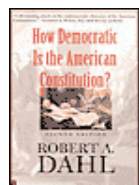


## Ecozoic Book Reviews

By Herman F. Greene and Ellen LaConte

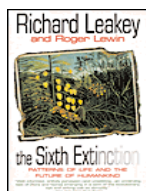
These book reviews are organized around the questions, if we are moving into an ecological age “Where are we?” and “How did we get here?” The reviews under “Where are we?” belong with Vol. 4, No. 1 (2004) of this *Reader*. These reviews will be inserted into that issue in the web version of the *Reader*, which may be viewed at [www.ecozoicstudies.org](http://www.ecozoicstudies.org). Similar reviews will appear in the next two issues of the *Reader* on “Where are we going?” and “How do we get there?” We hope readers of this publication will recommend additional works that have informed and influenced them. Bibliographical information (authors, editors, edition, publisher, city of publication, and date of publication) may be sent to [ecozoic@mindspring.com](mailto:ecozoic@mindspring.com). Please also send a short annotation or a longer review.

### Where Are We?



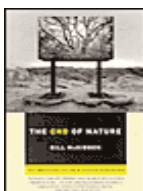
**Dahl, Robert A.** *How Democratic Is the American Constitution?* New Haven, CT: Yale University Press, 2001.

Succinct—under 200 pages—and very accessible. A legendary constitutional scholar reconsiders our Constitution, held by many Americans to be the world’s highest expression of democratic vision and governance. Shattering the myth that the U.S. Constitution has been the best or should be the preferred model for other democracies, he offers proofs that a goodly number of other democracies are in fact more democratic, as permitted and guided by their constitutions, than ours is. He looks at the electoral college, bicameralism, judicial review, majoritarianism, and unequal access and representation among other categories in which our Constitution lays a less than level political playing field and then proposes that to “preserve and improve” conditions that would be favorable to democracy (such as, rights, liberties and opportunities for effective participation) would accomplish far more in achieving a more democratic order than any changes in the constitution.” In a concluding chapter, “Prospects for a More Democratic Constitution,” Dahl suggests we need a strategy “designed to achieve greater political equality within the limits of the present American Constitution. A major objective of such a strategy would be to reduce the vast inequalities of the existing distribution of political resources. The characteristics of the Constitution that I have described in this book will, of course, stand as obstacles to the success of such a strategy, for they arm those who possess the greatest resources with strong defenses—opportunities to veto changes—against all efforts to reduce their privileged positions.” (Reviewed by Ellen LaConte)



**Leakey, Richard and Roger Lewin.** *The Sixth Extinction: Patterns of Life and the Future of Humankind.* New York: Anchor Press, 1995.

Richard Leakey is one of the world’s leading paleoanthropologists and formerly was head of Kenya’s wildlife preservation program. Roger Lewin is a leading scientific writer. Together they explored the mysteries of the evolutionary history of life on Earth, which is not the gradual evolutionary advance that Darwin understood. Rather this is a history of punctuated equilibrium and five great periods of mass extinctions. They discuss how life continued for six-sevenths of Earth’s history in numbing single-cellular sameness. Complexity eventually arose 530 million years ago and within a period of only a few million years—during the “Cambrian explosion”—“all the major body plans, or phyla, that represent life on the planet today were invented in a frenzy of evolutionary innovation.” Equally as important as the periods of evolutionary innovation were the five mass extinctions, the greatest of these being the extinction at the end of the Paleozoic era, 225 million years ago, when 95% of marine animal species, and almost as many on land, vanished. The authors discuss with keen insight the way ecosystems operate, species evolve, and species die. After setting the stage, the final task for the authors is to discuss their belief that human intervention in ecosystems is resulting in the sixth extinction, with the prospect that in the twenty-first century half of extant species will disappear. (Herman Greene)



**McKibben, Bill.** *The End of Nature*, 2nd ed. New York: Anchor Books, 1999.

Nature without the presence of humans has its own way. In general, changes occur over long periods of time. McKibben observes that humans are bringing about an end to natural processes as they occurred

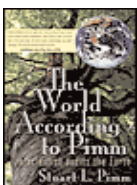
before humans. Acid rain falls, streams are diverted, greenhouse gases are released, vast stretches of natural field and fauna know “nature” is ending. One reaction to this is defiance: we proceed with the human project of building a Utopia and controlling nature. The other is deep ecology: we understand that the rest of nature counts as much as we humans do. He asks, “Which of these paths will we choose?” (Herman Greene)



**Paehlke, Robert C.** *Democracy's Dilemma: Environment, Social Equity, and the Global Economy.* Cambridge, MA: MIT Press, 2003.

The author is Professor and Chair of the Environmental and Resource Studies Program, Trent University, Canada.

“Democratic societies face a dilemma. Global economic integration produces a need for global political integration. Without it, national, state, and local governments are under pressure to forgo environmental protection and social programs in order to be competitive. At the same time, global governance presents problems because of its scale and its inaccessibility to citizens. This book describes the consequences of this dilemma—such as political cynicism and lack of democratic participation—and proposes ways to deal with it.” (From the book jacket.) Without dismissing globalization entirely, the author suggests, instead of an entirely economic bottom line, a three-part accounting system that includes environmental and social as well as economic factors. He proposes changes in international trade agreements and ways to improve domestic democratic effectiveness. Paehlke analyzes the anti-democratic effects of electronic (digital) capitalism and the ascendant corporate media monopoly. See especially the chapter “Community, Work, and Meaning: Everyday Life as Politics.” An entirely thoughtful, inspiring, readable treatment of the issues hampered only by the limitations Robert A. Dahl confessed to: those in power aren’t apt to, and aren’t likely to be required to, take his advice. This book is for those who still believe in the possibility of gaining political leverage and making a difference. (Ellen LaConte)



