

PPOL 150, Environmental Policy Analysis

Public Policy Program at Mills College, Fall 2007

Tuesdays and Thursdays, 11-12:15, Lucie Stern Hall, Room 26

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Office Hours: Tuesdays, 2-3:00, or by appointment

Course Overview

This course explores political responses to environmental problems. Students will examine the social and cultural origins of contemporary attitudes toward the exploitation and conservation of natural resources, and the institutional structures that shape public policy in this field. We will then turn to case studies of environmental issues at multiple scales, from neighborhood air quality to global climate change. We will emphasize comparisons between American and international cases, as well as the effects of environmental crises and policies on equity for different populations. Analytical approaches to be discussed include political ecology, environmental justice, environmental impact assessment, and sustainable development.

Rationale and Learning Outcomes

Policy analysis and environmental studies are fundamentally interdisciplinary fields. This means that students must master and integrate knowledge and skills from multiple disciplines, both analyzing and synthesizing. The work of this course encompasses practice in all of the public policy B.A. and M.P.P. student learning outcome (SLO) areas, with demonstration of competence required in the following areas:

- Understanding public policy-making processes and contexts
- Ethical reasoning
- Legal reasoning
- Analytical methods for assessing public policy problems and options
- Contextualizing in terms of historical evolution; comparative/international institutions; and social structures and identity dimensions
- Applying analytical techniques to a variety of policy problems
- Investigating a specific policy problem in depth

Course Policies

Students are expected to attend all class meetings, arriving on time and having completed all readings and other assignments due on that date. **Late assignments will not normally be accepted.**

For each class meeting, you should be prepared to **participate fully and thoughtfully**: this means not only having read and analyzed the required materials, but also being ready to listen to

others and collaborate in the learning process. Because this is a small class that depends on all students' individual expertise and active participation, please consult with the instructor well in advance should any reason arise that would prevent your attendance or timely completion of an assignment.

To request **academic accommodations due to a disability**, students should contact Services for Students with Disabilities in the Cowell Building. If you have completed the "Confidential Memo to Instructor" from SSD indicating you have a disability that requires academic accommodations, please give it to me so that I will be able to provide the accommodations that you need in this class.

Customary academic standards for original work and proper bibliographic citations apply. Plagiarism, as defined under the **Mills College Honor Code**, will be cause for a failing grade in this course as well as Honor Code sanctions. Please consult with me if you have any questions, or even the slightest doubt, about how to follow these requirements.

Course Requirements and Grading

Preparation and Participation (25% of final grade).

Your active participation is essential for this course to be a worthwhile learning experience, both for you and for your fellow students. In preparation for discussion, **by midnight on Monday each week** you will submit a brief (2-3 sentence) abstract of each of the week's required readings, giving 2-3 important points or questions to be considered by the class. At the end of the semester, students will have the opportunity to identify the classmates who contributed most to their learning, and this feedback will be a factor in computing this grade.

Ecological Footprint Exercise and Memo (10%).

Carbon Stabilization Wedges Exercise and Memo (10%).

Environmental Impact Map Exercise and Memo (15%).

For these assignments, you will complete an exercise (online or in class, as directed) and summarize your results in a 2-3 page memorandum. Details will be announced one week ahead of each due date, as shown on the calendar below.

Environmental Policy Briefing: Presentation (20%).

Environmental Policy Briefing: Research Paper (in lieu of final exam, 20%).

In consultation with the instructor, you will choose a current environmental policy problem to research during the semester. Briefings may consist of either (a) a public comment letter in response to an Environmental Impact Report/Statement or (b) a recommendation for action by a responsible official or institution, be it local, national, or international. In either case, the briefing should place the specific problem in context, drawing on the concepts covered in this course. You will choose your topic and turn in a preliminary bibliography early in the semester. At the end of the semester you will make a formal presentation of your findings to the class; you will then submit a policy brief of approximately 8-10 pages on the topic in lieu of a final exam.

