

# Journal of Political Ecology

## Reviews

### Volume 9 (2002)

**Something New Under the Sun: An Environmental History of the Twentieth-Century World, by J. R. McNeill (2001), New York: Norton, xxvi, 421 pp.**

**Reviewed by Michael Bess, History Department, Vanderbilt University, Nashville, TN**

At some level, most educated people today probably have a sense, a general impression, of what this book tells us: that humankind is transforming the planet faster and faster, with a depth and scope and variety of impacts that are unprecedented in history and truly alarming in their implications for the future. We know this already, at an intuitive level (those of us, at least, who are not blinded by political ideology or by tenderheartedness for our portfolio of Exxon stock).

What makes this book both important and extraordinary is that it succeeds in turning a vague impression, a nagging accumulation of specialized studies and anecdotal news items, into a cogent synthetic vision. McNeill's study is global in scale and genuinely multidisciplinary in approach: he weaves together, in a highly readable narrative, the whole tapestry of changes that have marked the human transformation of nature in the twentieth century. Lithosphere, atmosphere, hydrosphere, biosphere "every aspect of the planet comes under scrutiny, linked again and again to the pullulating agency of humans and the awesome shifts that agency has wrought."

This is not the first time, of course, that such works of scholarly synthesis have been attempted. George Perkins Marsh produced his landmark work, *Man and Nature: Or, Physical Geography as Modified by Human Action*, in 1864 "but in 1864 the transformative genie of industrial modernity had barely begun (relatively speaking) to poke its nose out of the bottle." Another synthesis came in 1955: William Thomas's *Man's Role in Changing the Face of the Earth*; followed in 1990 by yet another immense tome, B.L. Turner's *The Earth as Transformed by Human Action: Global and Regional Changes in the Biosphere over the Past 300 Years*. But both these more recent books "while immensely useful in themselves" were edited volumes, offering the reader a compendium of specialized essays by a small army of scientists and other researchers, each reporting the bad news from his or her own corner of the planet's mind-boggling complexity.

McNeill's main achievement lies precisely in this: he succeeds in rendering that complexity comprehensible to a non-specialist reader, soaring over the continents with analytical clarity and narrative vigor, placing within our grasp the full sweep of global changes. The result is that we come away from reading this book with an extraordinarily clear sense of how our species has affected the planet over the past 100 years, and an equally clear sense of where we stand today. We may, at the outset of our reading, have possessed a vague, somewhat scrambled intuition of all this: McNeill puts it right there, in front of your nose. We humans have now become one of the most salient factors in the equation of planetary change.

Another great strength of McNeill's approach lies in the fact that he does not regard "interdisciplinarity" in the way some authors unfortunately tend to do: as the mere juxtaposition of analytically distinct narratives: geology, biology, demography, politics, sociology, economics, cultural shifts. Instead, he starts from the premise that socioeconomic and biospheric changes are deeply and inextricably bound up with each other, in complex causal loops that require integral and bi-directional examination. The growth of cities, for example, is presented by McNeill as often having its genesis in certain geographical "givens," such as the location of a river, or of mineral deposits; but then the dynamic of social and economic forces comes increasingly into play, shaping the city over time, and shaping in turn the surrounding land; this reshaping of the land, in return, reverberates back on the city itself, modifying its culture and economy in important ways. Again and again, McNeill returns to these kinds of complex feedback loops, showing how human history and natural history, in the uniquely dynamic context of the twentieth century, are truly interwoven, and cannot be adequately understood in separation from each other. "History and

## Reviews

ecology,” he writes in his conclusion, at least in modern times, must take one another properly into account. Modern history written as if the life-support systems of the planet were stable, present only in the background of human affairs, is not only incomplete but is misleading. Ecology that neglects the complexity of social forces and dynamics of historical change is equally limited. Both history and ecology are, as fields of knowledge go, supremely integrative. They merely need to integrate with one another.

McNeill’s synthesis, therefore, is actually twofold: it is a synthesis of scale and scope, taking in the whole of the biosphere; and it is a synthesis of analytical methods, bringing together repeatedly and systematically the very different types of questions asked by scientists, sociologists, economists, or cultural historians.