**Pimm, Stuart L.** *The World According to Pimm: A Scientist Audits the Earth.* New York: McGraw-Hill, 2001.

Stuart Pimm, a preeminent conservation biologist now at Duke University undertakes to write a “global natural history” in order to assess the state of the globe’s biological accounts. Most of his data is taken, he says, from the pages of *Nature and Science* magazines, but his presenta-

tion takes the form of a global odyssey filled with his own personal stories and observations, with scientific data cleverly interspersed throughout. From the jacket cover we learn that humans use 50 percent of the world’s fresh water supply; consume 42 percent of the world’s plant growth, and that we are liquidating animals and plants 100 times faster than the natural rate of extinction. He makes no attempt to hector or preach, but he does not hesitate to conclude, “What is absolutely certain is that humanity’s future will be massively different from the past.” He intends the book to fill the gap between what scientists are learning about the condition of life on Earth and what is known to the public. He does not believe the future is hopeless, but rather that knowledge and understanding can lead to decisions that will bring healing to the planet. (Herman Greene)



**Speth, James Gustave.** *Red Sky at Morning: America and the Crisis of the Global Environment.* New Haven, CT: Yale University Press, 2004.

Speth provides an analysis of environmental governance from 1980 forward and suggests the causes of its failure. Speth is Dean of the School of Forestry and Environmental Studies at Yale University, and was founder of the World Resources Institute, co-founder of the Environmental Defense Fund and an environmental adviser for the Carter and Clinton administrations. The book begins with a summary of what has happened to the environment since the beginning of environmental regulation in the 1970s. Despite this regulation, according to Speth two “megatrends in environmental deterioration [stand out,] increasing pollution and biological impoverishment.” The causes of this, according to Speth, are land use conversion, land degradation, freshwater shortages, watercourse modifications, invasive species, climate change, ozone depletion, and pollution. The recognition of environmental problems over the last 50 years have led to the adoption of numerous global treaties, the establishment of environmental regulatory agencies in national governments and three UN-sponsored Earth Summits, the most well-known of these being the 1991 Earth Summit in Rio de Janeiro which led to the adoption of Agenda 21, a comprehensive and massive set of proposals for global environmental management. Speth analyzes why these regimes have not succeeded in stopping the rapidly increasing deterioration of the environment. He proposes an eight-fold way to a sustainable future: (1) stable or smaller world population, (2) massive reduction of poverty, (3) environmentally benign technologies, (4) environmentally honest prices,

(5) sustainable consumption, (6) transition in knowledge and learning for environmental literacy, (7) strong and effective government action, and (8) an aroused and motivated citizenry. (Herman Greene)



**United Nations Development Programme, United Nations Environment Programme, World Bank, and World Resources Institute. *People and Ecosystems: The Fraying Web of Life*. Washington, D.C.: World Resources Institute, 2000.**

In 1999 leading scientists undertook a Pilot Analysis of Global Ecosystems (PAGE). The Page study assessed five of the world's major ecosystem types: (i) agricultural ecosystems, (ii) coastal ecosystems, (iii) forest ecosystems, (iv) freshwater systems, and (v) grassland ecosystems. The results of the study are reported in this book. The overall intent of the book was to take stock of global ecosystems as a pilot for continuing assessment, increase awareness of the sub-systems within ecosystems, promote holistic approaches to ecosystems, and demonstrate that much can be done to improve ecosystems management by developing wiser policies and more effective institutions. This book presents a comprehensive overview of the health of Earth's ecosystems. It inspired the Bill Moyer's special, "Earth on Edge," a videotape of which is available from World Resources Institute. (Herman Greene)

### How Did We Get Here?

**Adams, E. Maynard. *Philosophy and the Modern Mind: A Philosophical Critique of Modern Western Civilization*. Lanham, MA: University Press of America, 1985.**

Adams book can be read together with Whitehead's, *Science and the Modern World*, discussed below. Both take as their starting point the premise that scientific materialism has significantly impacted philosophy and culture. Whitehead reflected on how science brought about a new understanding of the nature of reality. Adams emphasis is on how scientific materialism has affected the understanding of what it means to be human. Prior to the modern period, Adams says, humans asked "What does life require of me?" based on some conception of values. Beginning in the modern period, however, the question became "How can I get what I want?" Science gave the means to control nature and at the same time removed all values that would prevent one from seeking maximum control and satisfaction. In a world thought to be determined by meaningless predictable events that are subject to control, questions of value become questions of power. What we understand as values are only subjective and relative; and, thus, to espouse one value system over another is to

assume an ideological position rather than one based on objective realistic values. The second part of the book is devoted to Adams' philosophy of value realism. This book is intended for academic philosophers. A more easily accessible version of Adams' history and critique of the modern period is presented in his book, *A Society Fit for Human Beings* (which will be reviewed in the edition of this *Reader* on "How Do We Get There?"). (Herman Greene)



**Beard, Charles A. *An Economic Interpretation of the Constitution of the United States*. 1986 paperback ed. New Introduction by Forrest McDonald. New York: The Free Press, 1986. Original edition New York: Free Press 1913.**

A leading-edge Columbia University history professor, Beard created a much bigger stir with the 1913 release of this book than he even hoped. It was the first such work to reconsider long-revered, unquestioned aspects of American history in the harsh light of mundane contemporary forces like inflation, deflation, debt, currency stability, trade imbalances, the distribution of private property (called 'personalty' in the jargon) and wealth and the access they provided their possessors to commercial and political power. Or the lack of it.