Calendar and Topics

Week	Tuesday class meeting	Thursday class meeting	Topics	Assignments due in class Tuesday
1	—	8/30/2007	Think Globally	
2	9/4/2007	9/6/2007	Cultures and Values	
3	9/11/2007	9/13/2007	Footprints I	Footprint Memo
4	9/18/2007	9/20/2007	Footprints II: Food	
5	9/25/2007	9/27/2007	Footprints III: Population	
6	10/2/2007	10/4/2007	Climate I: Sci & Pol	Research bibliography
7	10/9/2007	10/11/2007	Climate II: Choices	
8	10/16/2007	10/18/2007	Climate III: Mitigate/Adapt	Carbon Game memo
9	10/23/2007	10/25/2007	Act Locally	
10	10/30/2007	11/1/2007	EIA I: NEPA & CEQA	
11	11/6/2007	11/8/2007	EIA II: Methods	Map Memo
12	11/13/2007	11/15/2007	EIA III: Who decides?	
13	11/20/2007	<i>Thanksgiving</i>	EIA IV: Reforms	
14	11/27/2007	11/29/2007	Policy Briefings (student presentations)	
15	12/4/2007	12/6/2007	Future Directions	

Final paper in lieu of final exam will be due by 5:00 on Monday, December 10, or no later than the scheduled final exam time. There is no textbook; all required readings (and some supplementary readings) are available on e-reserves. Asterisks (*) indicate scanned photocopies; pound signs (#) indicate PDF files provided to the library.

Week 1. The State of the World

- # Robert T. Lackey, 2006. "Axioms of Ecological Policy." *Fisheries* v.31 n.6 (June). pp.286-290.
- * Paul R. Ehrlich and Anne E. Ehrlich, 1996. *Betrayal of Science and Reason: How Anti-Environmental Rhetoric Threatens Our Future*. Covelo, CA: Island Press.
Chapter 4, "The Good News... in Perspective." pp.45-63.
- # Peter W. Huber, 1998. "Saving the Environment from the Environmentalists." *Commentary* v.105 n.4 (April). 6pp.

Supplementary Readings

- # Paul Harrison, ed., 2007. "2006 Overview." In *Global Environmental Outlook Year Book 2007*. Nairobi, Kenya: United Nations Environment Programme. pp.1-40.
<<http://www.unep.org/geo/yearbook/yb2007>>

Week 2. Cultures and Values

- * Carolyn Merchant, 1995. *Earthcare: Women and the Environment*. New York: Routledge.
Chapter 1, "Gaia: Ecofeminism and the Earth." pp.3-26.
- # Lynn White, Jr., 1967. "The Historical Roots of Our Ecologic Crisis." *Science*, Vol. 155, No. 3767. (March 10). pp.1203-1207.
- * Yi-fu Tuan, 1968. "Discrepancies between environmental attitude and behavior: examples from Europe and China." *Canadian Geographer*, v.12 n.3. pp.176-191.
- # Peter Sauer, 2002. "Global Ethics: An American Perspective." *Orion Magazine* (Winter). 8pp.

Supplementary Readings

- # Carl Pope, 1997. "Religion and the Environment." Address to the Symposium on Religion, Science and the Environment, Santa Barbara, CA (November 6-8). 5pp.
<<http://www.christianecology.org/CarlPope.html>>
- # E.O. Wilson, 2006. *The Creation: An Appeal to Save Life on Earth*. New York: W.W. Norton.
Chapter 1, "Letter to a Southern Baptist Pastor: Salutation." pp.3-8.
- Carolyn Merchant, 1980. *The Death of Nature: Women, Ecology, and the Scientific Revolution*. San Francisco: Harper & Row.

Bill McKibben, 1989. *The End of Nature*. New York: Doubleday.
Chapter 2, "The End of Nature." pp.47-91.

Aldo Leopold, 1966. *A Sand County Almanac*. Oxford: Oxford University Press.
"The Land Ethic." pp.237-264.

Week 3. Footprints I: Environmental Impacts of Consumption

MyFootprint.org, 2002. "Ecological Footprint Quiz." Oakland, CA: Redefining Progress.
Take the quiz online at www.myfootprint.org for Footprint Memo assignment.

Worldwatch Institute, 2004. *Good Stuff: A Behind-the-Scenes Guide to the Things We Buy*.
Washington, DC: Worldwatch Institute.
Online reference materials at <http://www.worldwatch.org/taxonomy/term/44>.

