

Global Environmental Governance

Public Policy 653

Paul Erickson
Office: 2407 Weill Hall
Office Hours: TBA
perckson@umich.edu

Course: Thursdays, 4-7 p.m.
5240 Weill Hall

In the past 50 years, states have signed hundreds of international environmental treaties. Prominent among these are the Montreal Protocol on Substances that Deplete the Ozone Layer, the United Nations Framework Convention on Climate Change and the Kyoto Protocol, and the Convention on Biological Diversity. Paralleling these diplomatic developments, environmental concerns have quickly come to suffuse global-level discussions of poverty, development, security, and human rights. In sum, environmental issues have had a substantial impact on both the theory and the practice of global governance.

This course surveys major patterns in global environmental governance over the past several decades. Rather than focusing on particular issues, it explores the interplay between two questions. First, how do we know we have global environmental problems? And secondly, how does this knowledge relate to governing arrangements? International political cooperation has helped to make global environmental change visible through the development of transnational systems for studying and monitoring the planet. At the same time, scientific understandings of the earth as an integrated environmental system are challenging traditional notions of citizenship, political participation, and regulatory policy. By examining the simultaneous production of environmental knowledge and global political order in class exercises and in case studies of their own choosing, students will sharpen their skills as analysts of international policy.

Readings

There will be one required text for this course, available from any of the University bookstores:

Sheila Jasanoff and Marybeth Long Martello, eds., *Earthly Politics: Local and Global in Environmental Governance* (Cambridge, MA: MIT Press, 2004).

Other readings will be placed in online reserve through CTools.

Assessment

- *Classroom preparation, attendance, and discussion (20%)*. You need to do the weekly readings and come to class prepared to discuss them. This preparation should not simply be a passive process of absorbing facts; rather, while reading, you should actively identify (and write down!) questions you have, possible avenues of discussion, and potential points of application of the readings to current events.
- *Reading Responses (30%)*. To assist you in fulfilling (1), during the course of the semester, I would like you to produce six (6) reading response memos of roughly a page (single spaced) each. These do not need to be fancy! They could even be a simple list of insights

or questions derived from the readings. They should be opportunities to refine questions and insights from the readings. You can also use these to explore ideas relevant to your paper for the course (see below). They should be submitted to me *at least two hours before the start of class* on the week the readings will be discussed; I will draw on them to frame discussion and steer the conversation toward areas of use to you.

- *Final paper and presentation (50%)*. The goal of the course will be for students to produce an original analysis (10 pages single spaced maximum) of some facet of global environmental governance. **You should choose a topic, in consultation with me, by the end of January.** The parameters of the assignment are flexible. In the past, students have used this space to write policy recommendations for NGOs, businesses, or international organizations that they work with (or plan to work with in the future); to produce scholarly papers related to their M.A. or Ph.D. research; or simply to explore the history and politics of an environmental issue near and dear to them. I will provide more information on how I will evaluate the paper as the semester progresses.

Unit I: Perspectives on Global Environmental Governance

10 January: Introduction and Orientation

17 January: Classic Perspectives on Global Environmental Issues

How do we know that the environmental problems we face are “global”? What does this mean for how we should solve these problems?

G. Evelyn Hutchinson, “The Biosphere,” *Scientific American* 223.3 (1970), pp. 45-53

World Council on Environment and Development, *Our Common Future* (Brundtland Report, 1987), Chapter 1

William C. Clark, “Managing Planet Earth,” *Scientific American* 261.3 (1989), pp. 47-54

Richard Benedick, “Ozone Diplomacy” *Issues in Science and Technology* (Fall 1990), pp. 43-50

Peter M. Haas, “Epistemic Communities and International Policy Coordination” *International Organization* 46.1 (Winter 1992), 1-35

Peter M. Haas, “Banning Chlorofluorocarbons: Epistemic Community Efforts to Protect the Stratospheric Ozone” *International Organization* 46.1 (1992), pp. 187-224

24 January: Contesting “One-World” Discourses

Why might the classic perspectives (discussed last week) on global environmental perspectives prove misleading or politically contentious?

Anil Agrawal, “A Southern Perspective on Curbing Global Climate Change” in S. Schneider, A. Rosencranz, and J. Niles, eds., *Climate Change Policy: A Survey* (Washington DC: Island Press, 1999)

Sheila Jasanoff, "Heaven and Earth: Images and Models of Environmental Change" in *Earthly Politics*

Wolfgang Sachs, *Planet Dialectics* (New York: Zed Books, 1999), chapters 6 and 7

Arturo Escobar, *Encountering Development* (Princeton: Princeton University Press, 1995), Chapter 5: "Power and Visibility" (in particular, look at pp. 154-171 on visibility and development; pp. 192-211 on the idea of sustainable development)

31 January: Interrogating Governing Institutions

In light of our discussions in the preceding weeks, how should we evaluate global institutions that produce knowledge about environmental issues and take action to address these issues? These readings propose some analytic frameworks drawn from political science and science and technology studies.