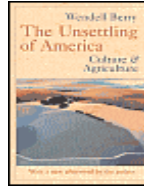
Much affected by the mounting backlash against the Progressive movement, pressures from powerful corporate and congressional figures to amend and use the Constitution to prop up Robber Baron perquisites, increased centralization of power in Washington, an imperial presidency, mounting talk of war, and the increasing distance money power put between the average American and his increasingly global-minded government (sound familiar?), Beard buried himself in mostly never-before-studied Treasury Department records hoping to learn from original sources rather than earlier interpreters whether economic self-interest might have influenced the framers as it seemed to influence every politico in his day. (His persistent concern that such invaluable records were falling into dust led to the establishment of the National Archive in the 1930s.)

To the extent it was possible, Beard assessed the economic circumstances of every one of the participants in the constitutional process in the period leading up to the convention through to the period of ratification, and also the chaotic, limping, massively deficated economy of the late colonial period itself. Key lines from the conclusion of what he termed his "long and arid survey" reveal why his book has been an often reprinted bestseller and school text and was considered scandalous, even heretical, by many historians and seminal by many others (all of whom, either way, benefited from the availability of the ever-expanding public archives).

“The movement for the Constitution of the United States was originated and carried through principally by four groups of personalty interests which had been adversely affected under the Articles of Confederation: money, public securities, manufactures, and trade and shipping.” The first steps were taken “by a small and active group of men immediately interested through their personal possessions in the outcome of their labors. “A large propertyless mass was, under the prevailing suffrage qualifications, excluded at the outset from participation (through representatives) in the work of framing the Constitution. . . . The Constitution was essentially an economic document based upon the concept that the fundamental private rights of property are anterior to government and morally beyond the reach of popular majorities. . . . In the ratification of the Constitution, about three-fourths of the adult males failed to vote on the question . . . either on account of their indifference or their disfranchisement by property qualifications. . . . [Consequently] the Constitution was ratified by a vote of probably not more than one-sixth of the adult males. . . . [T]he line of cleavage for and against the Constitution was between substantial personalty interests on the one hand and the small farming and debtor interests on the other. . . . [I]t was the work of a consolidated group whose interests knew no state boundaries and were truly national in their scope.”

It was not quite as simple as this, of course, nor were the framers all or consistently so crass and self-serving as it suggests. Historian Forrest McDonald, author in the 1950s of one of the critiques but a decade later of a work in confirmation of the principles of Beard’s thesis, sets the record somewhat more straight in his masterful introduction. But, like him, many former anti-Beardsian’s, whom he names, have had to admit that while some of his specifics were in error, the drift of Beard’s conclusion was not far off the mark. Constitutional scholar Robert A. Dahl concurs to the point that he offered his own countermeasures in *A Preface to Economic Democracy* (University of California Press, 1985).

Beard’s book is important, as a model, for Ecozoans, Progressives, Populists, Greens, you name it. The kinds of resources scholars were only beginning to have available to them a century ago are now available to us at the touch of a keyboard—or at least should be. It’s time someone took his book as a pattern and wrote up, in a voice and format as persuasive as Beard’s was, the *Who Owns What?* and *What and Who Owns Who?* of legislators, cabinet members, advisors and others in positions of influence in current American politics. The American government is still, even more profoundly, the work of a consolidated group whose interests know neither state, nor ethical boundaries. (Ellen LaConte)



**Berry, Wendell.** *The Unsettling of America: Culture and Agriculture.* San Francisco: Sierra Club Books, 1977.

This book is a classic of the modern environmental movement. Published in 1977, it describes the disturbing factors of our dislocation from the land and our own bodies. Berry chronicles how the first European settlers never intended to be “here” in America. Columbus, for example, was looking for India. Berry observes that this “never intending to be here” has persisted throughout the white man’s occupation of America. He says that the ecological crisis is a crisis of character: there is a vast split between what we think is right and what we do. This ecological crisis is also a crisis of agriculture as conservationists seek to keep pristine areas pristine and leave others for human exploitation. The agricultural crisis is, in turn, a crisis of culture: the modernization of agriculture has led to the disintegration of farming cultures and communities. Modern agriculture is business driven by the use of fossil energy, petrochemicals and fertilizers. The connection between humans, land and life and the cycles of life with the necessity of returning life to the soil has been broken. Thomas Jefferson praised the agricultural way of life relative to that of the “artificers,” the industrialists. Berry calls Americans back to an integral, simpler, more basic life with humans working in harmony with animal and soil. (Herman Greene)



**Brague, Rémi.** *The Wisdom of the World: The Human Experience of the Universe in Western Thought.* Teresa Lavender Fagan, trans. Chicago: The University of Chicago Press, 2003.

Brague’s subject is the human experience of being “in the world.” As humans we are both aware that *we are*, and, also, that we are *in a world*. What we understand this world to be is what Brague calls cosmology. He distinguishes cosmology from cosmography, our physical map of the Earth/universe (whether the Earth is flat, sits on the back of a turtle, circles the sun, or is part of an expanding universe), and cosmogony, the story of how things came to be. Though related to these other terms, the meaning of cosmology to Brague, “as is implied by the word *logos*, is not that of a simple discourse, but an account of the world in which a reflection on the nature of the world as a world [(as some kind of existing reality with common features throughout)] must be expressed.” Cosmology is reflexive, which is not always the case with cosmography or cosmogony where unreflexive description or myth will do. Because it is reflexive, cosmology requires an experiencing subject—the human being—and “must therefore necessarily imply something like an anthropology.” This does not make cosmology merely subjective, nor reduce

it to the characteristics of humans. It “encompasses a reflection on the way in which man can fully realize what he is—an ethics.” Thus we might say that as humans construct their understanding of the physical aspects of nature, they also construct their understanding of what it means to exist in this physical reality—what it is possible for them and others to do in such a world, what the ethical character of the world is, and what ethical fulfillment in such a world is. Thus “world” is more than a description of physical reality, it is a reflection on what it means to be in the world. This understanding is cosmology.

