

For those of you with an interest in climate change and access to the journal *Science*, I recommend Philip Kitcher's "essay review," [The Climate Change Debates](#). Kitcher, a philosopher of science at Columbia University, uses a review of eight recently-published books about climate science, policy, and politics as the basis for an essay about the role of democracy and expertise in policy. After reading it twice, I'm still not sure I understand exactly what Kitcher's views are, but I found two parts of the essay particularly thought-provoking.

First, Kitcher points out the extent to which participants in the climate change debates are talking past one another without acknowledging or perhaps even recognizing that they are doing so. Kitcher rightly points out that different perspectives on the global warming problem are in part attributable to a focus on different questions.

It is useful to differentiate three questions. First is the issue of whether human activities, specifically actions that increase the emission of greenhouse gases, are contributing to a significant average warming of Earth. . . . Second are questions about the probabilities with which various phenomena (complete melting of ice sheets, for example) will occur and about their consequences for human beings and other species. Third are considerations about what might be done to halt (or even reverse) the warming and to limit the damaging consequences.

The answer to the first question does not determine the answer to the second, and surely does not determine the third.

The voice of climate scientists should command special attention with respect to the first, and authors such as Stephen Schneider, James Hansen, and Naomi Oreskes are right to point out the ways that public discussion of climate change can falsely undermine the strength of actual scientific consensus, and to look for ways to reframe the debate to reduce that problem.

But its also important that we keep in mind the limits of what climate science can or should be expected to do. Climate scientists surely have much to contribute on the question of what impacts climate change will have on people and ecosystems, but so do ecologists, sociologists, economists, political scientists and many others. And the third question, what can and what should we do about it?, is primarily addressed to the political community as a whole, although technical expertise is surely important in understanding what responses are feasible.

Which is why the second compelling statement in Kitcher's review is his call for future deliberations which:

will require a new synthesis that involves scientists, social scientists, historians—and others, too. It is an embarrassment (at least for me) that philosophers have not contributed more to this necessary conversation. We might clarify some of the methodological issues—for instance, those concerning the variety of risks involved in model-building. Perhaps more important, we could use recent ethical work on responsibilities to future generations and to distant people to articulate a detailed ethical framework that might help a planet's worth of policy-makers find their way to consensus.

I'm not a philosopher, but I agree that we need far more than natural science to decide what to do about global warming, and in particular that we need a robust discussion of what we owe future generations that can move us beyond what Bryan Norton years ago described as the "ecological perspective" — we must pass down the natural capital we inherit — and the "economic perspective" — we must pass down wealth, in whatever form. (See Bryan G. Norton & Michael A. Toman, *Sustainability: Ecological and Economic Perspectives*, 73 *Land Econ.* 553, 555 (1997).)

The real question is how we can have that conversation effectively in a world where money talks loudly, and technical information is mediated through an increasingly fragmented and polarized communications network. Many of the books Kitcher reviews struggle to get at that question. Hopefully Kitcher's essay will spark more direct conversation about that crucial question.

And for those of you without easy access to *Science*, here's the list of books Kitcher reviews:

- Naomi Oreskes and Erik M. Conway, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming* (Bloomsbury, 2010).
- Mike Hulme, *Why We Disagree About Climate Change: Understanding Controversy, Inaction and Opportunity* (Cambridge University Press, 2009).
- James Hansen, *Storms of My Grandchildren: The Truth About the Coming Climate Catastrophe and Our Last Chance to Save Humanity* (Bloomsbury, 2009).
- Stephen H. Schneider, *Science as a Contact Sport: Inside the Battle to Save Earth's Climate* (National Geographic, 2009).

- Howard Friel, *The Lomborg Deception: Setting the Record Straight About Global Warming* (Yale Univ. Press, 2010).
- David E. Blockstein and Leo Wiegman, *The Climate Solutions Consensus* (Island Press, 2010).
- Stephen H. Schneider et al., eds., *Climate Change Science and Policy* (Island Press 2010).
- Anthony Giddens, *The Politics of Climate Change* (Polity 2009).