Sheila Jasanoff, "In a Constitutional Moment: Science and Social Order at the Millennium." *Social Studies of Science and Technology: Looking Back, Ahead (Sociology of the Sciences Yearbook, 23)*. Ed. B. Joerges and H. Nowotny. Kluwer, September 2003

Robert Keohane, "Governance in a Partially Globalized World" *American Political Science Review* 95.1 (March 2001): 1-13

Paul Wapner, "Reorienting State Sovereignty: Rights and Responsibilities in an Environmental Age" in Karen Litfin, ed., *The Greening of Sovereignty in World Politics* (Cambridge: MIT Press, 1998)

Marybeth Long Martello and Sheila Jasanoff, "Introduction: Globalization and Environmental Governance" in *Earthly Politics*

Unit II: Knowledge for the Earth

7 February: Monitoring and Modeling

Scientific practices of monitoring and modeling are central to identifying and studying global environmental problems. How do these techniques produce representations of the global environment, how do they structure inquiry, and how do they acquire credibility?

P. Taylor and F. Buttel, "How do we know we have Global Environmental Problems? Science and the globalization of environmental discourse," *Geoforum* 23.3 (1992): 405-416

Stephen Zehr, "Method, Scale, and Socio-Technical Networks: Problems of Standardization in Acid Rain, Ozone Depletion, and Global Warming Research" *Science Studies* 7.1 (1994): 476-58

Paul Edwards, “Representing the Global Atmosphere: Computer Models, Data, and Knowledge about Climate Change” in Clark A. Miller and Paul N. Edwards, eds., *Changing the Atmosphere* (Cambridge: MIT Press, 2001)

Simon Shackley, “Epistemic Lifestyles in Climate Change Modeling” in *Changing the Atmosphere*

Shackley, Young, and Wynne, “Uncertainty, Complexity, and Concepts of Good Science in Climate Change Modeling: Are GCMs the Best Tools?” *Climatic Change* 38 (1998): 159-205. (This article is very long and somewhat technical, but it makes some very important points, especially in the conclusion.)

Daniel Sarewitz, “Science and Technology Policies for the Environment” *AAAS Science and Technology Policy Yearbook* (2003), pp. 135-144

14 February: Creating Environmental Regions

How do scientific representations of the environment constitute facets of political order, such as borders and community? Building on theoretical perspectives by Anderson and Hacking, we look at three case studies involving acid rain modeling, climate modeling, and elephant conservation.

Benedict Anderson, “Census, Map, Museum,” in Anderson, *Imagined Communities* (New York: Verso, 1991)

Ian Hacking, *Historical Ontology* (Cambridge, MA: Harvard University Press, 2002), chapter 6, “Making Up People”

Stacy VanDeveer, “Ordering Environments: Regions in International European Environmental Cooperation” in *Earthly Politics*

Charis Thompson, “Co-Producing CITES and the African Elephant” in Jasanoff ed., *States of Knowledge* (London: Routledge, 2004)

Clark A. Miller, “Climate Science and the Making of Global Political Order” in S. Jasanoff ed. *States of Knowledge* (London: Routledge, 2004)

21 February: Imperial Knowledge: Forests and Preserves

What gets left out in global representations of forests and biodiversity?

James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale UP, 1998), chapter 1, “Nature and Space.” (41; just focus on pp. 11-33)

Michael Goldman, “Imperial Science, Imperial Nature: Environmental Knowledge for the World (Bank) in *Earthly Politics*

Karen Litfin, “The Local, the Global, and the Kyoto Protocol” in *Earthly Politics*

R. Rittermeier et al., “Hotspots and Global Biodiversity Conservation” in R. Rittermeier et al. eds., *Hotspots* (Mexico City: CEMEX, Conservation International, 1999)

Rachmandra Guha, "The Authoritarian Biologist and the Arrogance of Anti-Humanism: Wildlife Conservation in the Third World" *The Ecologist* 27 (1997), pp. 14-20

28 February: Break

6 March: Global Assessments and Local Knowledge

Can global-level assessments productively incorporate local knowledge, and who ultimately benefits from these encounters?