With this as introduction, he begins with an account of the “experienced cosmology” of pre-modern humans (in this case, “pre-modern” meaning before the “Axial Age” of 600-200 B.C.E.). In the pre-modern experience there was no concept of “world,” no word designating all of reality in a unified way. There were descriptions of heaven and earth and myths of origins, and there were catalogues of things that constituted the physical-spiritual reality in which humans lived—stars, clouds, winds (e.g., the “Great North Wind”), etc.—but “no sense that the humanity of man [could be accounted for] out of considerations related to the structure of the universe.”

It was not until the Greeks that a sense of “cosmos” arose, one that encompassed humans and the universe, one where humans would grapple with who they are and what they should be from the nature of the “world.” The Greek word for world was “*kosmos*.” “Pythagoras was the first to call ‘*kosmos*’ the encompassing of all things . . . because of the order (*taxis*) that reigns in it.” The world had a moral order that governed both nature and humans. In Plato “Good is the supreme principle. Good exercises its sovereignty over physical reality, but it equally rules the conduct through which the human individual turns his soul into a coherent whole (ethics) and gives the polis where his humanity must come to its fulfillment the unity without which the polis must fall (politics).”

The other great model (though not the only other model) of the cosmos in antiquity was the Abrahamic model carried forward in the sacred texts of the Hebrews, Christians and Muslims. Brague summarizes this model as follows: “The world is created by a good God, who affirms at every stage of creation that which he has just freely brought into being is ‘good,’ indeed in his ordered edifice ‘very good’ (Genesis 1). But the phenomena that seem most sublime within the physical world are not those of the highest level. They are in fact of lesser value compared with man, whom they serve. Man, therefore, is not meant to govern himself according to the phenomena of the world but must seek elsewhere for a model of behavior. In the final analysis, that model is God himself and God manifests himself less

through his creation than through a more direct intervention. He can either give the world his law, as in Judaism and Islam, or he can indeed enter into that world through incarnation, as in Christianity.”

These two models, one seeing the cosmos as ordered goodness from which humans are derivative, the other seeing nature and humans as independently created with nature being subservient to humans and all of creation being of a lower order than the world of the divine, have intertwined with each other in Western thought and continue in importance today.

A third model entered Western thought in the wake of the scientific breakthroughs in the sixteenth century and afterwards. Brague calls this “the end of the world,” a return to the pre-Axial Age “absence of world” but in a different sense. “The image of the world that emerged from physics after Copernicus, Galileo, and Newton is of a confluence of blind forces, where there is no place for consideration of the Good.” The world was no longer a whole, but a result of disparate forces. Cosmology gave way to cosmography—the stars, for example, no longer reflected the order of heaven, an ethical model to which one was to adapt oneself, but lacked any significance until some new theory might account for the facticity of their existence. In the words of Nietzsche concerning the new astronomy, “‘Since the time of Copernicus man distances himself from the center, and moves toward X.’”

Cosmology also gave way to cosmogony, as a focus on theories to account for the origins of nature became more important than the truth expressed in it. To the extent that post-Copernican science revealed a truth about nature, it was of its moral indifference.

“[Consequently,] cosmology lost its relevance in two ways . . . : on the one hand, its ethical value was simply neutralized as the cosmology was considered amoral; and on the other hand it was more seriously discredited as being immoral.” Further, in this modern view (in this case “modern” meaning post-sixteenth century C.E.), humans appeared as no exception to the new laws of nature. Morality was reconceived, in the liberal movement, to emulate amoral nature’s pursuit of self-interest as the way to the good; in various strains of existentialism, as a protest against nature’s indifference; or, in reactionary circles, as an “un-worldly” adherence to traditional, ideological, or religious values, in the latter case, sometimes as a protest against modern science.

Thus, the “world” that came into being in antiquity and had endured through the medieval period gave way to “worldviews” each of which was, in principle, equivalent in the light of modern scientific understandings that would validate none of them. “The long use of *world* to mean an object so patterned and unified as [to constitute] the geocentric *kosmos*” gave way to the term “universe”

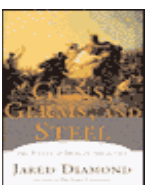
to mean the totality of things, whatever this may be, whether good or bad or ordered or chaotic. Further, from this acosmic vantage point, good was no longer understood to be in nature, it had to be introduced by humans “by force, by taking nature against the grain . . . inside the only realm that [was] within the scope of human action . . . the earth. Modern technology defines itself through the undertaking of domination, through a plan to become, according to the famous epigram of Descartes, the ‘master and possessor of nature.’”

In an interesting passage, which Brague never develops, he writes, “We again see the beginnings of a cosmology with [Sir Arthur] Eddington, starting with whom we have a unified, henceforth dynamic model of the unity of the cosmos.” Instead he ends his book with an account of the contemporary search for a “world” in subjectivity. He discusses, for example, Heidegger’s phenomenology where the primal experience of humans is that of being “thrown into an alien world.” From this perspective, the unity of the “world” does not come from the *kosmos*, but from within the human subject. This being the case, the world is a lonely place to be. In the next edition of this journal on “Where are we going?” we will follow up on Brague’s undeveloped idea that in Eddington’s thought we have the beginning of a new cosmology. In this idea is a great deal of what the ecozoic understanding is about. (Herman Greene)



**Carson, Rachel.** *The Silent Spring*. Greenwich, CT: A Fawcett Crescent Book, 1962.

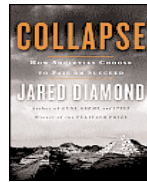
This is the book that gave birth to the modern environmental movement. Until Carson’s book few challenged the proposition of “better living through chemistry.” Consequently chemical use multiplied with little regard for its secondary effects. Carson wrote convincingly about how the indiscriminate use of pesticides could harm the environment and humans. She critiqued the quest for the “conquest of nature” and called attention to the ecological dimensions of nature: organisms and systems interacting with each other. The book describes how twentieth century technologies dramatically changed human impact on nature. It still reads well. When one views a crop duster spraying insecticides one can’t help but wonder whether the lessons of this book have yet been learned. (Herman Greene)



