Wildness, Cyborgs, and Our Ecological Future: Reassessing the Deep Ecology Movement

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Public awareness of global warming, as the most frightening and visible aspect of the global ecological crisis, has increased dramatically in the last several years. This most recent phase of ecological awareness has been brought about primarily by the scientific community (especially the Intergovernmental Panel on Climate Change), religious leaders worldwide, Jared Diamond's best-selling Collapse, environmental journalists such as Bill Moyers, Bill McKibben, and Mark Hertsgaard, and now Al Gore's global warming documentary. As Rajenda Pachauri, head of the Intergovernmental Panel, said last year, "We are risking the ability of the human race to survive." But lest we get obsessed exclusively with global warming, Diamond lists twelve problems (including human overpopulation, biodiversity, and wild habitat loss which results in a critical loss of ecosystem services, as well as global warming) each of which, he claims, is capable of bringing about the global collapse of civilization. British scientist James Lovelock recently warned that "there must be no more natural habitat destruction anywhere . . . the natural ecosystems of the Earth sustain the climate and chemistry of the planet."

In his critique of sustainable development, environmental historian Donald Worster pointed out that:

back in the 1960s and 1970s, the goal [of the most thoughtful leaders] of environmentalism . . . was to save the living world around us, millions of species of plants and animals, including humans, from destruction by our technology, population, and appetites. The only way to do that . . . was to think the radical thought that there must be limits to growth in three area . . . limits to population, limits to technology, and limits to appetite and greed. Underlying this insight was a growing awareness that the progressive, secular materialist philosophy on which modern life rests, indeed on which Western civilization has rested for the past three hundred years, is deeply flawed and ultimately destructive to ourselves and the whole fabric of life on the planet.

This necessary coupling of population, consumption, and technology with limits to growth was made in 1971 by Stanford biologist Paul Ehrlich and University of California Berkeley physicist John Holdren in their famous I=PAT equation: environmental impact is a function of population size, multiplied by the level of consumption, together with the nature of the technology being used. This equation provides the basis for the global scientific consensus concerning the ecological state of the world.

But where are the contemporary ecophilosophers, environmental ethicists, and environmental historians in this new environmental reawakening—the social ecologists, ecofeminists, and Callicott with his Leopoldian ethic? Or have they actually been counterproductive to this reawakening? These contemporary ecophilosophers and environmental ethicists have generally paid little attention to the implications of the I=PAT equation, and to the world's scientists' increasingly dire warnings about the global ecological crisis. In addition, there has been a recent concerted effort by Deweyan neo-pragmatists (Bryan Norton, Bob Taylor, Ben Minteer, Andrew Light, Paul Thompson, and others) to take over the field of ecophilosophy in the pages of *Environmental* Ethics journal and elsewhere, even though Bob Taylor admits that Dewey was anthropocentric and promoted the exploitation of Nature.³ At the same time, William Cronon, Carolyn Merchant, and a new cadre of anthropocentric leftist postmodern deconstructionists have taken over the field of environmental history from Donald Worster, Roderick Nash, and others who founded the discipline and were centrally concerned with the philosophical development of environmentalism and the worsening ecological crisis. Michael Zimmerman has drawn parallels between the neo-pragmatists and the postmodern theorists, with their overriding political preoccupation with human concerns such as social justice, democratic institutions, and fear of totalitarianism and fascism. 4 But why call this ecophilosophy or environmental ethics? Concern with the global ecological crisis, and ecophilosophical critiques and theorizing inspired by the crisis, have fallen through the

cracks or have been deliberately discouraged. The most important philosophical/ecological controversies going on these days, such as critiques of anthropocentric and economic worldviews, and the cybernetic/technological replacement of the biosphere, are ruled out-of-bounds. It's as if these theorists have moved back in time, before there was any widespread awareness of global ecological crisis.

David Nicholson-Lord, writing recently about the disappearance of the issue of overpopulation from public awareness and the agendas of environmental organizations, asks whether we shouldn't be concerned that human population has more than doubled from three billion in 1960 to six-and-a-half billion today and is projected to reach nine to ten billion by 2050? He points out that ecological footprint analysis shows that humans have now overshot the Earth's carrying capacity by 40 per cent and this could grow to 130 per cent by 2050. The influence of Julian Simon's "unlimited growth" perspective on both the political right and the left has heavily contributed to this lack of concern, and the public, and perhaps a new generation of academics, have been taken in by right-wing anti-ecological propaganda to the point where they have discounted the reality of global ecological crisis. But Nicholson-Lord also sees an overall return to anthropocentrism over the last several decades ("human society turning in on itself and losing contact with nature") as a major cause of this lack of concern. 5 This runs parallel with the ecologically conservative anthropocentric backlash of the neopragmatists and postmodernists in the academic fields mentioned above.

At the same time, the deep ecology movement which, since the 1960s and 70s, has been centrally concerned with the full dimensions of the global ecological crisis and with a shift away from anthropocentrism, has been relentlessly attacked by both the political right and the left. Fred Buell's outstanding scholarly analysis of environmentalism, From Apocalypse to Way of Life, thoroughly documents the massive rightwing Republican anti-environmental disinformation campaign beginning with Ronald Reagan and Julian Simon, which singled out deep ecology as the main culprit. One textbook author pointed out that "it sometimes seems that Deep Ecology acts as a lightning rod for environmental criticism and backlash. Because Deep Ecology does critique the dominant worldview, we should not be surprised to find significant critical reaction." Attacks also continued in the 1980s from the academic left with Murray Bookchin and his social ecology, from ecofeminists, and more recently from the neo-pragmatists and postmodern theorists. Some of this amounted to legitimate academic "give and take" but a good deal of it has been the result of unusually careless scholarship and ideological blindness. And insofar as the

nature and severity of the global ecological crisis has been misrepresented and belittled in the process, this goes beyond "playing academic games." Many of these academic theorists appear to have gone out of their way to remain ecologically illiterate. In what follows, I examine these critiques from the postmodern theorists, social ecologists, ecofeminists, and others, and try to reassess the position of the deep ecology movement as it developed from Rachel Carson and David Brower's Sierra Club in the early 1960s, through Paul Ehrlich to Arne Naess in the 1970s, and on to the present.

I. Postmodernists as the "New Creationists."

Scientists Barbara Ehrenreich and Janet McIntosh refer to postmodern theorists as the "New Creationists" who hold that biology is irrelevant to understanding humans. 10 For instance, Stanford philosopher John Dupre claims that "it is 'essentialist' even to think that we are a biological species in the usual sense—that is, a group possessing any common tendencies or 'universal properties' that might shed some light on our behavior." Clifford Gertz, an early proponent of social constructivism, is quoted as saying that "our ideas, our values, our acts, even our emotions are, like our nervous system itself, cultural products" having nothing to do with biological evolution. "Some of the strongest rejections of the biological," Ehrenreich and McIntosh claim, "come from scholars with a left or feminist perspective . . ." With the postmodernists, this has hardened into dogma, much like the Biblical creationists, and intellectual dissent from this dogma is rudely discouraged. But, in their view, "in portraying human beings as pure products of cultural context, the secular creationist standpoint not only commits biological errors but defies common sense." They conclude that "this climate of intolerance, often imposed by scholars of the left, ill suits an academic tradition rhetorically committed to human freedom. What's worse, it provides intellectual backup for a political outlook that sees no real basis for common ground among humans of different sexes, races, and cultures."

The modern rift between the sciences and the humanities (and now the "hard sciences" and the humanities/social sciences) has a history that leads back at least to Descartes. In his development of an "ecology of man," Paul Shepard in 1969 discussed the rift between the sciences and humanities, how the Left saw evolutionary theory as leading to Social Darwinism and eugenics, and how both the sciences (in their mechanistic phase) and the humanities have led to an alienated and Nature-hating culture. ¹¹ In his recent book on deep ecology (*The Culture of Extinction*), philosopher Frederick Bender acknowledges

postmodernism's exorcism of Eurocentrism from anthropology. But, like Ehrenreich and McIntosh, he claims that the tide of postmodernist relativism is beginning to turn and a "universal cultural design" is receiving support from ethology, primatology, hominid paleontology, linguistics, and Paleolithic archaeology. For Bender, one of the keys to understanding the biological basis for human nature is Mary Midgley's concept of "open instincts." Based on this "universal design," Bender endorses Shepard's "Paleolithic counterrevolution" against modernity.¹²

Looking more deeply into the roots of the "New Creationism" Nature/Culture debate, Michael Zimmerman, in *Contesting Earth's Future: Radical Ecology and Postmodernity*, summarizes the rise of French postmodernist thinking. This began, he claims, after the failed European student revolution of 1968 when French intellectuals turned away from Marxism and utopianism. Given the Nazi holocaust, recently compounded by revelations of the Soviet Gulag, the main fears and concerns of the French postmodernists were political: protecting democracy, promoting social justice, and avoiding totalitarianism and fascism, even if this resulted in nihilism. French intellectuals turned for inspiration to the anti-humanistic critique of modernity developed by Nietzsche, Heidegger, and the anthropologist Claude Levi-Strauss. ¹³

It is not surprising that, for all three of these thinkers, the rejection of humanistic modernism also went hand-in-hand with the rejection of anthropocentrism. Fred Bender argues that Nietzsche could be considered "the first philosopher of deep ecology" with his idea of "perfect nihilism" consisting of a joyful affirmation of "faithfulness to the Earth." Heidegger criticized the anthropocentric humanism of modernity for its assault on the Earth. What is most striking to me is Levi-Strauss's 1962 critique of Jean-Paul Sartre's humanistic existentialism. Sartre was the quintessential French anthropocentric Enlightenment humanist: promoting Eurocentric unlimited progress and rejecting science as it relates to humans because of its supposed strict cause and effect determinism, which he thought undermined the possibility of human freedom. Sartre has been labelled the "anti-Nature philosopher"; his goal, he claimed, was to "rescue the entire species from animality." For Sartre, humans are totally free and unlimited (what Pete Gunter refers to as "man-infinite"). In contrast with his French existentialist colleague Albert Camus, Sartre was a biophobe. 15

Levi-Strauss claimed, according to Zimmerman, that "anthropocentric humanism has justified the extermination of thousands of species, each of which was as valuable as a human." Sounding like John Muir's critique of "Lord man," Levi-Strauss asserted that his anti-humanism was not misanthropic, but a critique of the strutting arrogance of

modern humanity, a humanism which "makes man into the lord, into the absolute master of creation." Levi-Strauss preferred the "humility of primal people," claiming that "care about mankind without a simultaneous solidarity-like caring for all other forms of life . . . [leads] mankind to self-oppression and self-exploitation." The French postmodernists (Derrida, Foucault, and Lyotard), Zimmerman points out, "focused on human and social and cultural affairs, thus minimizing Levi-Strauss's and Heidegger's criticism of modernity's assault on nature." Several centuries earlier, their countryman Rousseau had argued that Europeans were becoming too civilized and needed to get back to Nature. But there is a direct lineage in French philosophy from the anti-Nature mind/body Christian dualism of Descartes through Sartre to Derrida. The postmodernists have rejected modernism as it relates to human society but, unlike the thinkers who inspired them (Nietzsche, Heidegger, and Levi-Strauss), they have failed to address the issue of anthropocentrism and modern humanity's destruction of wild Nature. Thus, French postmodernists have continued a central part of the Enlightenment project by developing convoluted theory and linguistic theoretical constructs designed to showcase humanity's uniqueness and superiority while, at the same time, casting doubt on the existence of Nature independent of human language and culture. For postmodernists, humans are not biologically a part of Nature.

The Politicizing of Science and Ecocide

Ehrenreich and McIntosh further point out that "postmodernist perspectives go beyond a critique of the misuses of biology to offer a critique of biology itself, extending to all of science and often to the very notion of rational thought itself." As one of the strengths of postmodernist analysis they appreciate Foucault's insight that power is everywhere, even in claims to truth. Thus, as a holdover from Marxist analysis, postmodernists claim (according to Zimmerman) that "what passes for objective truth is a construction generated by powerinterested elites." To counter the power elite's hegemonic grip on truth, postmodernists hold that "truth should result from negotiations in which as many voices as possible are heard." Zimmerman suggests that even Arne Naess's Ecosophy T is a power-motivated perspective, for it promotes his own striving for Self-realization, and his desire to be in wilderness areas. ¹⁷ The postmodernist theory of truth presumably serves their democratic concerns while, at the same time, delegitimizing any biological understanding of humans, and basically undercutting the theoretical sciences as an on-going effort to be an objective (or impartial) truth-seeking enterprise. When the world is viewed

exclusively from a political "power" perspective, then truth, like everything else, is to be "negotiated."

While Ehrenreich and McIntosh agree that "science needs close and ongoing scrutiny," they side with evolutionist Stephan Jay Gould when he says that "some facts and theories are truly universal (and true)—and no variety of cultural traditions can change that . . . we can't let a supposedly friendly left-wing source be exempt from criticism from anti-intellectual positions." This, of course, goes counter to the postmodernist claim that all knowledge is socially constructed, and specifically challenges Donna Haraway's view that knowledge should be solely "situated" and local. But there are legitimate forms of knowledge which are both universal and local. For example, the paleontologist Niles Eldredge points out that hunting-gathering people have an intimate knowledge of their local ecosystems. Their classification of plants and animals often coincides exactly with those developed by biologists. Eldridge concludes that "when we compare lists of plants and animals drawn up by local peoples with those of professional biologists, it confirms our notion that species are real entities in the natural world, not just figments of Western-world classificatory imaginations": in other words, knowledge is not just culturally relative and reducible to "social constructions." ¹⁸

The distinguished ethical theorist Bernard Williams also recently criticized both the postmodernists and the pragmatist Richard Rorty for denigrating and relativizing the concept of truth. Williams claims that the deconstructionists "depend on the remarkable assumption that the sociology of knowledge is in a better position to deliver truth about science than science is to deliver truth about the world." Physical and biological scientists are also not especially pleased with the rather careless politicizing and subjective undermining of their fields. ¹⁹ And so we have both the political left and the right politicizing science to serve their respective agendas.

In a paper on social constructivism and deep ecology, Mick Smith claims that I hold that (1) "current scientific theory [is] an accurate and unchanging representation of the world as it really is ... that it gives us privileged access to *the* truth," (2) that by supporting genetic *theory*, I thereby support the *technological applications* of genetics, (3) that although I criticize anthropocentric humanism, I actually remain within the modernist Enlightenment humanist paradigm by supporting natural science as an attempt to provide a true description and understanding of Nature, and (4) that Paul Shepard and I are sociobiologists and biological determinists in holding that biology has a significant role to play in understanding human behaviour and human nature. ²⁰ Smith's

claims seem to me to represent the typical postmodernist "straw man" arguments of the type discussed above. Having been trained as a philosopher of science, I am quite aware that science undergoes change. Smith seems to wilfully ignore my explicit claims about being a skeptic with regard to science ever arriving at final and complete Truth. I also make the customary distinction between theoretical science and its applications (applied science-technology); I support the former while having serious reservations about a good deal of the latter. With regard to (4), I essentially agree with the analysis presented by Ehrenreich and McIntosh, and with Fred Bender, as discussed above.

Inspired by Spinoza's account of the three levels of knowledge, Arne Naess (a major theoretical philosopher of science) makes a crucial distinction between the "contents of reality" and the "structure of reality." Naess's account of Gestalts as the rock-bottom "contents" of reality is his version of non-dualism. Theoretical science, on the other hand, provides us with an account of the structure of reality, and both the contents and structure of reality are independent of the relativizing of social construction. As a philosophical analysis of knowledge, I think Naess is on the right track here and this, of course, puts the lie to, and undercuts, the postmodernist sociological analysis of truth and knowledge. ²¹

Timed to coincide with the UN Rio Environmental conference, in February 1992 the U.S. National Academy of Sciences and the Royal Society of London (acknowledging the essential correctness of the earlier analyses of Paul Ehrlich and other ecologists of the 1960s and 70s) jointly announced that worldwide population growth of nearly 100 million people annually was the "core reason" for the loss of forests, global warming, and the rate of species extinction. They claimed that "the future of the planet is in balance" and called for the rapid stabilization of the world's population. Later that year, 1,575 of the world's leading scientists from 69 countries, including 104 Nobel laureates, signed the 1992 World Scientists' Warning to Humanity claimed that "Human beings and the natural world are on a collision course . . . We, the undersigned, senior members of the world's scientific community, hereby warn all of humanity of what lies ahead. A great change . . . is required, if vast human misery is to be avoided and our global home on this planet is not to be irretrievably mutilated . . . No more than one or a few decades remain before the chance to avert the threats we now confront will be lost . . ." In 1993, fifty-eight of the National Academies of Sciences throughout the world came together to draft a similar statement. Lester Brown has recently discussed the exponential global ecological deterioration which has continued to

occur since the Rio conference and the warnings of the world's scientists.²²

It is significant that Fred Bender begins *The Culture of Extinction* with a 40 page detailed scientific summary of the global ecological crisis: from overpopulation, global warming and ozone depletion, to biodiversity loss, habitat destruction and ecosystem collapse, toxic pollution, ocean degradation, arable land loss, fresh water shortages, and deforestation, the sum total of which he refers to as "ecocide." Business as usual policies, such as sustainable development, might allow us to grow for a few more decades. By drawing on the 1990 computer models of Donella Meadows and others, he claims the evidence now strongly suggests "that overshoot and collapse will occur during the present century" unless major social change rapidly occurs (ecological footprint analysis now indicates that overshoot actually began in the 1970s). A parallel analysis, focusing specifically on species extinction and habitat loss, has been given by University of Hawaii researcher Franz Broswimmer in his book *Ecocide*. Current estimates are that 30,000 species are going extinct each year, up from 1000 species per year in the 1970s, in what scientists call the Sixth Mass Species Extinction Event. The analysis of the global ecological crisis provided by Bender and Broswimmer reflects the overall consensus of the world's scientific organizations.²³ Arne Naess, like Bender, has looked at several scenarios for the twenty-first century leading to ecosystem collapse which would, in Naess's view, result in harsh totalitarian measures by governments to restore order. Naess hopes for a more rational deep ecological approach to avoid both ecospheric collapse and totalitarian measures.²⁴ In attempting to undermine the impartiality and "objectivity" of the natural and biological sciences, the postmodern social constructivist position undermines the credibility of the world scientist's warnings about the ecological state of the world.