On top of these two remarkable achievements, the book has yet another surprise in store for us: it is fun to read. Again and again, we find ourselves marveling at some piquant anecdote or particularly juicy factoid, deftly woven into the broader narrative as McNeill takes us on our global journey. Thus, for example, we find out that Thomas Midgley, the man who invented Freon in 1931, can be with good reason described as having “had more impact on the atmosphere than any other single organism in earth history.” Quite an epitaph. Or, in a chapter on demographic trends, the intriguing thought that human bodies, by the 1990s, account for about five percent of the earth’s animal biomass, “ranking with cattle and far outstripping any other mammal.” (Ants, however, still have the edge: the diminutive bugs still outweigh us four-to-one.) Or, in a chapter on urban growth, an arresting image: Mexico City, which today slurps water at a rate 30 to 35 times greater than in 1900, is draining its aquifer so rapidly that the ground under the city is collapsing” in some places as much as seven meters over four decades. McNeill’s comment: “Children amused themselves by marking their height on well casings to see whether the ground was sinking faster than they were growing.”

The only weak spot in McNeill’s masterful narrative arguably lies in his treatment of the dawning of environmental awareness in the industrialized world. He acknowledges that the rising popularity of ecological ideas constitutes an important development: “Between 1960 and 1990 a remarkable and potentially earth-shattering (earth-healing?) shift took place.” But his treatment of this shift only occupies him for eight very sketchy and cursory pages, touching briefly on such figures as Rachel Carson and Wangari Maathai, or such events as Earth Day or the creation of UNEP, the United Nations Environment Programme. This amounts to perplexingly short shrift, in a lengthy and otherwise comprehensive book that so rigorously seeks to integrate cultural factors into our understanding of the planet’s twentieth-century transformation. Perhaps the reason for this lies in McNeill’s belief that environmentalism has so far merely offered tantalizing possibilities, rather than real, concrete changes in the way we shape the material world. “By far the most important political forces for environmental change,” he writes, “were inadvertent and unwitting ones. Explicit, conscious environmental politics, while growing in impact after 1970, still operated in the shadow cast by conventional politics. This was true on both the international and national scales.”

This may prove, in the end, to be a rather important blind spot in McNeill’s analysis. The transformation of societies, laws, economies, and mentalities brought about between 1960 and 2000 by the “rise of ecology” actually constituted far more than a mere glimmer of future potentials. One can make a good case that those four decades saw widespread changes in consumption patterns, production methods, political priorities, lifestyles, and values that already added up to a highly significant shift by the end of the century. Though it is easy to become demoralized by the cretinous persistence of gas-guzzling SUVs on our roads and by the recalcitrance of many of our fellow citizens when it comes to making sacrifices in the name of ecological restraint, the full picture is more complicated than this. On the one hand, McNeill is surely right when he concludes that contemporary society remains far indeed from achieving (or even envisioning) a state of sustainable development. On the other hand, it would be an equally important mistake to underestimate the variety, sweep, and (in some cases) depth of the changes that have already taken place. Most industrial democracies, by the year 2000, have begun to take important (albeit uneven) steps in the direction of sustainability” and to discount this fact is just as misleading as to overestimate it. True, we have a very, very long way to go: from modes of agriculture to patterns of travel, from consumerism to waste, from global poverty to global population, the challenges ahead remain daunting indeed. But to deny that we have already started to move, in important ways, during the last few decades of the twentieth century, is both inaccurate and needlessly depressing. Not all the changes triggered by the rise of environmentalism have been superficial ones.

None of this, however, diminishes in the slightest the fact that McNeill’s book offers an extremely valuable tool for all those who take an interest in matters of ecology. As a wake-up call to some readers, as a powerful source of synthesis and clarification for others, as a reference tool for still others, it takes us an important step closer to comprehending the state of our global environment and where our priorities should lie. It offers a model of judicious, sophisticated scholarship in the field of environmental history: an extremely ambitious, and impressively successful, intellectual journey.