**Diamond, Jared.** *Guns, Germs and Steel: The Fates of Human Societies*. New York: W.W. Norton, 1999.

In this Pulitzer Prize winning book, Diamond attempts to answer the question, “Why did history unfold differently on dif-

ferent continents?” His book traces human development on all continents from 13,000 years ago with a particular emphasis on the first 10,000 years, before the widespread use of writing. Diamond’s answer is based on geography. A look at the index has no mention of the names of modern scientists or the scientific revolution. He finds that geographical differences exerted the largest influence on the development of societies. This book provides an unusual and insightful perspective on how we got here. His emphasis on geography also provides a starting point for envisioning the future against the globalization, which purports to eliminate geographic distinctions. (Herman Greene)



**Diamond, Jared.** *Collapse: How Societies Choose to Fail or Succeed*. New York: Viking, 2005.

Diamond was on a roll after the success of the aforementioned work and was given money, and time to travel the globe researching this 560-page counterpart that considers how the civilizations and societies that succeeded in rising came to fall. Loaded with anecdote, first-hand accounts, original research and old research revisited, Diamond’s second magnum opus suggests there are five interacting sets of factors that may contribute to the shape and timing of a society’s decline and recovery or collapse: environmental damage, climate change, hostile neighbors, friendly trade partners, and—often thorniest of all—its own responses to these forces. The failed societies he studied include, from the past, Easter Island, Pitcairn Island, the Anasazi and their neighbors in the Chaco Canyon region, the Maya, Vikings, and Christian European Greenlanders, and, from the present, Rwanda and Haiti. The causes of their failures are not surprising, but Diamond handles them in such a way as we really see them for the first time and, even before he tells us, can imagine what they have to teach us.

Just as interesting is his small selection of societies that have succeeded against the first four of the above odds because, for a variety of reasons, they responded soon enough and appropriately: the peoples of a tiny Pacific island called Tikopia, Tokugawa era Japan (1603-1867), Inuit Greenland, the Dominican Republic, and the New Guinea highlands. For those that succeeded the key was responsive, wise, situationally appropriate decision making, whether from the top down or the bottom up. When it was clear weather was changing, supplies were growing short, renewables were being over used, old enemies were too strong or old friends not strong enough, for example, these peoples didn’t put their heads in the sand, they changed.

For our purposes, Diamond’s most instructive chapter—given that nearly all the historic causes for collapse

are upon us now—may be the one that considers why some societies fail to grasp their changed realities and do something about them, why they, he says, *choose* to fail—or at least do not choose to succeed. He gives these markers: (1) For whatever reasons (he offers several), they fail to anticipate a problem before it arrives full blown. (2) They misperceive or fail to perceive a problem even after it has shown itself (for which he also offers explanations including “creeping normalcy” and “landscape amnesia”—the change is so gradual no one notices). (3) Frequently and insidiously, even when they perceive the problem, they fail to address it, often because of a clash of interests or the self-protection of special interests despite the long-term threat even to them (red flag this one). (4) Their value system or culture is not equipped to sponsor or permit the necessary changes (another red flag). (5) The messengers bearing the bad news of the crisis are underappreciated or disliked (or deemed unpatriotic?). (6) Simple psychological denial.

In his concluding chapter, Diamond second-guesses his potential naysayers and handily disputes their naysaying by suggesting the very interconnectedness that threatens to bring about collapse could prevent it, so there’s some reason for hope. There are plenty of things we could do to avoid our predecessors’ fate. Having already identified China and Australia as examples of nations that may find a way to do this, he reminds us that if China doesn’t, then, oh, dear for all of us. There’s not much precedent for social systems as big as our global economic one getting it right, but then since there’s no precedent for such a large socio-economic system, there’s no precedent for its getting it wrong either. An endnote for this chapter makes suggestions for actions groups and individuals may take. (Ellen LaConte)



**Eisler, Riane.** *The Chalice and the Blade*. New York: Harper Collins, 1987.

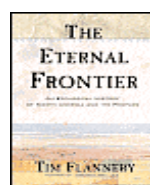
Eisler was known before the publication of this work as a futurist. Her efforts to understand where we are and ought to be going led her to investigate how we got where we are. A proudly feminist book, it has been a cult phenomenon. Eisler’s premises and interpretations of historical data have been sharply criticized by those who believe the data neither prove the existence of prehistoric matriarchal—what she calls “gylanic”—societies, nor indicate that invasions by patriarchal Kurgan nomads brought them to an end in the last few millennia B.C.E. My own study of recent research supports most of Eisler’s assessment, much of which was based on the controversial work of archaeologist Marija Gimbutas. Eisler asserts that members of prehistoric,

women-valuing societies—“symbolized by the life-sustaining and enhancing Chalice”—lived in instinctive “partnership” with each other, Earth, and other living things. In due course, masculine-styled, male-valuing patriarchies of both the nomadic/barbarian and the so-called civilized sort—symbolized by the “lethal blade”—triumphed over Earthly values along with the women who espoused them and substituted androgynous and dominance models of relationship to Earth and each other for the original partnership/gylanic models. Like Thomas Berry, Eisler holds that there has been a “breakdown of evolution” that has left us in charge and that “human evolution is now at a crossroads. Stripped to its essentials, the central human task is how to organize society to promote the survival of our species and the development of our potentials,” including our potential for partnership. Eisler left it to subsequent titles to suggest how this might be achieved. (Ellen LaConte)



**Eldridge, Niles.** *Dominion*. Berkeley: University of California Press, 1995.

Niles Eldridge, a paleontologist at the Museum of Natural History in New York, examines humans as a unique species in Earth’s history that have now come to dominate the planet. He tells the story of humans from their origins to the present. The uniqueness of humans, he writes, is in their culturally mediated approach to living in the natural world. Something happened 2.5 million years ago when humans began to fashion tools and later learned to control fire. Humans broke away from the rhythmic patterns of extinction and evolution common to other species. Even more importantly, with the beginning of agriculture 10,000 years ago, humans took control of their own food supply and became the first species to be able to live outside the confines of the local ecosystem. In the last two centuries, humans have become the only species to interact as a whole with the global natural system. It is this history and its implications that Eldridge ably presents in this short book intended for the lay reader. (Herman Greene)



**Flannery, Tim.** *The Eternal Frontier: An Ecological History of North America and Its Peoples*. New York, Grove Press, 2001.