Richard York, Eugene A. Rosa, and Thomas Dietz, 2003. "Footprints on the Earth: The Environmental Consequences of Modernity." *American Sociological Review*, Vol. 68, No. 2. (April). pp.279-300.
<<http://links.jstor.org/sici?sici=0003-1224%28200304%2968%3A2%3C279%3AFOTETE%3E2.0.CO%3B2-Q>>

Norman Myers, 1997. "Consumption: Challenge to Sustainable Development..." *Science*, Vol. 276, No. 5309. (April 4). pp.53 (upper)-57.
<<http://links.jstor.org/sici?sici=0036-8075%2819970404%293%3A276%3A5309%3C53%3ACCTSD%3E2.0.CO%3B2-Y>>

Jeffrey R. Vincent and Theodore Panayotou, 1997. "...or Distraction?" *Science*, Vol. 276, No. 5309. (April 4). pp.53 (lower)-57.
<<http://links.jstor.org/sici?sici=0036-8075%2819970404%293%3A276%3A5309%3C53%3A.OD%3E2.0.CO%3B2-S>>

David Lazarus, 2007. "Talking trash disposal: we are running out of room for rubbish in throwaway society." *San Francisco Chronicle*, July 13. 3pp.

Supplementary Readings

Marian R. Chertow, 2001. "The IPAT Equation and Its Variants: Changing Views of Technology and Environmental Impact." *Journal of Industrial Ecology*, v.4 n.4, pp.13-29.

Andrew K. Jorgenson, 2003. "Consumption and Environmental Degradation: A Cross-National Analysis of the Ecological Footprint." *Social Problems*, Vol. 50, No. 3. (August). pp.374-394.
<<http://links.jstor.org/sici?sici=0037-7791%28200308%2950%3A3%3C374%3ACAEDAC%3E2.0.CO%3B2-N>>

Jeroen C.J.M. van den Bergh and Harmen Verbruggen, 1999. "Spatial sustainability, trade and indicators: an evaluation of the 'ecological footprint.'" *Ecological Economics* 29. pp.61-72.

Week 4. Footprints II: Tracing Chains of Consumption (Focus on Food)

Free Range Studios, 2003-06. "The Meatrix Trilogy." New York: Sustainable Table, a program of GRACE (Global Resource Action Center for the Environment).

View online at www.themeatrix.org in preparation for class discussion.

* Richard Manning, 2004. "The Oil We Eat: Following the food chain back to Iraq." *Harper's Magazine* v.308 n.1845 (February). pp.37-45.

* Barbara Kingsolver, with Steven L. Hopp and Camille Kingsolver, 2007. *Animal, Vegetable, Miracle*. New York: Harper Collins.
Chapter 4, "Stalking the Vegetannual." pp.63-69.
Chapter 8, "Growing Trust." pp. 111-123.

* Thomas Princen, Michael Maniates and Ken Conca, eds., *Confronting Consumption*. Cambridge: MIT Press.
Chapter 2, "Consumption and its Externalities." pp.23-41.
Chapter 5, "Distancing." pp.103-131.

Supplementary Readings

Tom Knudson, 2003. "State of Denial: A Special Report on the Environment" *The Sacramento Bee*, April 27. 41pp.

<<http://www.sacbee.com/static/live/news/projects/denial>>

Prologue, "Shifting the pain: world's resources feed California." pp.3-6.

Chapter 3, "Harvesting the sea: quotas protect Canada's catch." pp.29-39.

Daniel Buck, Christina Getz, and Julie Guthman, 1997. "From Farm to Table: The Organic Vegetable Commodity Chain of Northern California." *Sociologia Ruralis* 37 (1). pp.3-20.
doi:10.1111/1467-9523.00033

Julie Guthman, 2004. "The Trouble with 'Organic Lite' in California: a Rejoinder to the 'Conventionalisation' Debate." *Sociologia Ruralis* 44:3. pp.301-316

* Josiah McC. Heyman, 2005. "The Political Ecology of Consumption: Beyond Greed and Guilt." In Susan Paulson and Lisa L. Gezon, eds., *Political Ecology across Spaces, Scales, and Social Groups*. New Brunswick, NJ: Rutgers University Press. pp.113-132.

Vandana Shiva, 2000. *Stolen Harvest: The Hijacking of the Global Food Supply*. Cambridge, MA: South End Press.

Richard Tucker, 2000. *Insatiable Appetite: The United States and the Ecological Degradation of the Tropical World*. Berkeley: University of California Press.