A refusal to accept the global scientific ecological consensus, of course, changes the whole picture in terms of social priorities and the need for radical worldview and social change. The political right has argued for decades against the scientific consensus in the person of Julian Simon and his followers who have claimed that there is no human overpopulation problem or global ecological crisis. In 1995 a book appeared by the environmental journalist Greg Easterbook which argued that the environment is in better shape than it has ever been. Easterbrook was partly influenced by the New Age views of Pierre Teilhard de Chardin. More recently, the left has had its champion ecological dissenter in the young Danish statistician Bjorn Lomborg who, inspired by Julian Simon, has challenged all the figures on

deforestation, species loss, rates of population growth, global warming, and so on. Lomborg says he is a "left-wing guy" who wants to free up all the money needlessly spent on ecological protection to promote Third World development and feeding the poor. As the situation has evolved, the irresponsible views of both Simon and Lomborg have turned into a world-wide scandal. Ehrlich and Diamond show that Simon is ecologically illiterate. In the case of Lomborg, the scientific establishment, led by Peter Raven and others of the American Association for the Advancement of Science, rushed in to refute him in the pages of *Scientific American* and elsewhere. More recently, a panel of scientists (the Danish Committee on Scientific Dishonesty) reviewed Lomborg's book and decided that it is academically dishonest. They charitably concluded, however, that Lomborg basically got in over his head and didn't fully understand the nature of the issue involved.²⁶ In critiquing the views of Simon and Lomborg, was this merely another Foucaultian power play on the part of the scientists (as Zimmerman and the postmodernist social constructivists would have it), or rather an attempt by the scientists to set the facts straight in the best long-term interests of humanity and the Earth?

World Religions versus the New Creationism

As we have seen, the new generation of postmodernist environmental historians and neo-pragmatist "ecophilosophers" have become increasing conservative and reactionary in terms of evolutionary science and the global scientific ecological consensus, and have effectively crawled back into the traditional Western "anthropocentric cocoon." As philosopher Roderick French pointed out with regard to the traditional Western anthropocentric approach, "it is very unsettling . . . to consider the idea that the formation of human consciousness through training in literature, philosophy, history, religion and related disciplines may in fact inculcate values and behaviors that jeopardize the continuation of life itself."

Christian theologians have a history of blowing hot and cold on the ecological crisis, but beginning in the 1980s, under the prodding of the ecologically radical Catholic theologian Thomas Berry, together with Mary Tucker of Harvard University's "Religions of the World and Ecology" program (who was influenced by Berry), significant progress has been made in alerting and radicalizing the world's religious leaders to the catastrophic nature of the global ecological crisis and to the rejection of anthropocentrism.²⁸

In 1997 the Patriarch of the Greek Orthodox Church, Bartholomew I, made the following pronouncement:

To commit a crime against the natural world is a sin . . . For humans to cause species to become extinct and to destroy the biological diversity of God's creation . . . for humans to degrade the integrity of [the] Earth by causing changes in its climate, stripping the Earth of its natural forests or destroying its wetlands . . . for humans to contaminate the Earth's waters, its land, its air and its life with poisonous substances, these are sins.

The Pope had earlier shocked the world with his pronouncement concerning the overwhelming evidence in support of Darwinian evolution. In June 2002, Bartholomew and the Pope issued a "Common Declaration" on the environment declaring "our hope that [God's design] will be realized through our cooperation in restoring its original harmony."²⁹

Religions in rich and poor countries alike are beginning to take a leadership role in addressing both the global and local dimensions of the ecological crisis. For many years, the Dalai Lama has been an outspoken advocate for ecological responsibility and for protecting the ecosystems and wildlife of Tibet. The Buddhist monk Sulak Sivaraksa is a leader of the Assembly of the Poor which combines a social justice and ecological approach to protecting the forests and wildlife (and the home of indigenous people) in Thailand. Sivaraksa, Thich Nhat Hanh, Gary Snyder, and the American Buddhist/deep ecologist Joanna Macy have been mentioned as being instrumental in moving world-wide Buddhism into a new third phase of social and ecological activism. Further, the Brazilian Christian theologian Leonardo Boff has written that, since the late 1960s, liberation theology has moved progressively from a concern for the starving poor, blacks and Indians, and the oppression of women, to a new concern for an ecological theology and spiritual ecology that focuses on the destruction of wild ecosystems and species on the basis of their "autonomy" and "intrinsic value." Boff claims that "according to this theology, social injustice becomes ecological injustice" in that humans and society are "part and parcel of Nature."30

The conflict between the free-market capitalist, unlimited-growth economic-worldview versus an ecological worldview was sharply highlighted in 1995 when Thomas Berry made the dramatic claim that "we are already on the verge of total [ecological] dysfunctioning of the planet . . . [this] requires a drastic reduction in the plundering processes of the commercial industrial economy [and] a sudden and total change in lifestyle." This is in sharp contrast with New York pundit Thomas Friedman and his uncritical cheerleading for economic globalization

(*The World is Flat*) in which American super consumerist lifestyles are spreading to China, India, and the furthest corners of the globe; the rich get richer while the poor get poorer; and multinational corporations increasingly rule the world. Writing in *The Guardian* last year, George Monbiot claimed that modern economics sees the cure to all the world's ills as endless growth, whereas global warming "exposes our economists as utopian fantasists . . ." At the 2004 Parliament of World Religions held in Spain, where there was an emphasis on spirituality and ecology, Rabbi Michael Lerner received the most applause for his critique of globalization as a "soulless religion of the Market"—a comprehensive worldview that "acts like a proselytizing religion, promising salvation through consumerism, technological gadgets, and economic power."³¹

The most radical religious/ecological statement to appear recently is the "God's Earth Is Sacred" document of the World Council of Churches (available on their website). It rejects "business as usual" and calls for drastic reductions in economic production and consumption, along with protection of ecosystems and species. Dealing with the global ecological crisis is "the central moral imperative of our time." But the most glaring omission in all this radical religious ecological awakening, from Thomas Berry to the World Council of Churches, is the *lack of any reference to human overpopulation!* They have accepted and promoted most the global scientific ecological consensus except one of its most crucial aspects. They need to study Diamond's *Collapse* and Ehrlich's *One with Nineveh* and present the world with a comprehensive ecological analysis and critique.

While the world's religious leaders are now taking ecologically radical positions, and lining up with the world-wide scientific community and the position of the deep ecology movement, the Republican, right-wing, George W. Bush "Wise Use movement" White House is in collusion with the apocalyptic fundamentalist Christians who see ecological collapse as "good news." The journalist Glenn Scherer provides an outstanding analysis of the anti-ecological "end-time" Christian apocalyptics and how they have politically taken control of Congress. This message was repeated by veteran journalist Bill Moyers when he received the Harvard Medical School's Global Environment Citizen award in 2004.³²

How ironic that highly educated academics such as the leftist postmodern deconstructionists would end up as "new creationists" taking scientific and ecological positions similar to the anti-ecological Biblical creationist Christian right! And now some theologians (who have traditionally been dogmatic) are at the forefront of the radical

ecological movement, while supposedly open-minded philosophers (such as the neo-pragmatists) have dropped back to being minimally ecologically concerned anthropocentrists. The ecophilosopher Jack Turner (in *The Abstract Wild*) comes close to expressing my feelings when he says that despite his training in the Western philosophical tradition "I am suspicious of that tradition, its means and ends, yet I remain its servant." Given the present reactionary position of most of contemporary Western philosophy (including the new generation of "ecophilosophers") which can't seem to rise above its anthropocentric biophobic past, I am beginning to feel more solidarity with the radical ecological theologians of the world.

II. From Guha to Cronon: The Postmodern Deconstruction of Wilderness

The most recent phase of wilderness critiques began in 1989 with the Indian social ecologist Ramachandra Guha who, in a very influential paper, took on the mantle of spokesman for the Third World by providing a "Third World critique." ³⁴ Calling himself a "sympathetic outsider," Guha claimed that the deep ecology movement is just a radical trend within the American wilderness preservation movement. It has little relevance to the real environmental issues facing humanitysocial justice, over-consumption by the rich, and militarization (Guha considers these "the major dangers to the integrity of the natural world"). He even goes so far as to suggest that "a truly radical ecology movement in the American context ought to work toward a synthesis of the appropriate technology, alternate lifestyle, and peace movements." Guha refers to India euphemistically as a "densely populated country." By any realistic ecological measure India is grossly overpopulated and has now shot past China as the most populated country in the world. One is astounded to see the environmental crisis characterized in this way, given the global scientific ecological consensus.

Guha is upset with the nature reserves established to protect tigers and other endangered species in India in the 1970s by prime minister Indira Gandhi, in collaboration with international conservation organizations. He rejects the view "that intervention in nature should be guided primarily by the need to preserve biotic integrity rather than by the needs of humans." In his view, India's tiger reserves (which also protect many other endangered species) are an example of "elite ecological imperialism" that results in "a direct transfer of resources from the poor to the rich." Guha further asserts that American parks and wilderness

areas (as in the Third World) cater primarily to the rich as tourist attractions. "Deep ecology," he claims, "runs parallel to the consumer society without seriously questioning its ecological and socio-political basis." The ecological issues, for Guha, are primarily issues of human social justice. Further, the deep ecology anthropocentric-biocentric distinction is "largely spurious." He is upset by deep ecological appeals to Eastern traditions such as Taoism, Hinduism, and Buddhism as a basis for its ecocentrism, claiming this is politically motivated to provide an "authentic lineage," and to present itself as a universal philosophy (as opposed to a parochial American one).

Guha cites the Devall-Sessions *Deep Ecology* book, but even with its faults, it contained enough information to head off most of his misconceptions about deep ecology. If he had read the book more carefully, he would have found that the deep ecology movement is not narrowly focused on wilderness. For instance, bioregionalism is highlighted in the book as an ecologically sensible way of life for people throughout the world. There is a critique of inappropriate technology. Guha also would have found criticism of over-consumption by the rich. He dismisses the appeal to Eastern religions as a "political ploy" apparently without realizing, for example, that Arne Naess is a recognized world authority on Gandhi's philosophy and has incorporated Gandhi into his personal ecological philosophy (Ecosophy T). Further, Gary Snyder trained for ten years as a Zen priest in Japan, and bases his deep ecology philosophy and practice on Zen. 35 In short, Guha's knowledge of the deep ecology movement appears to be greatly distorted. And Guha is not the "impartial" or representative Third World spokesperson that many took him to be. There are many people throughout the Third World who place a high priority on efforts to protect biodiversity and wild Nature in their countries. Further, he is not necessarily a representative spokesperson even for India. For example, the well-known Indian physicist/ecofeminist, Vandana Shiva, claims that deep ecology's insistence on the intrinsic value and protection of wild species and habitat is the only way to ensure a healthy life-style for the world's poor in the long run. ³⁶ Despite these problems, Guha nevertheless touched a nerve: the issue of displacing indigenous people from their homes in order to set up preserves to protect wild ecosystems, endangered species, and the continuing evolutionary flow of wild Nature.

A much more systematic and comprehensive critique of the wilderness concept was developed beginning in 1991 by J. Baird Callicott, one of the leading expositors of Leopold's land ethic. Summarizing Callicott's position, he first of all claims that the original rationale for protecting wilderness put forth by John Muir was for its aesthetic and spiritual

values. But, this is misleading. Muir also rejected the anthropocentrism of what he called "Lord Man": for Muir, wild nonhuman beings have a right to exist for their own sakes and this requires protecting large expanses of wilderness as wild habitat. Thoreau was the first modern thinker to emphasize the crucial importance of protecting the Earth's wildness; Muir agreed with Thoreau and emphasized the role of anthropocentrism in destroying wildness.³⁷ Second, according to Callicott, wilderness preservation is a defensive and ultimately losing strategy. Third, echoing Guha, Callicott argues that wilderness is a uniquely American concept and is not exportable. It results in evicting indigenous people from their homes in the remaining wild areas of the Third World. Fourth, it is an ethnocentric concept. No wilderness is pristine (untouched by human hands): native people managed and, in some cases, altered the landscape with fire and other means. Fifth, recent ecological theory claims that ecosystems are constantly changing and unstable, whereas Callicott claims that wilderness preservation assumes a stable ecosystem. And sixth, by excluding permanent human habitation, the wilderness concept reinforces a philosophical and literal separation of humans from nature.

Unlike Guha and his exclusively social justice-oriented colleagues, Callicott has a thorough knowledge of the ecological literature, and realizes the necessity of ecosystem and species protection. He proposes replacing the concept of legally designated wilderness with the concept of "biodiversity reserves" to protect biodiversity and ecological habitat. But in their anthology, *The Great New Wilderness Debate*, Callicott and Michael Nelson insist that these "biodiversity reserves" must be *managed*. What do Callicott and Nelson have against unmanaged *wildness*? Do they feel the need to "control Nature" by managing it? Perhaps the most insightful exchange occurred between Callicott, the conservation biologist Reed Noss, and Dave Foreman. Noss and Foreman seem to successfully answer most of Callicott's points.³⁸

In addition to his biodiversity reserve alternative, Callicott also endorses the concept of "sustainable development." The biologist Edward Grumbine has argued against Callicott's sustainable development proposal. Sustainable development involves too much management and development, and goes hand-in-hand with Callicott's vision of a "global technological society." Grumbine claims that, for Callicott, there is "very little of the sense of limits" that will be required for future ecologically compatible societies. ³⁹ Callicott seems oblivious to the vast literature criticizing sustainable development. And like the reform environmental organization leaders of the 1980s, Callicott seems to have backed away from the "limits to growth" analysis, while promoting instead what Fred Buell refers to as the much less radical

"ecological modernization" position. Arne Naess, on the other hand, has proposed that we substitute the concept of "ecological sustainability" for the ecologically flawed concept of sustainable development. 40

Postmodern social constructivism dramatically entered the debate with environmental historian William Cronon's paper, "The Trouble with Wilderness; or, Getting Back to the Wrong Nature." Excerpts appeared in the *New York Times Magazine* and other newspapers in 1995 with such titles as "Inventing the Wilderness" and "Is Wilderness a Threat to Environmentalism?" In 1990, the leading environmental historian, Donald Worster, had engaged in a debate with the new postmodern environmental historians. Worster claimed that Cronon and Carolyn Merchant attempt to "reduce environmental history to social history and to embrace the latter's causal arguments and moral concerns—the importance of gender, race, class, and so forth." Cronon had so broadly redefined environment as cultural landscape that it would "encompass virtually every place on earth, even hospitals and military bases." 42

Cronon's paper draws on the arguments of Guha and Callicott, but adds the postmodernist theme that Nature and wilderness are social constructs that *need* to be "reinvented." Cronon's style of presentation seems unusually ambiguous and devious, and much of the cogency of his argument rests on this. For example, Cronon claims that "wilderness poses a serious threat to responsible environmentalism in the late twentieth century." But is he talking about the concept of wilderness or the physical landscape to which the word "wilderness" refers? As it turns out, it's both. For Cronon, the Euro-American idea of wilderness is Romantic and based on historical factual inaccuracies such as the extent to which the Earth's surface has been altered from its "pristine" state by native peoples. In line with Callicott, he claims that his criticism "is not directed at wild nature, or even at efforts to set aside large tracts of wild land." But this is misleading, for Cronon ultimately sides with Guha. The "bottom line" for Cronon is that "responsible environmentalism" needs to be redirected away from protecting large wild areas world-wide (for wild species and biodiversity protection) toward a concern for our "backyards": places like cities and other areas where we "live, work, and play."