Polly Ericksen et al., "Using Multiple Knowledge Systems: Benefits and Challenges" Chapter 5 in *Ecosystems and Human Well-Being, Vol. 4: Findings of the Sub-Global Assessments Working Group* eds. Doris Capistrano et al. (Washington DC: Island Press, 2005)

Rengalakshmi Raj, "Harmonizing Traditional and Scientific Knowledge Systems in Rainfall Prediction and Utilization" in Fikret Berkes et al., eds., *Bridging Scales and Epistemologies: Linking Local Knowledge and Global Science in Environmental Assessments* (Washington, DC: Island Press, 2006)

Joan Eamer, "Keep it Simple and Relevant: The First Ten Years of the Arctic Borderlands Ecological Knowledge Co-Op" in *Bridging Scales and Epistemologies*

Paul Nadasdy, *Hunters and Bureaucrats: Power, Knowledge, and Aboriginal-State Relations in the Southwest Yukon* (Vancouver: UBC Press, 2003), chapters 4-5

Unit III: Interactions between Local and Global

13 March: Cross-Scale Encounters

This week we look at two innovative examples of cross-scale exchanges that look a bit different from "imperial" impositions of order and legibility. One involves the transfer of knowledge related to weather forecasting from the global to the local; the other involves an exchange between transnational capital and local nature.

Clark Miller, "Resisting Empire: Globalism, Relocalization, and the Politics of Knowledge" in *Earthly Politics*

Steve Rayner, Denise Lach, and Helen Ingram, "Weather Forecasts are for Wimps: Why Water Resource Managers do not use Climate Forecasts" *Climatic Change* 69 (2005), pp. 197-227

Maria Lemos, "A Tale of Two Policies: The Politics of Climate Forecasting and Drought Relief in Cear , Brazil" *Policy Sciences* 36 (2003), pp. 101-123

Peter Takacs, *The Idea of Biodiversity* (Baltimore: Johns Hopkins, 1996), chapter 6: Costa Rica's National Institute of Biodiversity (INBio)

Astrid Scholz, "Merchants of Diversity: Scientists as Traffickers of Plants and Institutions" in *Earthly Politics*

Jens Lachmund, "Knowing the Urban Wasteland: Ecological Expertise as Local Process" in *Earthly Politics*

20 March: Cultures of Risk

How are risks associated with global-scale phenomena such as climate change understood in local contexts? What challenges does this pose for global-level treaties and institutions that seek to deal with these risks?

Sheila Jasanoff, "Acceptable Evidence in a Pluralistic Society" in *Acceptable Evidence: Science and Values in Risk Management* (New York: Oxford University Press, 1991)

Michael Thompson and Steve Rayner, "Cultural Discourses" in S. Rayner and E. Malone eds., *Human Choice and Climate Change* (Columbus: Battelle, 1998), pp. 279-306

Peter Weingart, Anita Engels, and Petra Pansegrau, "Risks of Communication: Discourses on Climate Change in Science, Politics, and the Media" *Public Understanding of Science* 9 (2000), pp. 261-283

Myanna Lahsen, "Transnational Locals: Brazilian Experiences of the Climate Regime" in *Earthly Politics*

Silke Beck, "Localizing Climate Change in Germany" in *Earthly Politics*

27 March: Trade and Regulatory Harmonization

International trade regimes such as WTO and NAFTA are increasingly driving the harmonization of national regulatory policies. What is at stake in this process, and where does this leave the environment?

Abraham Chayes and Antonia Handler Chayes, "A Theory of Compliance" Chapter 1 in Chayes and Chayes, *The New Sovereignty: Compliance with International Regulatory Agreements* (Cambridge: Harvard University Press, 1995)

Sheila Jasanoff, "Harmonization: The Politics of Reasoning Together" in R. Bal and W. Halfman, eds., *The Politics of Chemical Risk* (Dordrecht: Kluwer, 1998)

Aarti Gupta, "When Global is Local: Negotiating Safe Use of Biotechnology" in *Earthly Politics*

William K. Tabb, *Economic Governance in the Age of Globalization* (New York: Columbia University Press, 2004), ch. 11, "Market Efficiency Versus Labor Rights and Environmental Protection"

Robyn Eckersley, "The Big Chill: The WTO and Multilateral Environmental Agreements" *Global Environmental Politics* 4.2 (May 2004), pp. 24-50

Alisdair R. Young, "Picking the Wrong Fight: Why Attacks on the World Trade Organization Pose the Real Threat to National Environmental and Public Health Protection" *Global Environmental Politics* 5.4 (November 2005), pp. 47-72

3 April: Transnational Social Movements and Environmental Citizenship

How are transnational social movements and global environmental science causing us to rethink our conceptions of citizenship?

Sheila Jasanoff, "Science and Environmental Citizenship" *Handbook of Global Environmental Politics* eds. Peter Dauvergne (Edwards Elgar, 2005): 365-382

Margaret Keck and Kathryn Sikkink, *Activists Beyond Borders* (Ithaca, NY: Cornell University Press, 1998), Chapter 4, "Environmental Advocacy Networks"

Tim Forsyth, "Social Movements and Environmental Democratization in Thailand" in *Earthly Politics*

Marybeth Long Martello, "Negotiating Global Nature and Local Culture: The Case of Makah Whaling" in *Earthly Politics*

Alistair Iles, "Patching Local and Global Knowledge Together: Citizens Inside the US Chemical Industry" in *Earthly Politics*

10 April: Student Presentations!