We think we know what the North American continent is and has been and what its plants and fauna are and have been. Just look at a map, just look around and see. The continent, however, has a developmental, plastic history that Flannery presents wonderfully. He begins his account 65 million years ago with the meteor impact that resulted in the fifth extinction, ending the Mesozoic Era and beginning our present Cenozoic Era. Before that

event, North America existed as two isolated islands separated by the broad, shallow Bearpaw Sea, and it was in this sea that the meteor came down. In the last 65 million years, the continent has been warm from Alaska to Panama, frigid during more than one ice age, and the home of elephants, lions and tigers and other large beasts that are now only seen in museums. It was the last continent to have human impact with the arrival of the Clovis hunters 13,200 ago and with them the death of the megafauna. Beginning in 1492, the colonization of the continent by Europeans began and since that time people of many cultures have come to America to reshape the land. Flannery's final chapter is on re-inventing America as a necessary adaptation to the conditions of the continent now that the "eternal" frontier has come to an end. (Herman Greene)



**Glacken, Clarence J.** *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century.* Berkeley, CA: University of California Press, 1967.

Glacken writes, "In the history of Western thought, men have persistently asked three questions concerning the habitable earth and their relationships to it. Is the earth, which is obviously a fit environment for man and other organic life, a purposefully made creation? Have its climates, its relief, the configuration of its continents influenced the moral and social nature of individuals, and have they had an influence in molding the character and nature of human culture? In his long tenure of the earth, in what manner has man changed it from its hypothetical pristine condition?" The answers to these questions have generated three ideas, (i) designed earth—[man lives] on a divinely created earth harmoniously devised for his needs; (ii) environmental influence—[the physical qualities of man] such as skin and hair, his physical activity and mental stimulation are determined by climate; and (iii) geographic agency—"[man] fulfills his God-given mission of finishing the creation, bringing order into nature, which God, in giving him mind, the eye, and the hand, had intended that he do." This encyclopedic work on Western thought about nature and culture ends at the close of the preindustrial period. "What follows [in the industrial period] is of an entirely different order, influenced by the theory of evolution, specialization in the attainment of knowledge, [and] acceleration in the transformations of nature." Yet Glacken concludes the ideas that dominated the preindustrial period continue. Man's growing dominance and transformation of nature is still seen through the ideas of a world designed for man and man as divine agent of change. (Herman Greene)



**Griffin, Susan.** *Woman and Nature: The Roaring Inside Her.* New York: Perennial Library/ Harper & Row, 1978.

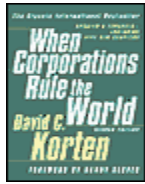
This is an important early book that is both feminist and ecofeminist. The book describes in painful detail male attitudes toward living things— nature in general and women in particular. "He [man] says that woman speaks with nature. That she hears voices from under the earth. That wind blows in her ears and trees whisper to her. That the dead sing through her mouth and the cries of infants are clear to her. But for him this dialogue is over. He says he's not part of this world, that he was set on this world as a stranger. He sets himself apart from woman and nature." The first part of the book is devoted to exploitation and the second to the woman's dream of the separated being rejoined. It is a book of prose that is a book of poetry. One must read this to understand. (Herman Greene)



**Horowitz, Morton J.** *The Transformation of American Law: 1780-1860.* Cambridge, MA: Harvard University Press, 1977.

Horowitz states that pre-American Revolution law was based on English common law and was thought to be fixed and determinate. He shows how, largely through judicial decisions, law in America was placed at the service of commerce. For example, in the English common law a landowner had absolute rights to his land and no neighbor could interfere with his "enjoyment" of the land. In the nineteenth century, the understanding of property changed "from a static agrarian conception . . . to a dynamic, instrumental, and more abstract view of property that emphasized the newly paramount virtues of productive use and development." This period saw the rise of merchant and entrepreneurial groups to political power and the formation of "an alliance with the legal profession to advance their interests through a transformation of the legal system." In this period the legal system "shed its eighteenth century commitment to regulating the substantive fairness of economic exchange." "Legal rules providing for the subsidization of enterprise and permitting the legal destruction of old forms of property for the benefit of more recent entrants triumphed. The new rules gave the appearance of being "self-contained, apolitical and inexorable," like mathematics. The new doctrines "actively promoted a redistribution of wealth away from the weakest groups in the society." Though the effects of these laws and attitudes have been moderated by antitrust laws, public welfare, and regulation of commerce, they still powerfully influence the outcomes of the legal system. (Herman Greene)





**Korten, David C.** *When Corporations Rule the World*. San Francisco: Berrett-Koehler Publishers, Inc./West Hartford, CT: Kumarian Press, 1995

Korten focuses on the history of the last half of the twentieth century. This was a period in which rapid population and economic growth brought humans face-to-face with limits, the “end of the frontier” on spaceship Earth. Yet, he observes trans-national corporations remain the cowboys seeing a world where unlimited growth is possible under the untrammled global rule of free markets. Korten de-mystifies the institutions and tactics that support corporate rule. We are, he says, ruled by a “professional class” who are persuaded that corporations are the future of the world. He describes the obliviousness of this juggernaut to the fact that corporations and their related institutions serve less than half of the world’s people, and in the third world, only a relative few. Even worse, he observes, corporations are rushing the planet to its ecological limits. He sees no hope in a world ruled by corporations and calls for people to reclaim their power and choose life within an ecological understanding of life. (Herman Greene)



**McNeill, J. R.** *Something New Under the Sun: An Environmental History of the Twentieth-Century World*. New York: W.W. Norton & Company, 2000.