Cronon's grasp of ecological science seems somewhat slender: for instance, he claims that the genetically domesticated tree growing in our backyard is just as wild and "other" as a tree growing in an old growth forest. In a valuable ecological critique of Cronon, conservation biologist Donald Waller takes him to task for the tree example, and

explains how conservation biologists understand and classify wild ecosystems. All In another example of scientific confusion, David Kidner (in his excellent critique of social constructivism) faults Cronon for suggesting that many of the most dramatic global ecological problems (global warming, ozone depletion, biodiversity loss) exist mainly as simulated representations in complex computer models of natural systems. La Cronon proposing that scientists are manufacturing or constructing the world's global ecological problems, thereby belittling these problems so that emphasis can be placed on local urban pollution and environmental social justice issues?

Any doubts about the direction Cronon and his postmodernist colleagues are headed should be dispelled by the orientation of the participants, and the issues discussed, at the "Reinventing Nature" conference (inspired by his paper and organized by Cronon) held at the University of California in Irvine in 1994. The title of the conference came from the work of Donna Haraway of "Cyborg Manifesto" fame, who was a participant. For example, Richard White discussed the fight for the protection of the ancient forests of the Pacific Northwest in terms of those who work (the loggers) versus recreationists, while downplaying the ecological issues. Candice Slater and Carolyn Merchant accused environmentalists of trying to return to a lost Eden of pristine wild Nature. Giovanna DiChiro promoted the conflating of environmentalism with social justice. Katherine Hayles discussed the convergence of virtual reality with experiences arising from the natural world. It is significant that the ecologist Daniel Botkin was invited to Cronon's conference, although he could not attend. Botkin also apparently rejects "limits to growth" and the global ecological scientific consensus. Donald Worster has criticized Botkin for wanting to develop almost all of the Earth to the point where it has been made "a comfortable home" for civilization. "Nature in the twenty-first century," Botkin claims, "will be a nature that we make." But what then happens to the wild ecosystems and species which make up the Earth's life support system?⁴⁵

The participants took field trips to Disneyland, Sea World, and the South Coast Plaza shopping mall with its Nature Company to see how the corporate world "reinvents" Nature. If there are any future conferences on "reinventing Nature," a more appropriate field trip would be to the American Museum of Natural History in New York City to see how biologists "invent" Nature. Niles Eldredge, the curator of the Hall of Biodiversity, opened a major exhibit in 1998 called Life in the Balance. It explains ecosystem functioning, the values of biodiversity, the nature of human dependence on wild ecosystems, and what can be done to avert the Sixth Mass Species Extinction Event. In

the book accompanying the exhibit, Eldredge's impassioned plea for protecting biodiversity and species habitat is, in itself, a profound refutation of postmodern deconstruction. Eldredge claims that "because we are still stuck with the notion that we have escaped the natural world, few of us see the dependence that our species truly has on the health of the global system." If they can't make it to the exhibit, Botkin and all the participants at the "Reinventing Nature" conference owe it to themselves to read Eldredge's little book!

Gary Snyder has little patience with Cronon and the postmodernists. He points out that early ecologists understood that ecosystems were in flux and change. Many pre-agricultural societies made relatively minimal impact on the environment so, in many cases, these lands should be referred to as "*virtually pristine*" rather than "pristine." Snyder claims that the positions of Cronon and Botkin are "simply the high end of the "wise use" movement." Cronon and the postmodernists fail to realize that "wilderness is the locus of big rich ecosystems, and is thus (among other things) a living place for beings who can survive in no other sort of habitat."

David Orr (whose sound judgment on environmental matters over the years rivals that of Snyder, Arne Naess, and Donald Worster) provides an excellent summary and evaluation of what he calls "the Not-So-Great Wilderness Debate." The key assumption—that Nature can be reinvented—"works only if one first conceives it as an ephemeral social construction. If Nature is so unhitched from its moorings in hard physical realities, it can be re-cast as anything one fancies." Cronon's claim that we should redirect our attention to the "wildness" in our own backyards is a "small idea" when we must "cope with global problems of species extinction, climatic change, emerging diseases, and the breakdown of entire ecosystems." Orr refers to historian Peter Coates' claim that "reckless deconstructionism cuts the ground from under the argument for the preservation of endangered species." Like Snyder, Orr sees postmodern views as similar to views found "only on the extreme political right." He concludes that "postmodernism provides no realistic foundation for a workable or intellectually robust environmentalism."49

The "wilderness debate" from Guha to Cronon is merely a small part of much larger leftist "culture wars" and intellectual social/political conflicts. One also needs to look, for example, at urban planner Robert Gottlieb's book, *Forcing the Spring*. Mark Dowie rightly regards it as a "landmark revisionist history of environmentalism" which stresses urban pollution and human environmental justice issues as the essence of environmentalism. Gottlieb's research is shallow, however, when he describes "old style wilderness conservationists" as concerned with

protecting wilderness primarily for scenic and recreational purposes. He also portrays the biologist Rachel Carson as being concerned primarily with pesticide pollution and "quality of life" issues, while ignoring her broader ecological and anti-anthropocentric stance. Gottlieb points out that the New Left (inspired by Paul Goodman, Herbert Marcuse, and Murrry Bookchin in the 1960s) was proposing an urban and social post-scarcity environmentalism focusing on pollution, new technologies, and the problem of over-consumption (much as Guha now does). The purpose of Gottlieb's book is to build a case for the resurrection of New Left urban environmentalism. ⁵⁰

Dowie expands on Gottlieb's analysis and program for a "new urban environmentalism." He brands the old wilderness conservationists with the usual leftist rhetorical epithets as "racists" and "elitists" (a few of them were but most were not) and endorses the "shift in emphasis from the natural to the urban domain [that] has transformed American environmentalism . . . The central concern of the new movement is human health. Its adherents consider wilderness preservation a . . . worthy but overemphasized value."51 Dowie does a good job of detailing all the foibles of the environmental movement and organizations as they became increasingly disorganized, ineffective, and confused about their priorities in the 1980s and '90s under the onslaught of the Republican right and demands from the left to adopt its urban social justice agenda as primary. But Dowie's minimal grasp of ecological realities and the scientific ecological consensus results in his elevating social justice issues above ecological issues. Like most urban/social justice environmental theorists who have come out of the traditions of the political Left, Gottlieb and Dowie seem to be ideologically blinded to the details of the history and biological basis of the conservation/ecology movement as it developed with Rachael Carson's writings and David Brower's leadership of the Sierra Club during the 1960s. Gottlieb references the key histories of this movement (Stephen Fox's John Muir and his Legacy, and Michael Cohen's The History of the Sierra Club) in his book, but the biological/ecological message didn't seem to sink in. For the Left (including the postmodern deconstructionists) everything is viewed anthropocentrically in terms of "race, class, and gender." For Gottlieb and Dowie, the early conservationist/ecologists were all "racists" and "elitists." And now we have Carolyn Merchant (a leading postmodern/ecofeminist environmental historian) ignoring John Muir's extraordinary ecological insights and achievements, and claiming he was a racist.⁵²

The New Left/social justice version of environmentalism (harkening back to Bookchin and Marcuse and now being resurrected by Gottlieb,

Dowie, Guha, and Cronon and the postmodernists) should, in the final analysis, be contrasted with these observations by Gary Snyder:

Deep ecology thinkers insist that the natural world has value in its own right, that the health of natural systems should be our first concern, and that this best serves the interests of humans as well . . . It is proper that the range of the movement should run from wildlife to urban health. But there can be no health for humans and cities that bypasses the rest of nature. A properly radical environmentalist position is in no way anti-human. We grasp the pain of the human condition in its full complexity, and add the awareness of how desperately endangered certain key species and habitats have become. ⁵³

III. Bookchin, Social Ecology, and Nature/Culture Dualism

Foucault was mostly right—power is almost everywhere, and certainly in the leftist (and postmodernist) orientations, which see everything as power politics. As Fred Bender (a former Marxist scholar) has pointed out, beginning with Marx, the left has rejected religion, including the religious spiritual traditions which provide an understanding of reality that involves techniques for moderating the domination of the ego. And now, reason and impartial evidence (the search for truth) is rejected by postmodernists in favour of (often inflammatory) rhetoric. This was nowhere more evident than in Murray Bookchin's vitriolic political power-play when he took the podium in July of 1987 to denounce deep ecology (and promote social ecology) at the first U.S. Green meeting in Amherst, Massachusetts.⁵⁴ Deep ecology had been promoted as the basic philosophy for the Greens by Fritjof Capra and Charlene Spretnak in their book, *Green Politics*. 55 Bookchin's tirade involved the claim that deep ecology is a "black hole"—a "bottomless pit in which vague notions and moods of all kinds can be sucked into the depths of an ideological toxic dump." Deep ecology is misanthropic in seeing humanity as an "ugly" anthropocentric thing that is "overpopulating the planet, devouring its resources, destroying its wildlife and the biosphere" (at least Bookchin got the last part of that statement right does he disagree?). Coupled with his violent rhetoric, Bookchin pushed all the right rhetorical buttons, with various accusations that were to become the stock-in-trade of leftist critics of deep ecology: for example, linking Dave Foreman's Earth First! pronouncements (and Michael Zimmerman's promotion of Heidegger's philosophy as a basis for the deep ecology movement) with ecofacism and Nazism.

The controversy appeared in the pages of *The Nation*. Kirkpatrick Sale saw a "concerted campaign afoot" when he served on a panel at the Socialist Scholars Conference earlier in 1987 with Bookchin and his colleague, Ynestra King, who attacked deep ecology and bioregionalism. ⁵⁶ King also claimed at a major Ecofeminist conference at the University of Southern California in 1987 that "there is only one ecology, and that is social ecology." Alston Chase points out that Sale had been repeatedly interrupted while giving a talk on deep ecology/bioregionalism at an earlier UCLA conference ("International Green Movements and the Prospects for a New Environmental/Industrial Politics in the U.S.") co-sponsored by Forcing the Spring author, Robert Gottlieb.⁵⁷ Chase, who is politically rightwing and also a critic of deep ecology, claims that Gottlieb (and Bookchin) were trying to extend the New Left German Green Party model to the United States: "environmentalism had not replaced Marxism but had been co-opted by it." Sale concluded that Bookchin, King and the others were "actually out to destroy the influence" of the deep ecology movement.

Fred Bender has little sympathy with social ecology, calling it "human chauvinism of the Left." He asserts that "social ecology and ecofeminism continue to develop traditional concerns of the historic Left, particularly analysis of, and opposition to, the class and gender domination, and unjustified inequalities, embedded in the Culture of Extinction."58 In her survey of Marxist, ecosocialist, and New Left political approaches to the environment, Australian political scientist Robyn Eckersley points out that Marx, like Locke and other classical liberals, "regarded the nonhuman world as no more than the ground of human activity, acquiring value if and when it became transformed by human labor or its extension—technology." The entire leftist tradition has not deviated substantially from the original Marxist position in this regard. Eckersley proposes two "litmus" tests for an adequate ecological position: a concern for overpopulation and the protection of wilderness (conceived of as wild species habitat). Both Bookchin's social ecology and ecofeminist positions fail dramatically on both scores. 59

As an intellectual leader of the New Left, Bookchin was hostile to the ecological perspective beginning with William Vogt and continuing with Paul Ehrlich (the dreaded "Neo-Malthusians") that warned of overpopulation, over-consumption, and wilderness/species habitat loss, and promoted limits to growth and human expansion. In Robert Gottlieb's view, "the environmental issue for Bookchin was preeminently an urban issue." Bookchin proposed a "post-scarcity anarchism" in which resources and human production are apparently

limitless (thus there is no overpopulation problem). The ecologist David Ehrenfeld quotes Bookchin as saying "for the first time in history, technology has reached an open end. The potential for technological development . . . is virtually unlimited." Ehrenfeld chides Bookchin's "boundless optimism" and asks why he embraces "the unwarranted optimism of a humanistic cult whose efforts to redesign the world in our own image have given us a lengthy string of ever-worsening failures?" Fred Buell points out the irony of how Julian Simon appropriated Bookchin's leftist post-scarcity ideas and turned them into an argument for "right-wing liberated free enterprise" unlimited growth!

In a 1988 article on the new ecophilosophies, there is a picture of Bookchin conferring with Marxist ecologist Barry Commoner at the 1987 Socialist Scholars Conference. Chris Lewis pointed out that as late as 1990 (in his book *Making Peace with the Planet*) Commoner

refuses to accept calls for controlling population growth, ending economic growth and development, and transforming the modern world. He argues that because humanity lives in two worlds, the natural world or ecosphere and a social world of its own creation—the technosphere [Nature/Culture]—the environmental crisis is not an ecological problem but a social and political problem.⁶²

The Commoner-Ehrlich debates of the 1970s must now be viewed in a new light: Ehrlich representing the scientific/ ecological, ecocentric wing of the environmental movement (what was to become the global ecological scientific consensus based on the I=PAT equation) and Commoner essentially representing the anthropocentric urban pollution political agenda of the New Left. The essential correctness of Ehrlich's analysis and efforts were acknowledged by the scientific community when they recently awarded him the first AAAS/Scientific American Prize for Science in the Service of Humanity.

In 1989, Eckersley provided a critique of Bookchin's ecological philosophy, focusing on his teleological interpretation of evolution as leading to greater diversity, complexity, and freedom, with humans at the top of the evolutionary ladder. For Bookchin, humans have created a "second nature" that has evolved from "first nature"—the old Nature/Culture dualism again. For Bookchin, it is necessary for humans to incorporate Nature into Culture thus adding "the dimension of freedom, reason, and ethics to first nature" in a new dialectical synthesis he calls "free Nature." Marx had divided Nature and Culture into the realm of necessity and the realm of freedom, and Bookchin's distinction between first and second nature obviously reflects this. In comparing Bookchin to the French Jesuit priest Pierre Teilhard de Chardin, Eckersley is concerned that Bookchin would be willing to

bioengineer wild "first nature" and "seize the helm of evolution on the grounds that we have grasped the direction of evolution and are now ready and able to give it a helping hand." Leaving wild nature and wild species alone "to follow their own evolutionary destinies" (in Gary Snyder's words) would mean, for Bookchin, that humans were being "too passive."

Bookchin claims that he is in the tradition of Aristotle, Hegel, and Marx. At the beginning of the rise of ecophilosophy in 1974, the Australian philosopher and historian, John Passmore, put his finger on precisely what is wrong ecologically with the entire Aristotelian, Hegelian/Marxist tradition.⁶⁴ For Aristotle, "nature is at its best when it fulfills men's needs—that this, indeed, is its reason for existing . . ." This tradition continued, according to Passmore, with the German idealist metaphysics of Fichte and Hegel, and was incorporated into the thinking of Marx, Marcuse (and Bookchin) of the New Left, and Teilhard de Chardin. Marcuse followed the thinking of Fichte in claiming that there are "two kinds of human mastery: a repressive and a liberating one . . . As [man] civilizes nature, he at the same time liberates it, frees it, as Hegel also suggests, from its 'negativity,' its hostility to spirit." Nonhuman nature must be humanized and spiritualized. There was no love lost for Nature in Hegel's Christianized dialectical philosophy. As the modern philosophical basis for Culture/Nature dualism, Bender claims that Hegel held that Nature has no intrinsic value. He quotes Hegel as saying that humans should "wear her out . . . and annihilate her." Hegel also asserted that "Man in so far as he is Spirit is not the creature of Nature."65

Bender argues that Nature/Culture is ultimately a bogus distinction and has no support from biology or the other sciences; contemporary human cultures still remain thoroughly imbedded in wild Nature and natural processes. His critique of Bookchin's social ecology follows along the lines developed by Eckersley. He claims that "social ecology's nebulous notion of 'free' nature amounts to nothing less than total planetary management, in support of massive, paternalistic intervention in evolution itself." But the situation with Bookchin is even more disastrous and sweeping than that. After attempting to establish that humans, through their Culture, have exited Nature—evolved out of Nature into the entirely separate realm of Culture—Bookchin would have humans turn back and absorb all of Nature into Culture. "Free nature" is the form that Culture takes after it has engulfed wild Nature. Now it's *all Culture!* The Hegelian tradition is so thoroughly anthropocentric, Nature-hating, and (in the case of Hegel) other-worldly that it is difficult to see how an adequate ecophilosophical position could ever be derived from it. Also, the dialectic is often used to imply

the inevitability of progress which, in many instances, is highly questionable.

