerment of those who came to exploit it. And each wave of exploitation was made possible, and necessary, by the even bigger and more complex technologies needed to achieve the economies of scale that would make such efforts profitable in a given epoch.

With Chapter Three, "Between Nature and Society: How Technology Drives Globalization," Bunker and Ciccantell develop what they learned from studying the Amazon into a theory of the relationship between technology, cycles of national economic dominance, and globalization. This theory posits, in the abstract, that "Transitions from one systemic cycle to the next occur when an ascendant economy adapts technologies developed by the established trade-dominant economy to the larger scales and broader spaces that the ascendant economy's particularly favorable materio-spatial situation makes possible" (p. 81). Thus, globalization—the ever enlarging inclusion of global space into social and economic relations—does not happen unless the logistical problems that the colonization of that space (and, one might add, everything and everyone within it) requires are solved. And whoever solves those problems gets to be on top.

Having formalized the discoveries made from studying the Amazon, Bunker and Ciccantell spend the remaining chapters analyzing the rise and eclipse of each nation, with a lot of attention paid, naturally, to technological innovations in navigation and shipping. Chapter Four, "Bulky Goods and Industrial Organization in Early Capitalism," considers Portugal in the fifteenth century; Chapter Five, "From Wood to Steel: British-American Interdependent Expansion across the Atlantic and Around the World," includes Holland as well as Britain and the U.S., while Chapter Six, "Raw Materials and Transport in the Economic Ascendancy of Japan," brings us back to present, where quarter-mile long container ships roam the seas and apartment building-sized dump trucks move the earth around. Taken together, these chapters provide substantial empirical evidence to support the contention that the economic fate of each of these nations depended to a great extent on their logistical and technological capabilities supported by emerging social and political structures designed to capitalize on those innovations.

In the concluding chapter of the book the authors summarize what has been learned and "...consider what further analysis and what kinds of action we, as citizens and as scholars, can undertake to reduce the social and environmental disruption and destruction that broadening searches for raw materials have engendered" (p. 222). While not a central focus on the book—it is almost assumed from the start—one of the more important things that the authors suggest we should do is debunk the myth that resource extraction will lead to economic development for anyone other than those doing the extracting. In this view the authors are not alone, of course; it is a view they share with all those who see global inequalities as the result of dependent and exploitive relationships between core and periphery. To these voices, however, the authors helpfully add their particular emphasis on the way in which raw materials extraction has contributed to these inequalities.

Finally, the authors propose that we can begin to mitigate the social and environmental damage the race for resources has caused by making raw materials more expensive "... thus reducing their consumption in the core, reducing the inequality between core and periphery, and reducing our destruction of the natural environment" (p. 246). Well, as we write, a barrel of oil is nearing one-hundred and fifty dollars, steel is hard to find, and food prices are on the rise. These events point to the queasy realization that the race for resources is speeding up, there are new

contestants (China, India, etc.), and that policy proposals along these lines might well be redundant or, more likely, futile. After all, this is a race that is unsustainable.

*Globalization and the Race for Resources* is theoretically challenging and empirically grounded, and is a must read for specialists. On the other hand, the book is not easy to read and will torture the unwary undergraduate or general reader, who will most likely give up on it if they have a choice. The authors are much too fond of writing page upon page of abstract jargon unrelieved by example or anecdote. And, have mercy, they often repeat themselves. Nevertheless, mindful of the trying conditions under which it was written, *Globalization and the Race for Resources* is an important and valuable work, and we are grateful to have it.

Clifford L. Staples Heather Jackson University of North Dakota Grand Forks, North Dakota clifford staples@und.nodak.edu