The book begins with the question from Ecclesiastes, “Is there anything new under the sun?” and proceeds to show how the changes in the environmental impact of humans that occurred in the twentieth century were unprecedented and indeed were something new. McNeill gives a comprehensive history of human impact over the course of the twentieth century on the atmosphere (in both cities and countryside), the hydrosphere (water use, water pollution, water diversions and water depletions), and the biosphere (land use, agriculture, fishing and invasive species). He concludes his survey by acknowledging that the twentieth century may be the first stage of an ecological catastrophe unless changes are made. The last major section of the book is on engines of change including population growth, urbanization, fuels, tools, economics, ideas and politics. (Herman Greene)

**Polanyi, Karl.** *The Great Transformation: The Political and Ecological Origins of Our Time*, 2nd ed. With a foreword by Joseph Stiglitz and a new introduction by Fred Bloch. Boston: Beacon Press, 2001. Original edition: New York: Farrar & Rinehard, 1944.

This book is about the industrial revolution and how it transformed society. The industrial revolution

began in England in the late eighteenth century with changes in the production of textiles, including the spinning jenny and the water frame, and the growing use of steam engines. It continues through today. Will and Ariel Durant in their multi-volume survey of history, *The Story of Civilization* (written over the period 1935-1975), conclude that the industrial revolution was the only true revolution in modern history. Anyone who reviews human population, economics, environmental impact, urbanization and military capabilities is confronted with the startling reality that the industrial revolution has changed everything.

The story of this revolution is usually told as one of technological innovation. Polanyi, however, focuses on social transformation. According to Polanyi, industry’s new productive methods and capacity required the investment of large sums of capital which could only be recovered over long periods of time. Industry required markets to put up that capital. The increased productive capacity exceeded regional needs so markets had to both expand and demand had to be continuous so that goods could be continuously produced. If goods could be continuously produced and marketed, then profits would result. Profits would buy more innovation and more productive capacity, which required even more markets for the goods produced. Markets, however, were not only needed for goods, but also for the inputs to industry—land, labor and capital. “Every element of industry [needed to be for sale],” in other words, commoditized.

According to the liberal economic theories that supported the new industrial economy, if everything had a price and was freely tradable, the market would be self-regulating and the result would be efficient allocation of goods and services and rising wealth. As Polanyi points out, however, “labor is only another name for a human activity which goes with life itself [, and] land is only another name for nature.” They are “obviously not commodities . . . produced for sale.” Yet, the myth of the power of self-regulating, free markets and their benefits has been so persuasive that not only was the economy transformed under the sway of this myth, but also society itself. The market economy required by industry resulted in the creation of the market society, a society the role of which is to promote free markets. Polanyi provides an analysis to support this position that, historically, an economy was an outgrowth of the social structure. The inversion of this in the industrial economy resulted in society becoming an outgrowth of the economy—this was *The Great Transformation*.

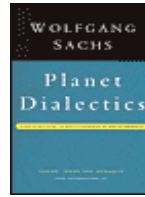
Polanyi first published this book in 1944, but it speaks with equal clarity today. In his foreword to the new edition of this classic, Joseph Stiglitz writes, “[Polanyi] exposes the myth of the free market: there never was a truly free, self-regulating market.” Yet it is this myth that still provides the underpinning for the

industrial economy. Stiglitz continues, “The [prevailing belief is that] the key to transformation is ‘getting prices right’ and getting the government out of the economy through privatization and liberalization [of trade]. In this view, development is little more than the accumulation of capital and improvements in the efficiency with which resources are allocated—purely technical matters. . . . Their perspective represents a misreading of history, as Polanyi effectively argues.” Polanyi’s historical analysis is brilliant and unmatched. To solve the problem of this social inversion, it must first be understood. (Herman Greene)



**Redman, Charles L.** *Human Impact on Ancient Environments*. Tucson, AZ: The University of Arizona Press, 1999.

Redman, an anthropologist, undertakes a study of human interactions with the environment over the last 40,000 years and comes to the conclusion that the environmental crisis is not new. He believes that an historical, cross-cultural study of human interactions with the environment provides a necessary perspective for addressing the current ecological situation. “The current problem,” he writes, “is not uniquely tied to contemporary politics, economics, or technology, but rather centers more on the nature of human decision-making and the forces that help shape those decisions. . . . [The contemporary situation is] the end product of thousands of years of a slowly changing, fundamentally similar set of human-environmental interactions.” In his view the problem is not limited to specific regions or cultures or time periods. These historical patterns have not been recognized because of the persistence of myths of an Edenic past where people lived in harmony with the land, a conviction that the forces of modernity, the West, technology and the global economy have fundamentally altered human-environmental relations, and the inability of ecologists to take into account that humans have been a part of the ecosystem for millennia. While ecologists have studied the interaction of organisms with their physical surroundings, they have purposely avoided studying human involvement. Redman’s broad topics concern animal exploitation, the impact of agrarian systems and the growth of cities, forces that grew in impact as human society grew. He concludes with a reflection on “the past as prologue.” This book greatly expands the historical and cultural context for understanding human-environmental interactions and why the Ecozoic Era involves re-inventing the human. (Herman Greene)



**Sachs, Wolfgang.** *Planet Dialectics: Explorations in Environment and Development*. Halifax; Nova Scotia: Fernwood Books, 1999.