Thomas Berry has tried to work through the immense anti-ecological implications of the dominant Western philosophical and religious tradition's approach to nonhuman wild Nature. As a Teilhardian scholar, Berry has attempted to reinterpret Teilhard ecocentrically. Contrary to both Teilhard and Bookchin, he claims that "the evolutionary process finds its highest expression in the earth community seen in its comprehensive dimensions, not simply in a human community reigning in triumphal dominion over the other components of the earth community." The spontaneous course of evolution and wild Nature must be respected and protected. 66

John Clark is now social ecology's "ablest philosopher," according to Bender. Clark holds that social ecology's distinctive claim is that "the human urge to dominate nature . . . results above all from human domination of other humans." Warwick Fox has argued against this view, and Eckersley appears to agree with Fox. 68 Bender also gives arguments why this cannot be true: for example, anthropocentrism historically preceded human domination of other humans. Bender also critiques attempts by Clark to defend social ecology's anthropocentrism. Bender points out that Clark now considers himself to be a "deep social ecologist." He has tried to distance himself from Bookchin's position and now claims to support bioregionalism and "an extensive expansion of wilderness areas." But what priority does biodiversity protection have (along with the other aspects of the ecological crisis) in Clark's new social ecology orientation? And what is the new "deep social ecology" position on human overpopulation, "post-scarcity anarchism" (unlimited growth), and humans directing evolution by absorbing wild Nature into Culture? Clark now apparently supports (along with Michael Zimmerman) Ken Wilber's anthropocentric Hegelian spirituality. Does he agree with Wilber that primal people have a less developed form of spirituality?⁶⁹ Bender thinks otherwise. More recently, Clark has sought strong ties with ecofeminism. This leads to the question of what Clark's position is on social constructivism, and towards Donna Haraway's Cyborg Manifesto.⁷⁰

Clark has recently claimed that my approach and Naess's differ so greatly that they represent two different conceptions of deep ecology. I have critiqued Bookchin's social ecology over the years for many of the reasons mentioned above, whereas Naess (in more Gandhian fashion) has tended to be conciliatory. Clark notes that Naess argues for keeping the deep ecology movement separate from social justice

concerns (these movements, for Naess, would ideally come together and co-operate, insofar as this is possible, under the overall banner of the Green movement). I agree with Naess's tactical approach to this issue and Clark does not. Insofar as I am aware, I do not differ with Naess on any major deep ecological issue, including the sensitive issue of the ecological consequences of overly liberal policies concerning immigration from poor to rich countries. Naess has pointed out, for instance, that "the children of immigrants will adopt the fatal consumption patterns of the rich countries, thereby adding to the ecological crisis," not to mention the added stress on ecosystems and social infrastructure these rapidly increasing population pressures are causing. In other words, there are limits to growth unless, of course, one believes that Culture has totally extricated itself from biological/ecological realities (these considerations are sufficiently weighty that they cannot be simply dismissed as a "racist" Garrett Hardin position). Given the I=PAT equation, environmental scientists now refer to America as "the world's most overpopulated country." And both Jared Diamond and the Ehrlichs have argued that immigration into developed countries must be significantly reduced for ecological reasons. 72 This is a key area in which leftist social justice movements (and apparently "second generation" ecophilosophers) appear to stray from sound ecological and social policy. Clark also strongly disagrees with Naess and me on this. One is finally led to wonder what social ecology as an ecophilosophical position would look like if Clark were to fully face up to the criticisms made by Eckersley, Fox, Bender, and others.

Postmodernism's Incredible Power Play—It's All Culture!

The social constructivism of the postmodernists provides a new and novel basis for the resolution of the Culture/Nature issue. There is no Nature/Culture dualism—Nature becomes a social construction totally dependent on Culture, or Nature become totally assimilated into, or eliminated, by Culture. This constitutes an intellectual power-play of such magnitude that it makes Bookchin's grab for power seem miniscule by comparison. For example, the Australian zoologist Peter Dwyer has claimed:

Modern thought treats nature as separate from culture and has assigned ontological priority to the former . . . I wish to revise, and to some extent up-end this tradition . . . I shall argue, in the domain of human affairs [that] culture should be taken as prior, nature as emergent.⁷³

But Culture is not "separate" from Nature unless we are Biblical creationists, Hegelian/Marxists, or postmodernist "New Creationists." Humans and their cultures arose through cosmic and biological processes, and remain thoroughly embedded in these processes. Bender provides extended arguments to support the embeddedness of humans in Nature. The Earth and many other species have historical ontological priority over humans. In rejecting the scientific account of the Universe's evolution by calling into question the veracity of the physical and biological sciences, the postmodernists have indeed "upended" things in an immense power-grab with implications for many practical issues (such as the priority of social justice issues over ecological issues). They have "up-ended" things to the point where they have turned reality on its head—it's all Culture! Through intellectual slight-of-hand, the social sciences now become the primary or "hard sciences" while the physical and biological sciences, become the "soft" culturally-dependent sciences. To the extent to which this bizarre intellectual power coup has been successful, the anthropocentric social sciences and humanities are now in the driver's seat! They now provide a new and unique intellectual basis, as a result of their newly acquired position of power, for the ecological destruction of the Earth and its wildness previously only dreamed of by Old Testament authors and modernist Enlightenment thinkers from Bacon, Descartes, Hegel, Marx, and Bookchin, to the New Age Silicon Valley cybernetic technotopian followers of Teilhard de Chardin.

As a way of summarizing the critique of anthropocentric postmodernism and its potentially devastating social and ecological impacts, I would like to refer to Paul Shepard's insightful little essay, "Virtually Hunting Reality in the Forests of Simulacra." After discussing the views of Derrida, Rorty, Lacan, Lyotard, and Foucault, Shepard says,

But is [postmodern deconstruction] really new or is it a continuation of an old, antinatural position that David Ehrenfeld has called "the arrogance of humanism?" . . . As the tourists flock to their . . . fantasylands, the cynics take refuge from overwhelming problems by announcing all lands to be illusory. Deconstructionist post-modernism rationalizes the final step away from connection: beyond relativism to denial. It seems more like the capstone to an old story than a revolutionary perspective.

And reminiscent of Nietzsche's "perfect nihilism" (the joyful affirmation of "faithfulness to the Earth") Shepard points out,

Alternatively, the genuinely innovative direction of our time is not final surrender to the anomie of meaninglessness or the escape to fantasylands but in the opposite direction—toward affirmation and continuity with something beyond

representation. The new humanism is not really radical. As Charlene Spretnak says: "The ecologizing of consciousness is far more radical than ideologues and strategists of the existing political forms . . . seem to have realized."⁷⁴

IV. Ecofeminism and the Deep Ecology Movement

Ecofeminism has been germinating since the mid-1970s, but it burst onto the ecophilosophy scene in 1984 with Australian sociologist Ariel Salleh's paper "Deeper than Deep Ecology: The Ecofeminist Connection."⁷⁵ Several ecofeminists, including Patsy Hallen, have pointed out that a large part of the development of ecofeminism has been in reaction to deep ecology. ⁷⁶ Most ecofeminists, with the notable exception of Charlene Spretnak, Hallen, and a few others, have seen ecofeminism (like Bookchin and his social ecology) as being in deadly competition with deep ecology. Before the attacks began, deep ecology theorists naively looked positively toward both social ecology and ecofeminism. Salleh's paper was the beginning and, with few exceptions, ecofeminists have uniformly misunderstood the deep ecology movement; as a consequence, most of their criticisms have been wide of the mark. For instance, Salleh thought deep ecology is a "masculine" rational ethical system (which it isn't) and that women are physically and emotionally closer to Nature than men (it seems obvious that, in alienated contemporary cultures, this varies mainly with the experiences of the individual man or woman). As a Marxist, Salleh has recently tried charitably to "help" deep ecology by suggesting that it deemphasize consciousness change, and place more emphasis on the "material" conditions of life.⁷⁷

The issue of masculine deep ecological alienation from Nature (most deep ecology *theorists* are male) has been a major theme of ecofeminist criticism to the present. [Since most ecofeminist intellectuals are urban-oriented postmodernists and social constructivists, it could be argued more plausibly that they are among the people of the world most alienated from Nature]. The mountain climber/philosopher Jack Turner points out that since people who spend lots of time in wild areas and on the summits of mountains often take a broad view of reality; it is no accident that many leaders of modern conservation (John Muir, David Brower, Arne Naess, George Sessions, Gary Snyder) have been mountaineers. Brower used to complain that the Sierra Club used to be run by mountain climbers but, beginning in the 1980s, it was being run by MBAs and other bureaucrats and had lost its boldness and ecological vision. Along the same lines, philosopher William Barrett referred to Henri Bergson's remark that "most philosophers seem to philosophize

as if they were sealed in the privacy of their study and did not live on a planet surrounded by the vast organic world of animals, plants, insects, and protozoa, with whom their own life is linked in a single history." Barrett thought that the "first lesson (of trees and rocks) is to draw us outside the narrow and presumptuous horizons of our humanism." Although Naess is often referred to as the "father" or "founder" of the deep ecology movement, this is misleading. Naess calls marine biologist Rachael Carson the founder of the movement. In his original 1973 deep ecology paper, he points out that "a vast number of people in all countries," many of whom were field ecologists (both men and women) who identified with wild Nature, had spontaneously arrived at similar deep ecological attitudes and beliefs. Naess saw himself as providing the philosophical articulation of a worldwide deep ecological movement which had already been in existence for over a decade.

Cheney, Plumwood, and Warren on Deep Ecology

Val Plumwood and Karen Warren are two of the most prominent contemporary ecofeminist scholars, and they both initially drew heavily on the work of Jim Cheney. Cheney introduced postmodernist ecofeminism to the ecophilosophy world in the late 1980s. Influenced by Donna Haraway, he argued in favour of local bioregional narratives, and against the views of Warwick Fox, whom he accused of promoting universal rational "cosmic identification," instead of concern with the particular, social, historical, personal, and the "politics of difference." Cheney then developed a convoluted analysis claiming that adherents of "Ecosophy-S" (for Stoic or Self-realization, or both)—namely Warwick Fox, Bill Devall, Sessions, and to a lesser extent Naess—are engaged in a "metaphysical salvational project" which places the deep ecology position "beyond the reach of negotiation." Like the response of the Stoics to the shattering of the ancient world, alienated masculine adherents of Ecosophy-S want to climb into a metaphysical "tower beyond tragedy" (Robinson Jeffer's phrase) to escape the demise of modernism. Of course, it was Naess who initially drew on Spinoza's metaphysical system for inspiration, and Cheney just assumes that postmodern deconstruction (with its rejection of metaphysics, truth, etc.) is the correct position. But despite Stoic scholar William Stephens's critique of Cheney, which claimed that his comparison of deep ecology to Stoicism is inaccurate and that the argument is mostly adhominem, it hasn't deterred ecofeminists from continuing to use it. 79

Karen Warren's 1999 paper "Ecofeminist Philosophy and Deep Ecology" is the most recent instance of an ecofeminist critique of deep ecology. She is aware of the Eight Point platform but begins her paper by characterizing deep ecology in terms of Naess's original 1972

statement of the position, and conflates the two throughout her paper. It seems strange that, at this late date, Warren still fails to understand that the 1984 Eight Point platform and the Apron Diagram *superseded* the 1972 statement. She asserts that the Eight-Point platform itself is "malegender" biased, but never really gets around to supporting this claim. The main contention of ecofeminism, according to Warren is that "if patriarchy would be eliminated . . . so would all the other 'isms of domination' (including 'naturism' or the unjustified domination of nonhuman nature by humans), *because* patriarchy is conceptually tied with all these other 'isms of domination' through the logic of domination." In reply to Warren, Arne Naess says that he supports the elimination of patriarchy, but finds it "difficult to believe" that such an occurrence would eliminate the domination of Nature. 81

Fred Bender has perceptively seen through the "ecological pretensions" of both social ecology and ecofeminism, and is much more critical than Naess of ecofeminism's central contention. While he holds that ecofeminism has made a strong case for the role of patriarchy (and oppressive dualisms and frameworks) in the rise of the ecological crisis, ecofeminists go "considerably less deeply to the roots of the problem than it first appears." They are mistaken when they think androcentrism is more fundamental to the crisis than anthropocentrism: anthropocentrism historically preceded the rise of patriarchy. The main problem with ecofeminism, according to Bender, is that, like social ecology (and the feminist movement in general), its allegiances lie more with leftist emancipatory politics than with the ecology movement (a movement with "very different intellectual origins"). 82

Plumwood's Critique of Aldo Leopold and Naess's Concept of Self Realization

Like many ecofeminists, Warren draws heavily on Australian Val (Routley) Plumwood's well known critique of Naess's concept of Self-Realization. [In 1973, Plumwood's ex-husband, Richard Routley (Sylvan), had written the first major paper in the field of environmental ethics. He advocated Leopold's land ethic as a formal ethical position. Sylvan soon became a major critic of Self-Realization and deep ecology's ontological approach to ecophilosophy]. ⁸³ Apparently thinking she could "clear the decks" for ecofeminism by eliminating the inherent "masculine alienation" in the fields of environmental ethics and ecophilosophy, Plumwood launched an attack on both Leopold's land ethic and Naess's Self-Realization Ecosophy T position.

Plumwood expands on Cheney's critique to claim that a masculine, abstract, rationalistic moral framework is involved in accepting

Leopold's land ethic. Bender argues, however, that Plumwood's critiques of both Leopold and Naess are fundamentally misguided. Drawing attention to John Rodman's interpretation of Leopold (which I have also endorsed), Bender argues, contrary to Plumwood, that the land ethic should not be separated from the overall context of *Sand County Almanac*—the entire book should be viewed as a rejection of anthropocentrism which gradually builds (and leads the reader) to the "gestalt-shift" of the land ethic. Therefore, Plumwood is mistaken in treating it as a formal ethical theory; Bender argues that Leopold's position is actually a form of "non-dualistic" holistic ecocentrism. ⁸⁴

Plumwood's critique of deep ecology focuses on Naess's personal Ecosophy-T position (with its norm of Self Realization), mistakenly thinking, as Bender points out, that Ecosophy-T and the deep ecology movement are the same. 85 Relying on postmodernist concepts such as the "logic of identity" and "essentialism," she claims that Selfrealization is guilty of (1) indistinguishability (a monism in which there are no boundaries between humans and Nature—humans and nature are "identical"), (2) the expanded self (the deep ecology sense of Self is essentially the magnified and extended male ego which absorbs and obliterates the "other"—a denial of the importance of difference) and (3) the transcended or transpersonal self (here Plumwood uses Cheney's critique of Warwick Fox's view that humans should rise above their narrow personal concerns to identify impartially with all individual beings). Karen Warren also believes that the "transcended self" is one of the most serious short coming of the deep ecological approach. When Naess and I use Spinoza's metaphysical system as a source of inspiration, Warren claims that this leads to "a rational preoccupation with the universal and the ethical as opposed to the particular and the personal."86

The Failure of Western Intellectuals to Understand Non-Dualism

Few ecofeminist theorists, other than Charlene Spretnak, seem to be familiar with Eastern spiritual/psychological traditions. This also seems to be the case with all the critiques of Naess's concept of Self-Realization by Western ecophilosophers, from Baird Callicott and Eric Katz, to Plumwood and Warren. There are now at least *three* separate and independent critiques of Plumwood (including Bender's) which all claim that she fails to understand the *nonduality* of Naess's position. As a result, her criticisms of Self-realization as involving "*indistinguishability*," the "expanded self," and the "transcended self," are all mistaken.