Michael Pollan, 2006. *Omnivore's Dilemma: A Natural History of Four Meals*. New York: Penguin Press.

Week 5. Footprints III: What about Population?

Stephanie Mills, 1969. "The Future is a Cruel Hoax." Valedictorian address, Mills College.

Bill McKibben, 1998. "A special moment in history: the future of population." *The Atlantic Monthly* v281.n5 (May). 18pp.

Nicholas Eberstadt, 2007. "Too many people?" London: International Policy Network (July). pp.3-18.
<http://www.aei.org/docLib/20070712_Too_Many_People.pdf>

Supplemental Readings

Garrett Hardin, 1968. "The Tragedy of the Commons," *Science* 165 (3859). pp.1243-1248.

* Paul R. Ehrlich and Anne E. Ehrlich, 1996. *Betrayal of Science and Reason: How Anti-Environmental Rhetoric Threatens Our Future*. Covelo, CA: Island Press.
Chapter 5, "Fables about Population and Food." pp.65-90.

Lester Brown, 1995. *Who Will Feed China? Wake-up call for a small planet*. New York: W.W. Norton & Co.

Robert L. Paarlberg, 1997. "Feeding China: a confident view." *Food Policy*. Vol 22 No. 3 pp. 269-279.

G. William Skinner, Mark Henderson, and Yuan Jianhua, 2000. "China's fertility transition through regional space." *Social Science History* v24 n3.
<http://muse.jhu.edu/journals/social_science_history/v024/24.3skinner.html>

Ye Qi, Mark Henderson, Ming Xu, Jin Chen, Peijun Shi, Chunyang He and G. William Skinner, 2004. "Evolving core-periphery interactions in an urban landscape: The case of Beijing." *Landscape Ecology* v19 n4.
<<http://www.springerlink.com/content/mq35h48ur54560g7>>

Week 6. Climate Change I: The Problem and the Politics

Kerry Emmanuel, 2007. "Phaeton's Reins: The human hand in climate change." *Boston Review* (January-February). 19pp.

Robert D. Putnam, 1988. "Diplomacy and Domestic Politics: The Logic of Two-Level Games." *International Organization*, Vol. 42, No. 3. (Summer). pp.427-460.

Dale Jamieson, 1996. "Scientific Uncertainty and the Political Process." *The Annals of the American Academy of Political and Social Sciences* 545 (May). pp.35-43.

The Economist, 2002. "The Invisible Green Hand." *The Economist* (6 July). 3pp.

Supplementary Readings

Intergovernmental Panel on Climate Change, 2007. "Climate Change 2007: The IPCC Fourth Assessment Report" and related documents. Geneva: IPCC.
<<http://www.ipcc.ch>>

David Demeritt, 2001. "The Construction of Global Warming and the Politics of Science." *Annals of the Association of American Geographers* 91(2). pp.307-337.

D.A. Stainforth et al., 2005. Uncertainty in predictions of the climate response to rising levels of greenhouse gases. *Nature*, 433: 403-406.

Alfred W. Crosby, 2006. *Children of the Sun: A History of Humanity's Unappeasable Appetite for Energy*. New York: W.W. Norton.

Al Gore, 2006. *An Inconvenient Truth*. Emmaus, PA: Rodale.

Week 7. Climate Change II: Political and Economic Challenges

UCS, 2005. "Common Sense on Climate Change: Practical Solutions to Global Warming." Washington, DC: Union of Concerned Scientists.
Peruse online at http://www.ucsusa.org/global_warming in preparation for class discussion.

Nicholas Stern, 2007. "Economics must be at the heart of any discussion of how to fight climate change." *Boston Review* (January-February). 6pp.

David G. Victor and Danny Cullenward, 2007. "The only practical approach is to pursue technologies that burn coal more clearly." *Boston Review* (January-February). 4pp.

Kirsten Oleson and Chandra Shekhar Sinha, 2007. "The Kyoto Protocol is an important catalyst, and carbon finance is its most powerful tool." *Boston Review* (January-February). 4pp.

Jeffrey Logan, Joanna Lewis, and Michael B. Cummings, 2007. "For China, the shift to climate friendly energy depends on international collaboration." *Boston Review* (January-February). 6pp.