Sachs critiques, on the one hand, the economic development model of the contemporary establishment and, on the other hand, important tenets of much of the environmental movement. The idea of “development” is to him “a ruin in the intellectual landscape.” In 1949 President Truman, in his inauguration speech, “defined the largest part of the world as ‘underdeveloped areas.’” From this point on, the South had a single name, underdeveloped. All the world’s peoples could be understood in terms of what their GNP per capita was and all were to move along a single trajectory—toward development. Greater production and economic growth were the key to peace and a better life for all. Sachs deconstructs the concept of development under such headings as “ambiguous claims for justice, Earth’s finiteness as a management problem, bargaining for the rest of nature, efficiency and sufficiency, and the hegemony of globalism.” The second part of the book focuses on the “dangerous liaison of environment and development” under the concept of “sustainable development.” In the face of the ecological predicament he says, “[T]he two founding assumptions of the development promise have lost their validity . . . , first that development could be universalized in space, and second, that it would be durable in time.” The third part of the book deconstructs the “Great Blue Planet” image loved by both environmentalists and industry. This image is one of a world without borders—one planet, one people, one market, and absence of local place. He explains how globalization accelerates the use of resources and fosters “a new colonization of nature.” The fourth section is devoted to the “post-development era.” Readers of this journal might think of this section as defining aspects of the Ecozoic Era. He raises such questions as, “[A]re the rich countries capable of living without the surplus of environmental space they appropriate today?” He writes of a world of selective slowness, one where resource sufficiency is more valued than resource efficiency. It is a world where it is recognized that the economic system is subordinate to the natural system and where economic demands are adjusted to those that the natural system can withstand. More pointedly, and much the more difficult, is his observation that “[eventually] the social scale of the economy will also have to correspond to the economy’s physical scale. . . . As it is not plausible to seek limits to economic expansion only in one dimension—the physical one—research on sufficiency must also explore limits in the social and cultural dimensions.” The exploration is one of “limits” and he asks “Can the appreciation of limits lead to a

more flourishing society? Can even self-limitation be part and parcel of self-liberation?" These are *the ecozoic* questions. Sachs continues in the last part of the book to offer some answers, but his greatest contribution is in framing the pertinent questions. Can we imagine a world in which well-being and economic sufficiency are understood as superior to a world of well-having? (Herman Greene)



**Swimme, Brian and Thomas Berry.** *The Universe Story: From the Primordial Flaring Forth to the Ecozoic Era, A Celebration of the Unfolding of the Cosmos.* San Francisco: HarperSanFrancisco, 1992.

The science of the twentieth century gave humanity a new understanding of its origins. This story was one of a big bang, or “primordial flaring forth,” which initiated space and time, and a continuous evolutionary and expansive development of the universe. Swimme and Berry call this time-developmental understanding *cosmogogenesis* as an alternative to *cosmos*, which reflected the older understanding of a static, spatial order of being, and they consider this new understanding the Copernican revolution of our time. Swimme and Berry are the first authors to present this story with many levels of meaning. They offer a scientific account of stages in the development of the universe, a geological and biological account of Earth’s history, and a cultural account of human history. They also offer a philosophical account of the dynamics of creativity in this evolutionary sequence and of the significance of this story for the human future. The universe story is presented as a unifying myth of origins and destiny for an ecological age. It is the book that presents, in the largest sense, how we got here. (Herman Greene)



**Teilhard de Chardin, Pierre.** *The Human Phenomenon*, Sarah Appleton-Weber, trans. Brighton, UK: Sussex Academic Press, 1999.

This is a new translation of the book that is more widely known as *The Phenomenon of Man*. Teilhard was a French paleontologist. He wrote, this, his masterpiece, in the period 1938-40. He was the first to understand evolution as story and to see in evolution dynamics that led to greater complexity and consciousness. This tendency was the human phenomenon that existed in the universe in the beginning and gave rise to the human in the course of its development. According to Thomas Berry, he was “one of the first scientists to realize that the human and the universe are inseparable.” Teilhard recognized in all

things an inner (perhaps we might say “spiritual,” though we could as well say human-like or humanistic) nature and an outer material nature. Appleton-Weber, the translator, describes the book as science and poetry. In doing so, perhaps she discloses the truth revealed by Teilhard about how we got here was through the universe, which is continuous and organic in its evolution and always moved by humanistic/spiritual forces reaching for fulfillment in greater complexity and consciousness and beauty and richness of experience. (Herman Greene)



**Whitehead, Alfred North.** *Science and the Modern World.* New York: The Macmillan Company, 1925.

Whitehead, a physicist, mathematician and philosopher wrote this book in 1925 just as the significance of relativity theory and quantum theory was becoming known. The modern period began with a revolution in science in the sixteenth and seventeenth centuries and this revolution was based on new capabilities in mathematics that allowed analysis and prediction of phenomena in the natural world, understood as matter in motion, where what was real was what was measurable. This scientific materialism caused a reaction in philosophy and culture as an attempt was made to understand humans through scientific materialism or to react against scientific materialism because of its inadequacy in explaining human experience. Whitehead shows how the progress of science itself, biological developments, the theory of evolution, the doctrine of energy and molecular theories, eroded the view that matter was primary and how the understandings of relativity and quantum mechanics were inconsistent with the scientific materialism that had dominated the modern period. He proposed that the idea of hard matter was an example of the “fallacy of misplaced concreteness” and the enduring entity is not the material part but the organism of which the part exists as pattern. An understanding of scientific materialism and its impact on philosophy and culture is critical to understanding how we got here. Though the new physics and non-reductionistic sciences, such as ecology, arguably support Whitehead's philosophy of organism, scientific materialism continues to powerfully and detrimentally influence philosophy and culture and with it our understanding of nature and the place of humans in nature. (Herman Greene)