As a former Marxist scholar, Fred Bender's study of Buddhist spiritual discipline, coupled with a concern with the global ecological crisis, moved him philosophically to support a deep ecological position. Bender describes *nondualism* as a spiritual and ontological three-step growth process of increasing awareness: (1) from egoistic dualism, through (2) monism (the awareness that "all is one"), to (3) the reemergence of individuals now understood as ontologically embedded and interrelated with everything else. In more technical language, "ontological particulars re-emerge, as it were, as both interdependent or interpenetrating particulars-in-relation and as spatiotemporal manifestations of the otherwise unknowable ground of being." Bender considers Lao Tzu, Nagarjuna, Spinoza, Leopold, and Naess, among others, to be nondualists. For instance, drawing on Spinoza's third way of knowing, Naess portrays ultimate ontological reality as individuals-in-relationship, in terms of lower and higher order gestalts. ⁸⁸

Naess characterizes his concept of nondualistic human Self-realization as the "ecological self." ⁸⁹ It is ironic that both Plumwood and Warren fail to understand Naess's nondualism and assert that feminism's "relational self" is the correct account. And, following Naess, they refer to the "relational self" as the ecofeminist version of the "ecological self." Bender points out that Plumwood occasionally comes close in her descriptions to nondualism, but the "relational self" is actually a dualistic feminist abstraction in which one doesn't relate to Nature beyond one's immediate personal and local surroundings. Bender refers to it as "the empathic, caring human individual, otherwise outside of nature." As a way to get beyond the narrow focus of the ecofeminist "relational self," Bender suggests the Gaia hypothesis as an example of "non-dual science." Lovelock and Margulis hypothesize that the entire biosphere is one organism: they "argue that everything within the ecosphere exists by virtue of its relations to everything else, consistent with the nondualist idea of the interdependence of all beings." It should then be possible to identify with the biosphere itself as an organic whole. Understood nondualistically, this does not negate each individual, as a component member of the whole, seeking its own selfrealization.90

The most serious problem with ecofeminism, as Bender rightly points out, is that "ecofeminists [are] uninterested in, or even hostile toward, the idea that a distinctively feminist ethics of nature would draw on ecology's key insights." Ecofeminism has "failed to grasp ecology's philosophical significance" and, as a result, is "more feminist than ecological." The Australian philosopher Patsy Hallen is committed to both ecofeminism and deep ecology. No urban armchair academic, she has spent significant portions of her life in the Australian outback and

in other wild places throughout the world. In her comments on the exchange between Warren and Naess, Hallen agrees with Bender (and with Warwick Fox's earlier critique) that ecofeminists are essentially preoccupied with feminist social justice issues, while pushing Nature and ecological issues into the background. Ecofeminism, she says, needs to "foreground wild Nature." But the postmodernist and social constructivist orientation of many ecofeminists seems to hinder any meaningful ecological understanding on their part, or their acceptance of the global scientific ecological consensus. For many ecofeminists, it is doubtful that they even begin to understand what Hallen means when she refers to ecological "wildness."

Karen Warren's Rejection of Australian/American Deep Ecology and Plumwood's Analysis

Karen Warren has begun to sense this glaring inadequacy and, seeking ecological credentials for ecofeminism, she seems to have rejected Plumwood's critique of both Leopold and Naess. She now holds that there needs to be a rapprochement between ecofeminism and Leopold's land ethic. She also suggests that Naess's Self Realization escapes the charges Plumwood raises against it. But like social ecologist John Clark, Warren seems to want to drive a wedge between Naessian and American versions of deep ecology. While Warren now believes that Plumwood's critique of Self-realization (and Cheney's "neo-Stoicism of Ecosophy-S" critique) no longer applies to Naess, she is convinced that they do apply to Fox, Devall, and Sessions.

In his otherwise valuable 1990 book, Warwick Fox claimed that all the major deep ecology theorists subscribe to some version of Self-Realization and, on that basis he concluded that Self-Realization was the distinctive characteristic of deep ecology. Fox thereby caused a lot of the confusion which resulted in the attacks on Self-Realization. He then proposed that the term "deep ecology" be dropped, and henceforth deep ecology should be considered a form of transpersonal psychology. Naess immediately objected, arguing that deep ecology is primarily a philosophical/social activist movement and should be characterized mainly by the 1984 platform and apron diagram. A rejoinder to Fox, which supported Naess's position and reflected the views of all the major deep ecology theorists except Fox, was written and widely circulated by Harold Glasser in 1991 (but not published until 1997).

Warren's critique of American/Australian deep ecology is thoroughly confused. For one thing, she attributes quotes to Fox which come from Naess, so if Fox is indicted by her, then so is Naess. Secondly, she doesn't realize that, since the late 1980s, all the major American deep

ecology theorists (Alan Drengson, Harold Glasser, Andrew McLaughlin, Devall, and Sessions) have accepted the 1984 Eight Point platform, together with the Apron Diagram which separates "ultimate premises" (such as Self-Realization) from the Eight Point platform. So the Plumwood/Cheney critiques are no more applicable to them than they are to Naess. This information has been readily available in the literature. In his reply to Warren, Naess just simply remarks that Warren has exaggerated the differences between the theorists. Ultimately, like Bookchin and Clark, much of this ongoing so-called "ecofeminism/deep ecology debate" by Plumwood, Warren, and other ecofeminists has amounted to little more than academic "game playing" and political power trips involving a "jockeying for position" which has basically obfuscated the issues and delayed realistic solutions to the ecological crisis.

This doesn't detract from Warren's recent effort (along with Patsy Hallen, Charlene Spretnak and Vandana Shiva) to belatedly couple ecofeminism with a genuine ecological perspective. Spretnak recommended to ecofeminists in the early 1980s that they read G. Tyler Miller's textbook on ecological science, *Living in the Environment*. She has also been a critic of postmodern deconstruction. ⁹⁸ But while Warren is trying to ecologize ecofeminism, Donna Haraway is seducing other so-called ecofeminists down a technotopian anti-ecological path.

Haraway's Cyborg Proposal for the Reinvention (Destruction) of Nature: Postmodernism Run Amok

It's an extraordinary phenomenon how the West, in contrast with Eastern religious/spiritual traditions such as Taoism and Buddhism and most primal peoples around the world, developed such an anthropocentric Nature-hating tradition and how so few Western philosophers over the millennia, with the exception of Nietzsche and possibly Rousseau, have managed to escape it. One notable exception was the Harvard philosopher George Santayana, who made the most radical philosophical proposal of the early twentieth century. In 1911, he delivered a speech at UC Berkeley which indicted the anthropocentrism of American philosophy and religion, while rejecting the orientation of his Hegelian and pragmatist colleagues. He proposed an ecocentric revolution for philosophy and Western culture.

The leading British philosopher Bertrand Russell (whose orientation, it has been argued, was ultimately Spinozist) passed the Second World War years reflecting on the development of philosophy in the West, which resulted in his monumental *A History of Western Philosophy*. Like Santayana, Russell observed that the philosophies of Dewey and

Marx are anthropocentric "power philosophies, and tend to regard everything non-human as mere raw material." Russell concluded that these power philosophies, which he traced to Fichte and the Hegelian tradition, are intoxicated with technological power over Nature, and this intoxication is the most dangerous form of madness in the modern world. An objective concept of truth, which Marx and Dewey rejected, helped keep the risk of "cosmic impiety" in check. [The parallels here with the critiques, which have been made of postmodernism and the neo-pragmatists are too obvious to mention!] Finally, Russell issued a warning that, almost 50 years later, was to be spelled out in frightening detail by the world's scientists: namely that the desire of Dewey and Marx (and others influenced by these traditions) for social power over Nature "contributes to the increasing danger of vast social disaster." 100

It is well known that Aldous Huxley, along with Zamyatin and Orwell, warned that the direction of modernity is toward a technological utopia that would inevitably be totalitarian. In *Brave New World Revisited* (1959) Huxley took the position that the exponentially increasing human population was the main factor leading the world toward totalitarianism. Huxley's new-found interest in ecology led him to write the novel *Island* (1962), a bioregional utopia based on spiritual/ecological principles. He claimed that his was "the modest ambition to live as fully human beings in harmony with the rest of life on this island. . ."¹⁰¹ Huxley, it seemed, would rather be an ecologically integrated, organic, fully human being than a cyborg.

The critiques of postmodernism, social constructivism, and wilderness deconstruction converge on the figure of Donna Haraway (of Cyborg Manifesto fame). With her radical and "playful" ideas of "transgressing the boundaries" of the distinctions ("dualisms") between humans and animals, the physical and non-physical, organisms and machines, and male and female, Haraway is an intellectual inspiration for those who would turn the Earth into a totally technological human construction. As the culmination of Western culture's biophic alienation from an organic wild Earth, this extends for Haraway even to the organic nature of the human body. As Michael Zimmerman describes it, "Haraway celebrates the merging of the organic with the mechanical, the natural with the artificial, so as to code the world in a way that undermines the integrity and innocence of the 'organic whole."

Haraway's technological utopian ideas are not new. They are essentially a feminist and social constructivist reworking of the technotopian thinking of Buckminster Fuller and Teilhard de Chardin, the intellectual leaders of the New Age movement. In a striking passage written in 1965, Teilhard presages Haraway's thinking:

Technology has a role that is biological . . . From this point of view . . . there ceases to be any distinction between the artificial and the natural, between technology and life, since all organisms are the result of invention; if there is any difference, the advantage is on the side of the artificial . . . the artificial takes over from the natural . . . [Human thought] suddenly bursts in, to dominate and transform everything on the earth.

For Teilhard, the Omega Point is reached when the Earth is totally enveloped by the "arch-molecule" of humanity living in a megatechnologically devised totally artificial environment. ¹⁰³ For both Teilhard and Haraway, the ongoing ecological functioning of Nature is obliterated as Culture, in the form of technotopia, reigns supreme.

In his analysis of the development of environmentalism, Fred Buell provides a detailed critique of this kind of technotopian fantasizing which he refers to as "the culture of hyperexuberance." On this view "global ecocatastrophe becomes, in short, weirdly desirable, even fun." He discusses Haraway and Alvin Toffler as the basis for this kind of thinking, as well as *Wired* magazine's Kevin Kelly who espouses Teilhardian theology to support his views of neobiology, neoevolution, cyberbodies, and cyber-ecosystems as a replacement for the organic Earth. *Wired* touted Julian Simon as the "doomslayer." Given that Haraway both inspired and was a participant in William Cronon's "Reinventing Nature" conference, is the endorsement of Haraway's anti-ecological cyborgian fantasy what Cronon and his new cadre of anthropocentric postmodernist environmental historians are really all about?

Haraway's interpretation of the world as basically "code" and "information," however, reflects an outdated Baconian/Cartesian mechanistic view of science, not more recent organic views of life such as the Gaia hypothesis. In keeping with her Marxist heritage, Haraway is a technological determinist who promotes such "boundary transgressing" technologies as bioengineering, nanotechnology, and presumably even the "downloading" of human brains into computers. Michael Zimmerman has warned of the impulse toward "death denial" which move patriarchal men to try to dominate Nature, and specifically, to merge with machines in an effort to avoid the physical death of the body and attain immortality. Is this same impulse toward "death denial" now manifesting itself in feminists such as Haraway?

For Haraway, the problem of social justice (particularly the issue of equality for women) has a technological solution. If women historically have been discriminated against by being identified with Nature, then her solution is to eliminate gender. Haraway would have women reject their evolutionary organic origins and become cyborgs—part human

and part machine. Racial problems can be similarly solved by eliminating so-called "racial" characteristics. Jean Paul Sartre would be ecstatic—with all natural limits and boundaries transgressed, women can lead the technological future toward unlimited creativity and freedom. But how does this result in a celebration of "difference" and diversity? On the contrary, it seems to lead more toward a homogenization of humans and culture of the kind found in the world-wide American colonization process known as economic globalization.

The unabashed technological optimism and enthusiasm of Haraway, Wired magazine, and the New Age movement for the destruction and replacement of the Earth's ecological systems has blithely managed to overlook the very substantial technological critiques of the last 70 years: from Huxley, Orwell, and Ellul, to the more recent critiques of E. F. Schumacher, David Ehrenfeld, Jeremy Rifkin, and Jerry Mander. Ecophilosopher Keekok Lee has recently argued that the most serious global ecological threat is from those technologies that break down the distinction between the natural and the artefactual. It was even more sobering for Silicon Valley technotopians when one of their own, Bill Joy (chief scientist for Sun Microsystems), warned of the very real dangers of self-replicating systems getting out of control; he recommended a ban on further robotics, genetic engineering, and nanotechnology research. An increasing number of thinkers are calling for a moratorium on these kinds of technologies. For instance, Sadruddin Aga Khan, the environmentally concerned former UN High Commissioner for Refugees, claimed that "perhaps the time has come to impose a moratorium on new scientific or technological innovations that have potentially negative implications for the planet and society." Joy's analysis and recommendation may have temporarily dampened the technotopian's spirits, but not for long, as research in these fields continues to move full speed ahead. 105

One might expect the ultra-postmodernist and deep ecology critic Peter van Wyck to endorse Haraway's cyborgism, but it was somewhat of a surprise when Michael Zimmerman did so as well. ¹⁰⁶ Zimmerman is a Heideggerian scholar who once emphasized Heidegger's critique of anthropocentric humanism as well as Heidegger's powerful critique of the technological world, thinking Heidegger provided yet another philosophical basis for supporting the deep ecology movement. But when Heidegger's close ties with the Third Reich were revealed, Zimmerman immediately dropped him, wrote extensively on the postmodernist theme of the possible dangers of ecofacism, and dramatically reversed his position in the direction of neo-Hegelianism [He fortunately concluded in his 1993 Heidegger-Deep Ecology paper that "deep ecology theorists can hardly be mistaken for ecofacists."] ¹⁰⁷

He concludes *Contesting Earth's Future* by supporting a number of thinkers he calls "critical postmodernists" that include Ken Wilber, Alexander Argyros, and Donna Haraway. Zimmerman points out that Argyros (like the Neo-Hegelian Wilber and Haraway) "does not seem particularly concerned about the fate of nonhuman life." Given that admission, to what extent can they (and Zimmerman) be construed as supporting an ecological position? One is reminded of Teilhard's antiecological anthropocentric statement that plants and insects have little significance since they are not part of the evolutionary development toward consciousness, which manifests itself to the highest degree in humans. ¹⁰⁸

It would have been stimulating to have Donna Haraway and Rachel Carson in the same room. One could imagine that one of the more interesting topics would be the raising of children. Carson was a strong advocate of cultivating a "sense of wonder" in children for the natural world and, like Naess, of developing strong ties of identification with wild ecosystems, plants, and animals. 109 Haraway, I suppose, would counter by enlightening Carson on the need to "reinvent Nature," and how she would propose raising children in the electronic world of video games, virtual reality and simulated wilderness to prepare them for the genderless technotopia of cyborgs and hyper-reality. Jerry Mander explains how children raised in our postmodernist carnival world of theme parks and hyper-reality, and exposed to a steady diet of television and video games, are in a state of confused reality, and being perpetually "sped up"—they become "speed junkies." Nature, by contrast, is too slow and boring for them, emotional contact is not made, and this helps pave the way for the exploitation of Nature. There is increasing concern among the public about the younger generation becoming cyborgs by living inside their "electronic bubbles" and shutting out the outside world—addicted to cell phones, ipods, laptops, and so on. Meanwhile, corporations colonize them through television programs and advertising for toddlers, and then MTV for adolescents, turning them into American super-consumers. 110

It appears that Karen Warren has her work cut out for her in terms of establishing ecofeminism on a solid ecological foundation. Chris Cuomo points out that ecofeminists "have flocked to appropriate Haraway's images of anti-dualistic cyborg feminism." Warren also needs to be careful that in her enthusiasm for rejecting *all* dualisms (or distinctions), she doesn't throw out the "dualism" between the natural (or the wild) and the artefactual; that would undercut the significance of the Leopoldian land ethic and the entire ecological foundation she wants to establish.

V. Thoreau, Snyder, and Turner on Wildness

To ensure the ongoing ecological health of the Earth, there has been a renewed interest in the nineteenth century emphasis of Thoreau and Muir on *wildness*. The protection of the Earth's wildness is now being proposed by some ecophilosophers as the central ecocentric issue. For example, after discussing the recent controversy over the conflicting ecological theories of stability and instability, Ned Hettinger and Bill Throop argue that "emphasizing wildness provides the most promising general strategy for defending ecocentric ethics." 112

In The Abstract Wild, Jack Turner does as good a job as anyone of deciphering and interpreting the meaning of Thoreau's radical and enigmatic 1851 statement, "In wildness is the preservation of the world."113 Turner expresses his indebtedness to Gary Snyder's The Practice of the Wild which provides a ground-breaking discussion of wildness and the "old ways" of primary people from a contemporary bioregional perspective. 114 Conservationists and environmentalists, over the years, have misunderstood Thoreau and frequently misquoted him as saying "wilderness" instead of "wildness." Turner points out that they have interpreted wildness as a place (such as legally designated wilderness areas) rather than a *quality* of people, plants and animals, and specific places. A certain amount of human habitation does not necessarily affect the wildness of an area in a negative way. As Turner points out, "A week in the Amazon, the high Arctic, or the northern side of the western Himalayas would suggest that what counts as wildness and wilderness is determined not by the absence of people, but by the relationship of people and place." The word "wildness" is etymologically tied to the ideas of health, wholeness, and liveliness. What Thoreau also meant by "wildness" is "self-willed, selfdetermined, and self-ordered." Wilderness should be understood as "self-willed land" where ecological processes, and not humans, are dominant. 115 The concept of wilderness goes way back in history. The critiques of Cronon and others, as Turner points out, focus on 'wilderness act' wilderness"—a specific legal designation tailored to fit the American situation.

In saying that wildness preserves the "world" Thoreau referred to the world as *cosmos*—as a harmonious order. In summarizing this point Turner says "so in the broadest sense we can say that Thoreau's 'In Wildness is the preservation of the World' is about the relation of free, self-willed, and self-determinate 'things' with the harmonious order of the cosmos." It is this spontaneous and self-determining order we

refer to as *wildness* that has, until quite recently, been the dominant characteristic of the Earth and its flora and fauna, and which must now be protected from further irreparable destruction.