- # Judy Layzer and William Moomaw, 2007. "Changing course will require major policy change, and the United States must lead the way." *Boston Review* (January-February). 5pp.

Week 8. Climate Change III: Mitigation and Adaptation

- # Nick Atkinson, 2007. "That Sinking Feeling." *Conservation* Vol. 8, No. 2 (April-June). 4pp.
- # Michele M. Betsill, 2000. "Localizing Climate Change: Controlling Greenhouse Gas Emissions in U.S. Cities." Working Paper 2000-20, Belfer Center for Science and International Affairs, Harvard University, September. 24pp.
- # CARB Market Advisory Committee, 2007. "Recommendations for Designing a Greenhouse Gas Cap-and-Trade System for California." Sacramento: California Air Resources Board, June 30.
Executive Summary, pp.iii-v.
Chapter 1, "Introduction: California's Efforts." pp.1-4.
Chapter 2, "Background on Cap and Trade." pp.5-17.

Week 9. Act Locally

- # Chip Johnson, 2007. "Air quality crusader learned craft from the ground up." *San Francisco Chronicle*, Tuesday, April 24, p.B-1.
<<http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/04/24/BAGA7PE1RN1.DTL>>
- # Meena Palaniappan, Diana Wu, and Jacki Kohleriter, 2003. "Clearing the Air: Reducing Diesel Pollution in West Oakland." Oakland: Pacific Institute and Coalition for West Oakland Revitalization." pp.3-15. <<http://www.pacinst.org/reports/diesel/>>
- # Don Oldenburg, 2003. "Julia Butterfly Hill, From Treetop to Grass Roots." *Washington Post* (September 22). p.C01 (3pp.)
- * Julia Butterfly Hill, 2000. *The Legacy of Luna*. San Francisco: Harper Collins.
Chapter 9, "Cross-fire." pp.136-161.

Week 10. EIA I: NEPA and CEQA

- * Ian McHarg, 1969. *Design with Nature*. Doubleday/Natural History Press.
Chapter 3, "A Step Forward." pp.31-41.
- # The National Environmental Policy Act (NEPA). (7pp.)
- * William Fulton, 1999. *Guide to California Planning*, 2nd ed. Point Arena: Solano Press.
Chapter 9, "The California Environmental Quality Act" (pp.153-175)

Supplementary Readings

The California Environmental Quality Act (CEQA). (66pp.)
<http://ceres.ca.gov/topic/env_law/ceqa/stat>

Week 11. EIA II: Methods

Take a look at at least one Environmental Impact Report/Statement online in preparation for discussion. Suggested places to look include www.ceqamap.com and the web sites of the City of Oakland, City of San Francisco, AC Transit, and Caltrans District 4.

Eric Parfrey, 1999. "CEQA Initial Study Checklist." Sacramento: Association of Environmental Professionals.
<<http://www.califaep.org/content.asp?pid=71>>

* Robert Sculley, 1998. "A Basic Strategy for EIR Preparation." San Francisco: Tetra Tech, Inc. (October 28). 31 pp.

A. Chaker, K. El-Fadl, L. Chamas and B. Hatjian, 2006. "A review of strategic environmental assessment in 12 selected countries." *Environmental Impact Assessment Review*, v.26, n.1, (January), pp.15-56.
<<http://dx.doi.org/10.1016/j.eiar.2004.09.010>>

Supplementary Readings

* Ronald E. Bass, Albert I. Herson, and Kenneth M. Bogdan, *CEQA Deskbook*, 2nd edition. Point Arena: Solano Press, 1999.
Chapter 7, "CEQA Litigation." pp.141-150.

Kenneth Lieberthal, 1997. "China's Governing System and its Impact on Environmental Policy Implementation." China Environment Series, Woodrow Wilson International Center. pp.3-8.
<<http://adb.org/vehicle-emissions/PRC/docs/ces1a.pdf>>

Kelly Haggart and Mu Lan, 2006. "Activists hail guidelines on public input into projects." Toronto: Three Gorges Probe news service (February 22). 3pp.
<<http://www.threegorgesprobe.org/tgp/index.cfm?DSP=content&ContentID=14893>>

Liu Changming, 1998. "Environmental Issues and the South-North Water Transfer." The China Quarterly, No. 156, Special Issue: China's Environment. (December), pp.899-910.;
<<http://links.jstor.org/sici?sici=0305-7410%28199812%290%3A156%3C899%3AEIATSW%3E2.0.CO%3B2-3>>

