

of the “inverted quarantine” response to the environmental crisis holds the mirror up to the face of consumer society so that it may, as Beck suggests, encounter in its own image “the hazards that confront it.” Whether Szasz’s intervention aids society in overcoming the ‘reigning paralysis’ (or as he refers to it in chapter seven, “political anesthesia”) remains unclear.

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**William F. Ruddiman, *Plows, Plagues & Petroleum: How Humans Took Control of Climate* (Princeton, NJ: Princeton University Press, 2005).**

Climate is unstable: for the past 900,000 years, based on varying orbital parameters, the earth has fluctuated between glacial and inter-glacial cycles. These truths have served as the foundation of much current debate over the human role in global climate change. If the climate fluctuates on its own can we really attribute recent global warming to human activities? The growing consensus within the scientific community—and, it seems, in public and political circles as well—is that human-induced emissions of greenhouse gases into the atmosphere since the Industrial Revolution have indeed contributed to the warming of the planet, which has resulted in the dramatic collapse of major Antarctic ice shelves, more potent storms, and rising water levels. The proliferation of greenhouse gases, the argument goes, is the product of the increasing human dependence upon fossil fuels—and predominantly coal and oil—which began in earnest in the western world in the eighteenth century. The modern production and consumption of energy has yielded the climate crisis. But here’s a riddle: if the earth’s climate is supposed to be unstable, then why has the Holocene’s climate remained strikingly stable for the last 10,000 years?

This is the puzzle that William F. Ruddiman confronts in *Plows, Plagues, and Petroleum: How Humans Took Control of Climate*. Ruddiman, an earth scientist and Professor Emeritus at the University of Virginia, argues that the last 10,000 years marks a break from the standard pattern. While this argument might seem to let humans off the hook for climate change, Ruddiman points to the rise of agriculture as the point at which more greenhouse gases entered the atmosphere and temperatures began to steady themselves. Drawing on his earlier work on the ‘early anthropogenic hypothesis,’ Ruddiman links global warming trends and climate stability to a much earlier period of human environmental activity. As early humans transformed from hunter-gatherers to agricultural societies, sedentary living and farming practices yielded a larger population and required the clearing of more lands. Deforestation precipitated increases in carbon dioxide accumulation and the rise of animal husbandry, combined with the creation of artificial wetlands to grow rice, produced greater quantities of methane. Ruddiman carefully tracks

these records and suggests that there are chronological similarities between this human transition and the rise of greenhouse gases at a time when existing climatic patterns should have been dictating decreases and cooling temperatures. In effect, Ruddiman contends that the earth was due for another ice age some five thousand years ago, but human activities continue to delay its arrival. Moreover, he notes that subsequent drops in greenhouse gas concentrations in the atmosphere can be linked to concomitant decline in human population as a result of disease (in fourteenth century Europe and a couple of centuries later in the Americas after European contact).

The book is instructive and refreshingly non-technical in its prose. It also offers insight to historians as to how they might think about scientific and environmental processes in the *longue durée* and draw on these materials to write history. Ruddiman's overriding argument is somewhat speculative, but the correlation between human agricultural practices and greenhouse gas emissions is striking and worthy of some consideration, particularly in their very accessible presentation in graphs and tables throughout this book. This is hardly the last word on human influences on climate, but it does complicate historical interpretations that indict the Industrial Revolution as the pivotal turning point in the rise of the current environmental crisis. Ruddiman also challenges his readers to be conscious of the role of human-ecological interactions in our histories. This is important: the take-away message is that not only are humans capable of changing the earth's climate, but also that we have been doing so for millennia. Given our contemporary industrial capacity, it raises some serious questions and concerns over the fragility of the physical environment and our relationship with it.

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**Kathryn Hochstetler and Margaret Keck, *Greening Brazil: Environmental Activism in State and Society* (Durham, NC: Duke University Press, 2007).**

Until the early 1980s the 'left' was largely 'red' but not 'green' in its concerns and politics—essentially ignoring the nature-society/development relation. However, United Nations Conferences in 1972 and 1992 placed the environment at the centre of agenda at the level of both theory and practice. These conferences stimulated a global environmental movement and several rounds of environmental legislation by governments across the world in the search for a more sustainable form of national development. And, it would seem, the resulting environmental movement also stimulated greater environmental awareness on the left, leading to the formulation of various forms of left-critical analysis and political activism—eco-Marxism, political ecology, eco-feminism, etc. In retrospect it is possible to divide the environmental left into two categories: a dominant stream oriented towards