Thoreau also links wildness with freedom. In Thoreau's words, "all good things are wild and free." Much like Naess's concept of the "ecological self," Turner claims that wildness and freedom for humans is a "project of the self." Thoreau and Turner agree that human freedom consists of being "self-willed" and not merely egoistic "social selves" moulded by their society. But, in contrast with Sartre's existentialist position that human freedom is unlimited and consists of autonomous individuals rejecting and transcending wild Nature, human freedom, for Thoreau, also involves being embedded in wild Nature. For Turner, "to create a wilder self, the self must live the life of the wild, mould a particular form of character, a form of life . . . from this vision of a wild order in complete interdependence comes freedom." According to Thoreau, humans must "rejoin the natural world," experience themselves as "part and parcel" of wild Nature, and live bioregionally as harmonious parts of biotic communities. In order to attain this wild freedom and nondualistic perception, and minimize socially sanctioned greed which is the basis of much environmental destruction, Turner (a practicing Buddhist) claims, along the lines of Naess and Zen Buddhism, that we must also integrate a spiritual practice into our lives. 118

The Amazon Basin, Vogel, and the Death of Nature

A major controversy has been brewing for years among geographers, anthropologists, and cultural historians over the extent to which the Earth has been modified historically by humans. As Charles Mann points out in an Atlantic Monthly article, some scholars claim that there were over 10 million indigenous people in North America before European contact. These huge populations were decimated by European diseases which gave early settlers the impression that North America was a vast sparsely populated wilderness. Given these huge populations, together with other archaeological evidence, some social scientists now argue that indigenous people "were so successful at imposing their will on the landscape that in 1492 Columbus set foot in a hemisphere thoroughly dominated by humankind." Parts of the Western hemisphere were as civilized as Europe. In parts of South America, human impact was so great that some anthropologists claim, for example, that the Amazon Basin "is a cultural artifact." Mann draws out the political and ecological implications of this by referring to Cronon, Callicott, and "the great wilderness debate." And Donna Haraway and other social constructivists draw on these controversies to argue that

social justice concerns should prevail in these areas previously thought to be pristine wilderness. Environmentalists and conservation biologists, the argument goes, have been fooled; there is no wildness there to be saved, so the development of these areas as human resources should continue.¹¹⁹

It is instructive, in connection with the above, to examine the argument of philosopher Steve Vogel against the central claim Bill McKibben makes in *The End of Nature*. McKibben argued that because global warming now affects every area of the Earth, the entire Earth has become man-made and artificial. Vogel interprets McKibben to mean that a Nature independent of humans has ended—"a world untouched by human action no longer exists." ¹²⁰ McKibben's claim was not particularly well thought out, and he became easy prey for Vogel's critique. But by the time Vogel draws the conclusion that Nature has failed to exist ever since humans began transforming it, it should have occurred to Vogel that something about his interpretation of McKibben had gone seriously wrong. Vogel is enthusiastic about eliminating Nature (or the concept of Nature), and says he uses these arguments to convince his students that Nature does not, and never did, exist. [Students suffer through enough ecological nonsense in their economics and forestry classes. But what is now happening these days, at the hands of teachers like the social constructivists, to the basically sound intuitions of students concerning the destruction of Nature and the wild world? Sir Karl Popper's remark, made in the early 1970s, seems particularly appropriate to both Vogel and the social constructionists: "the greatest scandal of philosophy is that, while all around us the world of nature perishes—and not the world of nature alone—philosophers continue to talk, sometimes cleverly and sometimes not, about the question of whether this world exists."¹²¹]

The most glaring problem with Vogel's position is the straw man disjunction he sets up—either Nature is totally pristine (literally untouched by human hands), or Nature doesn't exist. Thoreau's characterization of wildness (and wild Nature) cuts neatly through Vogel's disjunction—namely by referring to wild Nature as Nature which is "self-willed" and not *dominated* by humans (not as Nature "untouched by human hands"). Hettinger and Throop make the very important point that we need to think in terms of a *continuum*, with "virtually pristine" (Gary Snyder's phrase) wild environments at one end, and totally human dominated and developed environments at the other (such as cities and large-scale agriculture where most wildness has been largely suppressed or eliminated). As Cronon and his colleagues are apparently unable to do, we need to be able to distinguish between New York's Central Park and the Arctic National

Wildlife Refuge. Wild environments will shade off into increasingly more human dominated environments as we approach the center of the continuum. This reflects the ecological reality of the situation, and avoids unrealistic and misleading dichotomies such as Vogel's. 122

This same point applies to the arguments about the prior civilizing of the Amazon Basin and other areas throughout the Western hemisphere. Unlike most of Europe, these areas were not totally dominated by indigenous people. Enough wildness and wild species remained that, after these civilizations failed, wild Nature gradually and spontaneously reasserted itself. Hettinger and Throop describe this process as humanization being "washed out" of these natural systems: "early human influence on a system is dampened by intervening epochs with little impact. A system can recapture previous levels of wildness as human influence diminishes."¹²³ Other biologists refer to this as "rewilding," whether this occurs spontaneously or as the result of deliberate and painstaking efforts to restore an area with native species—what is called "ecological restoration." And so the arguments about the extent to which the Western hemisphere was altered by earlier indigenous people and civilizations are interesting but largely irrelevant to the efforts to protect now existing wild ecosystems. Biologists have not been fooled. They are capable of recognizing biologically diverse functioning wild ecosystems (such as those in the Amazon basin) when they see them. Countless biologists since Leopold's time have spent their careers in the field studying the remaining wild ecosystems of the world. Now many have become conservation biologists in an effort to try to save them. Hettinger and Throop also show how Baird Callicott, who seems to have an aversion to wildness, has modified Leopold's land ethic to accommodate ecological instability in a way that results in unacceptable consequences.

Jack Turner describes himself as a fundamentalist when it comes to wild Nature, and most deep ecology supporters are, no doubt, in sympathy with this. But his critique of the conservation biologist's Wildlands Project for North America (enlarging wilderness areas and connecting them with corridors) is thought-provoking and important although somewhat overstated. Protecting biodiversity and protecting wildness are not necessarily the same, Turner points out, and conservation biologists seem more concerned with the former than with the latter. Like Callicott and Nelson, biologists are too eager to manage these areas, and wildness and human management, he claims, are incompatible. Citing Foucault, Turner points out that human control, management, and domination are what modernity is all about, and biologists all-to-often have not emancipated themselves from this mind-set. Conservation biologists counter that many wild areas are too small,

ecologically fragile, and disconnected at this point to sustain themselves, and require various amounts of management. Also there is the increasing problem of invasive species. Given the current crisis state of wild ecosystems around the world, a certain degree of management in some cases seems like a practical necessity. It is important to distinguish between interim emergency measures, and more long-term desirable goals. 124

Turner's warnings about the dangers of biologists being "controlobsessed" should certainly be taken to heart by them, and a concern for maintaining wildness should be uppermost in their minds, along with biodiversity protection. Unlike ecosystem computer-modeling ecologists and others, it is doubtful that most field ecologists and conservation biologists view wild plants and animals mechanistically as merely "information" or genetic "codes," or primarily as genetic raw material for pharmaceutical corporations—in other words, as merely "resources" for human use. It's likely that most field ecologists were drawn to extended ecosystem field studies (with being out in wild Nature for extended periods of time) out of a love and respect for wild Nature, and that most biologists respect the dignity, "otherness," and rights to self-realization of the creatures they work with. Turner goes too far when he compares the Wildlands Project with the powertripping biophobic "wise use" plans of Daniel Botkin (and Cronon and the social constructivists) for "reinventing" Nature.

The great insight of Thoreau and Muir was that *wildness preserves the world and all its inhabitants*. From a "practical" survival standpoint, this means that the sum total of all the wild ecosystems of the Earth (the biosphere) is literally the "life support system" of the Earth and all its species. Less obvious, but just as important, wildness defines freedom, health, and "aliveness" for both humans and non-humans. It's the primal force that moves the living world. Wildness must be experienced and lived, which is why, as Western culture has become overly civilized and technological, there is less and less understanding of what is being lost.

Recently, Turner has taken a position very similar to Keekok Lee's—that biotechnology, nanotechnology, and other "technologies of replacement" pose an immediate threat to the wild ecosystems of the Earth. He focuses specifically on transgenic forests and salmon since these changes are immanent. Turner is concerned that some environmentalists will be seduced into approving biotechnological fixes as a way of attempting to solve other environmental problems. 125

E. O. Wilson, Arne Naess, and Nils Eldredge on Protecting Wildness

Harvard's E. O. Wilson and Paul Ehrlich have been an inspiration for many people in the field of conservation biology. But Turner's worries about environmentalists accepting biotechnological fixes seem to be confirmed by Wilson's view that genetically engineered crops will keep the world's 10 billion people fed throughout the twenty-first century. Wilson also claims that up to 50 per cent of the Earth could eventually be protected as biodiversity and wildlife sanctuaries. And Wilson's and Norman Myers's strategy for protecting biodiversity by setting aside biodiversity "hot spots" around the Earth has been challenged by Nils Eldredge, and by studies cited by the Ehrlich, as being totally inadequate. 126 The British environmental journalist Fred Pearce rightly points out that Wilson tends to be politically naive in thinking that free market capitalism (and biotechnology) will provide realistic solutions to the ecological crisis. Wilson seems to be in denial about the role of the United States as a major cause of the world's current social and ecological crisis. He suggests that the trajectory of globalization is inevitable (which involves continued growth and high consumption patterns) and believes in corporate capitalism's capacity to alter itself in ecologically benign ways. Wilson is also criticized for his apparent lack of concern and sensitivity for the poor people living in and around proposed wilderness/biodiversity sanctuaries. 127

In the late 1980s, Arne Naess held a position similar to Wilson's when he suggested that a good ecological mix for the Earth would be about 1/3 uninhabited wilderness (wildlife sanctuaries), 1/3 "free nature (sparse human inhabitation where wildness predominates), and 1/3 human dominated landscapes (cities and intensive agriculture). ¹²⁸ In response to Ramachandra Guha, Naess revised his views in terms of the amount of area that needed to be protected in human-free sanctuaries. In his 1991 reply to Guha ("The Third World, Wilderness, and Deep Ecology"), Naess pointed to "some people" who think deep ecology is a form of Western "neo-colonialism" that proposes to force Third World people out of their homes to make room for "spectacular animals." ¹²⁹ Naess refers to Gary Snyder's point (in The Practice of the Wild) that, throughout history, humans have lived in wilderness in *moderate* numbers without appreciably reducing biological richness and diversity. But, he argued, this is now not possible in rich countries such as the United States where high-consumption lifestyles, and other destructive practices, require the establishment of large designated wilderness to protect wild ecosystems and biodiversity. Apart from the desperately poor, Naess believes that most people in the Third World do care about the protection of wildness and biodiversity. Wildlife sanctuaries can be

established where appropriate, but some of the protection could consist of people living traditionally in ecologically benign ways in sparsely inhabited "free nature." But since the poor can't keep moving into the forests and destroying them, Naess suggests that the continuing severe overpopulation in Third World countries will require new redesigned cities for these additional people to live in.

Niles Eldredge has proposed a strategy which combines some of the features of Wilson's and Naess's strategies. Eldredge emphasizes that everything possible must be done to stabilize the human population by humane means. In addition, "the cycle of endlessly expanding farmland" to feed more and more people must be broken. He and Naess also have no doubts about the role of high consumption patterns in the ecological crisis. Eldredge disagrees with Wilson that globalization can help solve our problems -the living standards of the poor must be raised, but "global economic development is sheer fantasy, a pipe dream." Eldredge also argues that Wilson's call for protecting the biodiversity "hot spots" of the world does not go far enough. For Eldredge, protecting the biodiversity "hot spots" is very important, but an overemphasis on that tends to "minimize the sheer extent of habitat that we ought to be conserving." Major emphasis must be placed on wild ecosystem protection, not just on saving species and biodiversity. Further, local people who are affected by establishing preserves must be involved in these efforts. He points out that "conservation, in short, is doomed unless the economic interests and well-being of local peoples is taken into central consideration." He considers "ecotourism" as practiced, for example, in Costa Rica to be one option. But Eldredge cautions that it is no "panacea"—the effects of tourists on the preserves disrupts the wildlife and negatively impacts the ecosystems. 130

The solutions proposed by Wilson, Naess, Eldredge, and others are messy ones in a world marked by increasing multiple crisis situations. As the decades have gone by since ecologists first began warning of human overpopulation, and wild ecosystem and species loss, ecosystem destruction has increased exponentially and the solutions have grown messier, more desperate, and more difficult to implement. But there is no realistic alternative to protecting what is left of the wild world.

As a refreshing contrast with William Cronon and the postmodern historians, Donald Worster takes sides with Wilson, Naess, Ehrlich, and Eldredge:

we must make as our first priority in dealing with the earth the careful and strict preservation of the billion-year-old heritage achieved by the evolution of plant and animal life. We must preserve all the species, sub-species, varieties, communities,

and ecosystems that we possibly can. We must not, through our actions, cause any more species to become extinct. ¹³¹

VI. Frederick Bender on the Future of Deep Ecology

Frederick Bender concludes *The Culture of Extinction* by proposing a major revision of the deep ecology position. His view is that Naess made a fundamental mistake when he revised the original 1973 characterization of the deep ecology movement and replaced it, in 1984, with the more philosophically neutral Eight Point platform. The 1973 version included the nondualistic statement of the "relational total-field image—organisms as knots in the biospherical net or field of intrinsic relations." Naess also dropped the "anti-class" (social justice) clause. In his proposed revision of deep ecology, Bender reinstates those aspects of the original 1973 formulation, and much more, in a well thought out and complex restatement of both the Apron Diagram and the Eight Points. He wants deep ecology to be a comprehensive philosophical position based on nondualism. As a partial justification for these changes, he points to Naess's claim that the deep ecology platform was supposed to provide a basis for "changing everything." 133 And referring to Warwick Fox's proposal for changing deep ecology in the direction of a transpersonal psychology, Bender also argues that the real "depth" of deep ecology is not in Naess's insistence on "deep questioning," but mainly in the depth provided by its nondualistic philosophical orientation. Without this broader comprehensiveness, deep ecology runs the risk of being an "ecology-only" movement which lacks the resources for transforming the Culture of Extinction. 134

First of all, Bender's comment about "changing everything" needs to be put into context. In his 1991 paper, "Politics and the Ecological Crisis," Naess tells us that Rachel Carson (from whom he dates the beginning of the deep ecology movement) insisted that *everything*, not just politics, needs to be changed. He agrees with Carson, although later adding the proviso "everything except democratic forms of government." In this paper, Naess was contrasting Carson's position with the slogan of the neo-Marxist and Frankfurt School (from which the New Left positions of Marcuse and Bookchin emerged) that "everything is politics." And so, one of the key points Naess is making about the deep ecology movement standing for "changing everything" is that, unlike the almost totally political orientation of the neo-Marxists, the ecological crisis calls into question fundamental philosophical issues, such as the anthropocentric orientation of Western culture and the intrinsic value of wild ecosystems and species, which have to be addressed. Further, the

narrow (or "shallow") "urban pollution" analysis of the crisis, made by the New Left and mainstream environmentalism, fails to uncover the extent to which more radical social changes need to be made.

Naess remains insistent on the importance of "deep questioning" for the deep ecology movement. One main reason is his belief that motivation for effective ecological activism comes from deep religious and philosophical principles. Activists need to arrive at, and acknowledge these, through the "deep questioning" process. Fundamental principles also provide the basis for "total views." Naess holds that everyone has a total view whether they know it or not. Total views provide the basis for one's "life's philosophy" and also for understanding the ecological "big picture. Total views can also be revealed by deep questioning. ¹³⁶

Concerning Bender's desire for a comprehensive position, Naess's personal "Ecosophy T" position stands as a kind of schemata (or template) for a comprehensive deep ecology position (which includes a social justice component), but Naess does not wish to impose it on others. He genuinely believes in a diversity of world views (similar to the best of postmodernist thinking) and, as Bender realizes, Naess wants to attract as many diverse religious and philosophical positions as possible to provide support for the deep ecology movement. These are all important considerations why deep ecology should not present itself as a comprehensive position, or grand "global narrative."

Bender perhaps unwittingly comes close to one of the main reasons for Naess's change to the 1984 platform, when he points out that deep ecology runs the risk of becoming an "ecology-only" movement. In a broad sense, this is what Naess proposes for the deep ecology movement. Given the very aggressive anthropocentric and antiecological stance and tactics of the Marxist-inspired social justice movements, I think Naess believes that at least one movement has to stand for an undiluted ecological position. As has been documented throughout this paper, the social justice movements have succeeded in many cases, in co-opting the agenda of the ecology/environmental movements. In contrast with the left's exclusively oriented urban pollution/environmental social justice agenda (and emphasis on race, class, and gender), Naess emphasizes that a major goal of the deep ecology movement is promoting ecological sustainability (in contrast with the concept of sustainable development) by which he means protecting "the full richness and diversity of life forms on the planet. It is beneath human dignity," he claims, "to aspire to less."