Week 12. EIA III: Who decides? Public Participation and Environmental Justice

- * Leonard Ortolano, 1997. *Environmental Regulation and Impact Assessment*. New York: Wiley.
Chapter 18, "Public Participation and Environmental Dispute Resolution." pp.402-421.
- # Gregory King, 2003. Appendix A, "Addressing Environmental Justice in California." In *Recommendations of the California Environmental Protection Agency Advisory Committee on Environmental Justice to the Cal/EPA Interagency Working Group on Environmental Justice: Final Report*. Sacramento: California Environmental Protection Agency (September 30). 11 pp.
<<http://www.calepa.ca.gov/EnvJustice/Documents/2003/Appendices/AppendixA.pdf>>
- # Vicki Been, 2004. "Locally Undesirable Land Uses in Minority Neighborhoods: Disproportionate Siting or Market Dynamics?" *Yale Law Journal*, Vol. 103, No. 6. pp.1383-1406.
<<http://links.jstor.org/sici?sici=0044-0094%28199404%29103%3A6%3C1383%3ALULUIM%3E2.0.CO%3B2-T>>

Supplementary Readings

- # David N. Pellow, 2000. "Environmental Inequality Formation: Toward a Theory of Environmental Injustice." *American Behavioral Scientist*, Vol. 43, No. 4.
<<http://abs.sagepub.com/cgi/reprint/43/4/581>> (pp.581-601).
- # Steven F. Hayward, 2003. "Environmental Justice: Where Selma and the Cuyahoga River Fire Meet." *Environmental Policy Outlook*, American Enterprise Institute for Public Policy Research, (November-December). 6pp.
<http://www.aei.org/publications/pubID.19581,filter.all/pub_detail.asp>
- # Martha Matsuoka, 2003. "Building Healthy Communities from the Ground Up: Environmental Justice in California." National City, CA: Environmental Health Coalition. pp.1-25.
<<http://www.environmentalhealth.org/BuildingHealthyCommunities.htm>>

Edwardo Lao Rhodes, 2003. *Environmental Justice in America: A New Paradigm*.
Bloomington: Indiana University Press.

Week 13. EIA IV: Reforms and New Applications

- # Mary Lynne Vellinga, 2006. "Environmental act can thwart urban projects." *The Sacramento Bee* (January 23). p.A1.
- # Sharon Buccino et al., 2005. "NEPA: What Needs Fixing, What Doesn't, and How Would You Fix It?" *Environmental Forum* (May/June). (pp.34-41).

San Francisco Planning and Urban Research Association, 2006. "Form And Reform: Fixing The California Environmental Quality Act." SPUR Policy Report (February 1). 11pp.

Inside Cal/EPA, 2007. "ARB Challenges A.G. Over Handling Of CEQA Climate Change Disputes." *Inside Cal/EPA*, Vol. 18 No. 26 (June 29).

Supplementary Readings

NEPA Task Force, 2003. "Chapter 4. Adaptive Management and Monitoring." In *Modernizing NEPA Implementation*. Washington, DC: Executive Office of the President (September 24). pp.44-56.

[<http://ceq.eh.doe.gov/ntf/report/chapter4.pdf>](http://ceq.eh.doe.gov/ntf/report/chapter4.pdf)

Elisa Barbour and Michael Teitz, 2005. "CEQA Reform: Issues and Options." San Francisco: Public Policy Institute of California (April 6). 62pp.

[<http://www.ppic.org/main/publication.asp?i=593>](http://www.ppic.org/main/publication.asp?i=593)

Week 14. Policy Briefings (*student presentations this week, no readings*)

Week 15. Future Directions

* John Kerry and Theresa Heinz-Kerry, 2006. *This Moment on Earth: Today's New Environmentalists and Their Vision for the Future*. New York: Public Affairs. Chapter 1, "The Art of the Possible." pp.1-18.

* Paul Hawken, 2007. *Blessed Unrest: How the Largest Movement in the World Came into Being and Why No One Saw it Coming*. New York: Vintage Press. Chapter 8, "Immunity." pp.139-165.

Vandana Shiva, 2005. *Earth Democracy: Justice, Sustainability, and Peace*. Boston: South End Press.