For Naess, the deep ecology movement, the peace movement and the social justice movements should be viewed as separate social movements (with separate goals and intellectual histories), but can, and

should, join forces (to help "change everything") under the overall banner of the Green movement. In support of this position, he says that "considering the accelerating rate of irreversible ecological destruction worldwide, I find it acceptable to continue fighting for ecological sustainability whatever the state of affairs may be concerning the other two goals of Green societies [peace and social justice]." Supporters of the deep ecology movement, he claims, "should concentrate on specific issues relating to the *ecological* crisis (including its social and political consequences.)" More recently, he points out that "the interdependence [of the three movements] does not eliminate their differences: We cannot be activists in all of them. We must choose. Support all, but work mainly in one." I think that Naess's strategy for keeping the deep ecology movement focused specifically on the ecological crisis as we understand it through the global ecological scientific consensus is sound.

Deep Ecology as a Philosophical Activist Movement

This leads to the concerns of the editors of *Beneath the Surface* (David Rothenberg, Andrew Light, and Eric Katz) that "Naess, though a philosopher, has often stressed that he is more interested in deep ecology as a political and social *movement* than as a philosophy." These editors are more interested in critiques of the "philosophy" of deep ecology than in the "specific policy issues" addressed by the deep ecology movement. But even here, given that Rothenberg was a close collaborator with Naess for a number of years in Norway, he could have provided a considerable service in heading off the many mistakes in interpretation by a great number of the authors. They also could have done a much more accurate job of describing "the" philosophy of deep ecology in their introduction. 139

Michael Zimmerman has argued that the deep ecology movement has been closely identified with the 1960s' countercultural and New Paradigm utopian visions. Deep ecology, he claims, is a form of utopianism and is thus subject to all the criticisms made of utopianism by postmodernists. The Devall-Sessions book has a chapter on "ecotopia," which includes discussions of the utopian ideas of Huxley, Callenbach, Shepard, and others, but it begins with the observation by Paul Sears that utopian thought can also be thought of as "a critique of defects and limitations of society and an expression for something better." Perhaps the bioregionalism of Gary Snyder and others can be viewed as a kind of utopianism, which is an important aspect of deep ecological activism. But by the time Naess had revised the deep ecology position in 1984, it was becoming increasingly clear that society was not going to undergo any drastic change in an ecological

direction. Naess and other theorists of the deep ecology movement have become more pragmatic recently in terms of trying to devise strategies to protect wild Nature, and to head off the worst of the ecological crisis. Some of Naess's key papers along these lines are "Politics and the Ecological Crisis" and "Deep Ecology for the 22nd Century," which are concerned with the possibilities of Green societies in the future. But the main emphasis is on "overcoming the still-increasing ecological crisis."

The deep, long-range ecology movement, since its beginnings with Aldo Leopold, Dave Brower, Rachel Carson, and Paul Ehrlich, has been an ecophilosophical activist movement *primarily* concerned with seeking humane, but realistic, social and political solutions to the global ecological crisis. Conservation biology is a natural continuation of the ecological activism begun by Carson, Ehrlich, and others. Naess's efforts have been directed toward describing the deep ecology movement since its beginnings in the 1950s and '60s (both in his 1973 and 1984 formulations), trying to develop a consistent philosophical basis for this movement and, together with other deep ecology theoreticians, critiquing various environmental strategies and proposing alternative strategies for coping with the ecological crisis. The British environmental journalist Joanna Griffiths suggests that a revitalized deep ecology movement needs "a popular mantra for a more cynical, distracted age." ¹⁴²

The Future: A Cyborgian/New Age Technotopia or a Wild Earth?

Traditional societies ascribe identity on the basis of ethnic and tribal traditions, modern societies on the basis of the sovereign state and the market economy. The post-modern world will discover that the true basis of our identity is our membership in a species interconnected with all other species—a foundation far more universal than race, gender, ethnicity or anything partial and restricted.

Richard Falk, Political Science, Princeton University

In his critique of deep ecology, Bron Taylor approvingly quotes Dan Deudney's claim that deep ecology should go beyond local bioregional concerns to support global solutions to the ecological crisis. ¹⁴³ Taylor appears to be largely unfamiliar with Naess's writings, and tends to view deep ecology through the prism of the Earth First! movement. Since the 1980s, Naess has repeatedly stressed that ecological problems are increasingly global in scope and must also be dealt with on a global basis: we must "think and act globally, regionally, and locally." ¹⁴⁴ Much of this global action must be taken under the auspices of the

United Nations. For example, Naess cites the Bern convention in connection with his claim that "with increased education, combined with economic progress in the Third World, the goal is not only to halt the excessive rate of extinction of animals and plants but also to protect whole ecosystems and ensure the continuation of evolution [in other words, the protection of the Earth's wildness]."¹⁴⁵

The United Nations' initial position on the environment was exemplary. In 1982, the General Assembly adopted the ecocentric World Charter for Nature which asserted that every form of life has intrinsic value, and that "Nature shall be respected and its essential processes shall not be disrupted." Unfortunately, a former UN official, Sadruddin Aga Khan paints a gloomy picture of the recent United Nations approach to protecting the environment. The already flawed concept of ecological sustainability has deteriorated into highly exploitive concepts such as "sustainable use" and "sustainable consumption." The United Nations, he claims, has increasingly aligned itself with the multinational corporations, to the detriment of both the environment and the poor, and has become little more than an enforcement agency for the global economy. 146

At this point in history, there is every reason to believe that humanity stands at an absolutely crucial and unprecedented crossroads. In his best-selling 1992 book, *Earth in the Balance*, Al Gore proposed the only sane course of action when he claimed that concern for protecting the environment and solving the ecological crisis should become "the central organizing principle for civilization." He laid out the global scientific ecological concerns: overpopulation and species extinction. He devotes many pages to discussing the dysfunctional American way of life as a result of its addition to consumption, and also warns of relying exclusively on technofixes.

As the result of the latest furor over global warming, "peak oil," and Gore's global warming video *An Inconvenient Truth*, the latest issue of *Newsweek* magazine trumpets "the new greening of America." The talk is mostly of hybrid cars and alternative energy sources. ¹⁴⁸ The May 2006 issue of *Wired* magazine has a picture of Gore on the cover with the sub-titles "the Pro-Growth, Pro-Tech Fight to Stop Global Warming, and "Al Gore and the Rise of the Neo-Greens. "The "Neo-Greens" however are "eco-capitalist," hybrid car, solar panel types who find their personal identity in leading "eco-chic" lifestyles and wearing eco-designer clothing. Is the "new greening of America" and the world going to be merely another in a long line of shallow cosmetic responses, or finally an awareness of the need for deep change? As part of his strategy, Nils Eldgredge says that we need to use the media. A

tremendous effort to educate the world to a comprehensive understanding of the ecological crisis is obviously required.

And some people are waking up to what Teilhardian/Haraway artificial technotopian utopias are all about. For example, the activist lawyer Andrew Kimbrell points to biotechnology's attempt to "remake life in technology's image"—a kind of "techno-genesis." Two British academics, Lee-Anne Broadhead and Sean Howard, have made an impassioned plea for a moratorium on nanotechnology and the "nanobots" that would "eat" the greenhouse gases in the atmosphere. They are alarmed that "the end of the natural world is, incredibly, the explicit, celebrated goal of much pro-nanotechnology literature and propaganda. But what if the end of the natural world proves to be the death of us all?", ¹⁴⁹ To extend Bertrand Russell's warning, perhaps the greatest madness in the contemporary world is not only "an intoxication with power over Nature," but the belief of the technotopians that we don't need the wild ecosystems of the Earth to sustain life, and that technologists have the ability to successfully replace these systems. One interesting question is whether Gore will stick to his ecological commitment to protecting the natural world, or whether he will slide into the technotopian thinking of the Wired magazine/Silicon Valley way of thinking. The public should be made fully aware of the issues involved in whether a realistic future for humanity lies in protecting a wild Earth, or in becoming cyborg/technotopians? To the scientists of the global scientific ecological consensus, it is clear that the widely popular attempt to turn the Earth into a cyborgian artificial technotopia will result in the final sealing of the fate of both humanity and the Earth. As Paul Shepard prophetically warned in 1969 "affirmation of its own organic essence will be the ultimate test of the human mind." ¹⁵⁰

Notes

¹ Mark Hertsgaard provides a devastating expose of the decades-long disinformation campaign of the Republican political right against global warming (and the failure of the American media to stand up against it) in *Vanity Fair* (May) 2006; Jared Diamond, *Collapse* (New York: Viking, 2005).

² Donald Worster, "The Shaky Ground of Sustainability," in George Sessions, *Deep Ecology for the 21st Century* (Boston: Shambhala, 1995) pp. 417–27; the I=PAT equation first appeared in Paul Ehrlich and John Holdren, "Impact of Population Growth," *Science* (1971): 1212–17.

³ Bob Taylor, "John Dewey and Environmental Thought," *Environmental Ethics* 12 (1990): 175–84; an anthology that lays out the Neopragmatist position is Ben Minteer

and Bob Taylor (eds.) *Democracy and the Claims of Nature* (Lanham, Md.: Rowman and Littlefield, 2002).

- ⁸ For a "crash course" in ecological literacy, I would recommend (1) Diamond's *Collapse* (esp. ch. 16); (2) Buell's *From Apocalypse to Way of Life*; and (3) for the most comprehensive and up-to-date account of the ecological crisis, together with steps we need to take to ward off global catastrophe, Anne and Paul Ehrlich, *One With Nineveh: Politics, Consumption, and the Human Future* (Washington D. C.: Island Press, 2004).
- ⁹ An earlier version of this up-dating process appears in my "Deep Ecology" section in Michael Zimmerman, J. B. Callicott, George Sessions, et al. (eds.) *Environmental Philosophy* 3rd ed. (New Jersey: Prentice-Hall, 2001). As a result of his abrupt philosophical about-face (from a generally deep ecological orientation to an anthropocentric postmodern Ken Wilber/Donna Haraway/Cyborg Manifesto one) Zimmerman dropped the Deep Ecology section from the 4th edition.
- ¹⁰ Barbara Ehrenrich and Janet McIntosh, "The New Creationism: Biology under Attack," *The Nation*, June 9, 1997:11–16.
- ¹¹ Paul Shepard, "Ecology and Man—A Viewpoint," in Sessions *Deep Ecology for the 21st Century*, pp. 131–140. For the generally legitimate fears and concerns of the left and postmodernists toward biology, see Andrew Ross, *The Chicago Gangster Theory of Life: Nature's Debt to Society* (New York: Verso, 1994) Ch. 5 ("Superbiology").
- ¹² Frederic Bender, *The Culture of Extinction: Toward a Philosophy of Deep Ecology* (Buffalo, N.Y., Humanity Books, 2003) pp.78–101. For an excellent summary of his position, see Paul Shepard, *Coming Home to the Pleistocene* (Washington, D. C.: Island Press, 1998). The philosopher Mary Midgley agrees with Arne Naess that it is crucial to examine the role worldviews play in our attitudes toward Nature; see Kate Rawles, "Mary Midgley," *Revision* 229 (2005): 42–3.

⁴ See Michael Zimmerman, *Contesting Earth's Future: Radical Ecology and Postmodernity* (Berkeley: University of California Press, 1994) p. 93ff.

⁵ David Nicholson-Lord "Blind Spot," *Resurgence* 237 (July/August, 2006): 21–22.

⁶ Frederick Buell, From Apocalypse to Way of Life (New York: Routledge, 2004).

⁷ Joseph DesJardins, *Environmental Ethics* 2nd ed. (Belmont, CA: Wadsworth, 1997), p. 215.

¹³ Michael Zimmerman, Contesting Earth's Future, pp. 91–92.

¹⁴ Bender, *The Culture of Extinction*, pp. 255–61, 283–88; see also the excellent paper by Graham Parkes, "Nietzsche's Environmental Philosophy," *Environmental Ethics* 27 (2005): 77–91.

¹⁵ Bill McCormick, "Sartre and Camus on Nature," The *Trumpeter* 13, 1 (1996): 17–20; David Orr coined the word "biophobia" to contrast with E.O. Wilson's concept of biophilia, see David Orr, *Earth in Mind: On Education, Environment and the Human Prospect* (Washington, D. C.: Island Press, 1994) p. 131; see also David Orr, "Love It or Lose It," in Stephen Kellert and E. O. Wilson (eds.) *The Biophilia Hypothesis* (Washington D. C.: Island Press, 1995). Orr claims that "Biophobia is not OK for the same reason that misanthropy or sociopathy are not OK . . . Is mass biophobia a kind of collective madness?"

¹⁶ Zimmerman, Ibid. pp. 92, 116–117.

- ²⁰ Mick Smith, "To Speak of Trees: Social Constructivism, Environmental Values, and the Future of Deep Ecology," *Environmental Ethics* 21 (1999): 368–372; the paper in question is George Sessions, "Postmodernism and Environmental Justice," The *Trumpeter* 12 (1995): 150–154; for a reply to Smith, see Arne Naess, "Avalanches as Social Constructions," *Environmental Ethics* 22 (2000): 335–336.
- ²¹ Arne Naess, "Ecosophy and Gestalt Ontology," in George Sessions, *Deep Ecology for the 21st Century* pp. 240–45.
- ²² The warnings by the world's scientists appear in Paul and Anne Ehrlich, *Betrayal of Science and Reason: How Anti-Environmental Rhetoric Threatens our Future* (Washington D. C.: Island Press, 1996) appendices A and B (the Ehrlichs also critique the views of Julian Simon and others in this book); see also Erhlich and Ehrlich, *One With Nineveh*; the global scientific consensus is also reflected in the first half of Al Gore's *Earth in the Balance* (New York: Houghton Mifflin, 1992); for a deep ecological evaluation of Gore, see Harold Glasser, "Naess's Deep Ecology Approach and Environmental Policy," *Inquiry* (Oslo) 39 (1996): 157–87; for an account of recent trends in continuing global ecological destruction, see Lester Brown, *Ecoeconomy: Building an Economy for the Earth* (New York: Norton, 2001).

¹⁷ Ibid., pp. 93, 99.

¹⁸ Niles Eldredge, *Life in the Balance: Humanity and the Biodiversity Crisis* (New Jersey: Princeton University Press, 1998) pp. 155–56.

¹⁹ Bernard Williams, *Truth and Truthfulness* (Princeton, N.J.: Princeton University Press, 2002); see also Lawrence Sklar, *Theory and Truth: Philosophical Critique within Foundational Science* (New York: Oxford University Press, 2000); Noretta Koertge (ed.) *A House Built on Sand: Exposing Postmodern Myths about Science* (New York.: Oxford University Press, 1998).

²³ Bender, *The Culture of Extinction*, pp. 17–27, 29–68; Franz Broswimmer, *Ecocide: A Short History of the Mass Extinction of Species* (London: Pluto Press, 2002).

²⁴ Arne Naess, "Deep Ecology for the 22nd Century," in Sessions, *Deep Ecology for the 21st Century*, pp. 463–67.

²⁵ Gregg Easterbrook, *A Moment on the Earth: The Coming Age of Environmental Optimism* (New York: Viking, 1995); for comments on Easterbrook, see George Sessions, "Political Correctness, Ecological Realities, and the Future of the Ecology Movement," The *Trumpeter* 12 (1995):191–196.

²⁶ Bjorn Lomborg, *The Skeptical Environmentalist* (New York: Cambridge University Press, 2001); see also Nicholas Wade, "From an Unlikely Quarter, Eco-Optimism," *New York Times*, August 7, 2001, D1–D2; Bjorn Lomborg, "The Environmentalists Are Wrong," *New York Times*, August 26, 2002; for a discussion of the report by the Danish Committee on Scientific Dishonesty, see Mark Lynas, "Natural Bjorn Killer," *The Ecologist* 33 (2003): 26–29: Anne and Paul Ehrlich, *One With Nineveh*, pp. 253–54.

²⁷ For the Roderick French quote, and a discussion of anthropocentrism in the humanities, see George Sessions, *Deep Ecology for the 21st Century*, pp. 97–99.

²⁸ For an excellent account of the history of religion and ecology in the West, see chapter 4 "The Greening of Religion," in Roderick Nash, *The Rights of Nature: A History of Environmental Ethics* (Madison: University of Wisconsin Press, 1989). But Nash is nowhere near as successful in his discussion of "The Greening of

Philosophy." For an outstanding account of contemporary ecothology beginning with Thomas Berry and Mary Tucker, see Jim Motavalli, "Stewards of the Earth," *E: The Environmental Magazine* 13 (2002): 1–16; for Berry's radical 1987 article, "The Viable Human," see Sessions, *Deep Ecology for the 21st Century*, pp. 8–18.

As a typical example of a "new generation" anthropocentric ecophilosopher, Deane Curtin, in his book Chinnagounder's Challenge (Indianapolis: University of Indiana Press, 1999) basically agrees with, and expands on, Guha's position. He concurs with Guha that the anthropocentric/ecocentric distinction is largely spurious and that the concerns of Muir and Leopold are not relevant to Third World countries. Curtin suggests that "first generation" ecophilosophers, such as J. Baird Callicott and many deep ecology supporters are misanthropic, attributing to them the extreme views of Garrett Hardin. Overall, Curtin criticizes them for putting ecological priorities ahead of social justice concerns. Curtin tends to exonerate Arne Naess from many of these charges while, at the same time, misunderstanding much of Naess's ecological approach. For example, Curtin is correct that Naess is a pluralist when it comes to cultural diversity, but Naess also makes it clear that all cultures have a responsibility to protect their wild ecosystems and species. Again, following Guha, Curtin seems to propose an agricultural "ecological" model for the United States, along the lines of Thomas Jefferson. Curtin mentions the species extinction crisis and the loss of wildness but doesn't seem overly concerned about it. And so, perhaps the most glaring omission is Curtin's failure to explain why an agrarian model is preferable to Naess's and Gary Snyder's more ecological bioregional ideas which find a place for farming and urban life, but stress the high priority of protecting what is left of wildness and biodiversity world-wide.

²⁹ Motavalli, "Stewards of the Earth": 3.

³⁰ See, for example, Fabien Ouaki, *Imagine All the People: A Conversation with the Dalai Lama* (Boston: Wisdom Publications, 1999); see also the Dalai Lama's talk in Allan Badiner, *Dharma Gaia* (Berkeley: Parallax Press, 1990); Sulak Sivraksa, "A Cloud in a Piece of Paper", *Resurgence* 215 (2002): 23–24; Leonardo Boff, "Liberation Theology," *Resurgence* 215 (2002): 22.

³¹ Berry, "The New Political Realignment," quoted in Sessions, *Deep Ecology for the 21st Century*, p. xx; for the Michael Lerner quote, see Jordi Pigem, "The Greening of Religions," *Resurgence* 229 (2005):53.

³² Glenn Scherer, "Religious Wrong," *E: The Environmental Magazine* 14 (2003): 2–6; Bill Moyers, "On Receiving Harvard Medical School's Global Environment Citizen Award," December 1, 2004 (published on www.CommonDreams.org).

³³ Jack Turner, *The Abstract Wild* (Tucson: University of Arizona Press, 1996) p. xvi.

³⁴ Ramachandra Guha, "Radical American Environmentalism and Wilderness Preservation: A Third World Critique," *Environmental Ethics* 11 (1989): 71–83.

³⁵ See Arne Naess, *Gandhi and the Nuclear Age* (New Jersey: Bedminister Press, 1965); Arne Naess, *Gandhi and Group Conflict* (Oslo: Universitetsforlaget, 1974); for critiques of Guha, see Arne Naess, "The Third World, Wilderness, and Deep Ecology," in Sessions, *Deep Ecology for the 21st Century*, pp. 397–407; Arne Naess, "Comments on Guha," in Nina Witoszek and Andrew Brennen (eds.) *Philosophical Dialogues: Arne Naess and the Progress of Ecophilosophy* (Lanham, Maryland: Rowman and Littlefield, 1999) pp. 325–33.

³⁶ It turns out that Guha was involved with a version of anthropocentric "social ecology" in India for over a decade before he wrote the paper, that treats Nature as "human resources" (similar to Pinchot's pre-ecological resource conservation position) and rejects conservation biology: see Sahotra Sarkar, "Restoring Wilderness or Reclaiming Forests?" in David Rothenberg and Marta Ulvaeus (eds.), *The World and the Wild* (Tucson: University of Arizona Press, 2001) pp. 37–55); for another critique of Guha and Cronon, see Philip Cafaro, "For a Grounded Conception of Wilderness and More Wilderness on the Ground," *Ethics and the Environment* 6 (2001): 1–17; Vandana Shiva's remarks about deep ecology are made in the video "The Call of the Mountain,"(1997) Amsterdam: ReRun Products.

³⁷ J. Baird Callicott, "The Wilderness Idea Revisited: The Sustainable Development Alternative," *The Environmental Professional* 13 (1991): 225–47.

³⁸ J. Baird Callicott and Michael Nelson (eds.) *The Great New Wilderness Debate* (Athens: University of Georgia Press, 1998), p. 20; J. Baird Callicott, "A Critique of and an Alternative to the Wilderness Idea," Reed F. Noss, "Wilderness—Now More than Ever;" Dave Foreman, "Wilderness Areas are Vital," *Wild Earth* 4 (1994–5): 54–68

³⁹ Edward Grumbine, "Wildness, Wise Use, and Sustainable Development," in Sessions, *Deep Ecology for the 21st Century*, pp. 376–96.

⁴⁰ See Donald Worster, "The Shaky Ground of Sustainability," Wolfgang Sachs, "Global Ecology and the Shadow of Development," Arne Naess, "Politics and the Ecological Crisis," all in Sessions, *Deep Ecology for the 21st Century*, pp. 417–53; Buell, *From Apocalypse to Way of Life*, pp. 71, 189ff; for Naess's proposal, see Sessions, *Deep Ecology for the 21st Century*, pp. 323–5.

⁴¹ William Cronon, "The Trouble with Wilderness; or, Getting Back to the Wrong Nature," in William Cronon (ed.) *Uncommon Ground: Rethinking the Human Place In Nature* (New York: W. W. Norton, 1995) pp. 69–90.

⁴² Donald Worster, "Seeing Beyond Culture," *Journal of American History* 76 (1990): 1142–47.

⁴³ Donald Waller, "Wilderness Redux: Can Biodiversity Play a Role?" *Wild Earth* 6 (1996–97): 36–45; see also Holmes Rolston, "Nature for Real: Is Nature a Social Construct," in T. D. Chappell (ed.) *The Philosophy of the Environment* (Edinburgh: University of Edinburgh Press, 1997) pp. 38–64.

⁴⁴ David W. Kidner, "Fabricating Nature: A Critique of the Social Construction of Nature," *Environmental Ethics* 22 (2000): 339–57; David Kidner, *Nature and Psyche: Radical Environmentalism and the Politics of Subjectivity* (New York: SUNY Press, 2000); other excellent critiques of Cronon's social constructivism include: Anna Peterson, "Environmental Ethics and the Social Construction of Nature," *Environmental Ethics* 21 (1999): 339–57; Eileen Crist, "Against the Social Construction of Nature and Wilderness," *Environmental Ethics* 26 (2004): 5–24; David Kidner, "Industrialism and the Fragmentation of Temporal Structure," *Environmental Ethics* 26 (2004): 135–153.

⁴⁵ Donald Worster, "The Shaky Ground of Sustainability." op. cit; for another critique of Botkin's ecology, see Stan Rowe, "A New Ecology?" The *Trumpeter* 12 (1995): 197–200.

⁴⁶ The participant's papers are published in Cronon, *Uncommon Ground*; for a discussion of the U of C Irvine conference and these papers, as well as "Reinventing Nature" conferences held at U of C Santa Cruz and U of C Davis, see George Sessions, "Reinventing Nature?": The End of Wilderness," *Wild Earth* 6 (1996–97): 46–52; Niles Eldredge, *Life in the Balance: Humanity and the Biodiversity Crisis* (New Jersey: Princeton University Press, 1998) p. 151.

⁴⁷ Gary Snyder, "The Rediscovery of Turtle Island," in Sessions, *Deep Ecology for the* 21st Century, pp. 454–62.

⁴⁸ Gary Snyder, "Is Nature Real?" in Tom Butler (ed.) *Wild Earth* (Minnesota: Milkweed Editions, 2002) pp. 195–98; Donald Worster also wades into the debate in "The Wilderness of History," in Butler, *Wild Earth*, pp. 221–28.

⁴⁹ David W. Orr, "The Not-So-Great Wilderness Debate . . . Continued," *Wild Earth* 9 (1999): 74–80; Peter Coates, *Nature* (Berkeley, University of California Press, 1998) p. 185.

⁵⁰ Robert Gottlieb, *Forcing the Spring: The Transformation of the American Environmental Movement* (Washington, D. C.: Island Press, 1993) especially chs. 1, 3, and conclusion; Mark Dowie, *Losing Ground: American Environmentalism at the Close of the Twentieth Century* (Boston: MIT Press, 1995) p. 21; the basically urban industrial pollution orientation of Gottlieb's "environmentalism" is well illustrated in his *Environmentalism Unbound* (Boston: MIT Press, 2002).

⁵¹ Dowie, Ibid., pp. 2–3, 30, 126–7; for a critique of Gottlieb and Dowie, see George Sessions, "Political Correctness, Ecological Realities, and the Future of the Ecology Movement." op. cit.

⁵² Michael Cohen, *The History of the Sierra Club: 1892–1970* (San Francisco: Sierra Club Books, 1988); Stephan Fox, *John Muir and His Legacy: The American Conservation Movement* (Boston: Little, Brown, 1981); Carolyn Merchant, "Shades of Darkness: Race and Environmental History," *Environmental History* 8 (2003): 380–94.

⁵³ Gary Snyder, *The Practice of the Wild* (San Francisco: North Point Press, 1990) pp.180–81.

⁵⁴ Murray Bookchin, "Social Ecology versus Deep Ecology," reprinted in Witoszek and Brennen, *Philosophical Dialogues*, pp. 281–301.

⁵⁵ Charlene Spretnak and Fritjof Capra, *Green Politics: The Global Promise* (New York: Dutton, 1984).

⁵⁶ Kirkpatrick Sale, "Deep Ecology and Its Critics," *The Nation* 22 (May 14, 1988): 670–75, reprinted in Witozek and Brennen, *Philosophical Dialogues*, pp. 213–26; see also Arne Naess's letters to Foreman and Bookchin, and Naess's reply to Bookchin, in Witozek and Brennen, pp. 222–31, 302–309. For a further discussion of the New Left/social ecology takeover of the American Greens and Earth First!, see George Sessions, "Radical Environmentalism in the 90's" and "Postscript: March 1992," *Wild Earth* 2 (1992): 64–70.

⁵⁷ Alston Chase, "The Great, Green Deep Ecology Revolution," *Rolling Stone* 498 (April, 1987): 61–64, 162–68. As a "right wing kind of guy" (and no friend of deep ecology) it is no surprise that most of Chase's article is focused on the attempted New Left take-over of Green politics and environmentalism.

- ⁶¹ David Ehrenfeld, *The Arrogance of Humanism* (New York: Oxford University Press, 1978) pp. 54, 127. Murray Bookchin, *Post-Scarcity Anarchism* (Berkeley, CA: Ramparts, 1971): Fred Buell, *From Apocalypse to Way of Life*, pp. 218–19.
- ⁶² Peter Borrelli, "The Ecophilosophers," *Amicus Journal* 10 (1988): 30–39; Chris Lewis and Commoner are discussed in Sessions, *Deep Ecology for the 21st Century*, pp. 98–99; Paul Ehrlich has been maligned by both the Left and the Right but, to better understand his crucial role in the development of ecological thinking in the twentieth century, and the global scientific ecological consensus, see the 1996 PBS video, *Paul Ehrlich and the Population Bomb*.
- ⁶³ Robyn Eckersley, "Divining Evolution: The Ecological Ethics of Murray Bookchin," *Environmental Ethics* 11 (1989): 99–116; see also Eckersley, *Environmentalism and Political Theory*, pp. 146–67; similar critiques of Bookchin are found in Andrew McLaughin, *Regarding Nature: Industrialism and Deep Ecology* (New York: SUNY Press, 1993) pp. 215–17; George Sessions, "Deep Ecology and the New Age Movement," in Sessions, *Deep Ecology for the 21st Century*, pp. 303–04.
- ⁶⁴ John Passmore, *Man's Responsibility for Nature* (New York: Scribner's, 1974) chs. 1 and 2. Passmore's account is summarized in Sessions, "Deep Ecology and New Age": 298–99.

⁵⁸ Bender, *The Culture of Extinction*, p. 355; for ecofeminism, see Ariel Salleh, "Class, Race, and Gender Discourse in the Ecofeminism/Deep Ecology Debate," in Witoszek and Brennen, *Philosophical Dialogues*, pp. 236–54.

⁵⁹ Robyn Eckersley, *Environmentalism and Political Theory: Toward an Ecocentric Approach* (New York: SUNY Press, 1992) pp. 25, 29; for critiques of Marx from an ecological perspective, see John Clark, "Marx's Inorganic Body," *Environmental Ethics* 11 (1989): 243–58; Val Routley (Plumwood), "On Karl Marx as an Environmental Hero," *Environmental Ethics* 3 (1981): 237–44.

⁶⁰ Gottlieb, *Forcing the Spring*, p. 88.

⁶⁵ Bender, *The Culture of Extinction*, p. 365–66.

⁶⁶ Berry is quoted in Sessions, "Deep Ecology and the New Age," p. 305.

⁶⁷ Bender, Ibid, p. 355.

⁶⁸ Warwick Fox, "The Deep Ecology-Ecofeminism Debate and Its Parallels," in Sessions *Deep Ecology for the 21st Century*, pp. 269–89.

⁶⁹ John Clark, "A Social Ecology," in Michael Zimmerman et al. (eds.) *Environmental Philosophy* 2nd ed. (New Jersey: Prentice Hall, 1998) pp. 421, 430; Michael Zimmerman, "Ken Wilber's Critique of Ecological Spirituality," in David Barnhill and Roger Gottlieb (eds.), *Deep Ecology and World Religions* (New York: SUNY Press, 2001), pp. 243–69.

⁷⁰ John Clark, "The Matter of Freedom: Ecofeminist Lessons for Social Ecology," in Michael Zimmerman et al. *Environmental Philosophy* 3rd ed. (New Jersey, Prentice-Hall, 2001) pp. 455–70.

⁷¹ John Clark, "How Wide is Deep Ecology?" in Eric Katz, Andrew Light, and David Rothenberg (eds.), *Beneath the Surface: Critical Essays in the Philosophy of Deep Ecology* (Cambridge: MIT Press, 2000), pp. 7–10.

⁷² For Naess's views on immigration, see Arne Naess, "Politics and the Ecological Crisis," in Sessions, *Deep Ecology for the 21st Century*, pp. 451–52; Norman Myers, "The Most Overpopulated Country," *Population Press*, April/May, 2002; Diamond, *Collapse*, ch. 16; Ehrlich and Ehrlich, *One With Nineveh*, pp. 106–11.

⁷³ Peter Dwyer, "The Invention of Nature," in Roy Ellen and Katsuyoshi Fukui (eds.) *Redefining Nature: Ecology, Culture, and Domestication* (Oxford: Berg, 1996) pp. 157–86.

⁷⁴ Paul Shepard, "Virtually Hunting Reality in the Forests of Simulacra," in Michael Soulé and Gary Lease (eds.) *Reinventing Nature? Responses to Postmodern Deconstructionism* (Washington, D. C.: Island Press, 1995) pp. 17–29.

⁷⁵ Ariel Salleh, "Deeper than Deep Ecology: The Eco-Feminist Connection," *Environmental Ethics* 6 (1984): 339–45.

⁷⁶ Patsy Hallen, "The Ecofeminist-Deep Ecology Dialogue," in Witozek and Brennen, *Philosophical Dialogues*, pp. 274–80.

⁷⁷ Ariel Salleh, "In Defense of Deep Ecology: An Ecofeminist Response to a Liberal Critique," in Katz et al. *Beneath the Surface*, pp. 107–24.

⁷⁸ Jack Turner, *Teewinot* (New York: St. Martin's Press, 2000) p. 110; William Barrett, *The Illusion of Technique: A Search for Meaning in a Technological Civilization* (Garden City, N.Y.: Anchor Books, 1979) pp. 365–66, 373; Arne Naess, "The Shallow and the Deep, Long Range Ecology Movements," in Sessions, *Deep Ecology for the 21st Century*, pp. 151–55.

⁷⁹ Jim Cheney, "Postmodern Environmental Ethics: Ethics as Bioregional Narrative," *Environmental Ethics* 11(1989): 117–34; Jim Cheney," The Neo-Stoicism of Radical Environmentalism," *Environmental Ethics* 11(1989): 293–325; William Stephens, "Stoic Naturalism, Rationalism, and Ecology," *Environmental Ethics* 16 (1994): 275–86; for an extended discussion and critique of Cheney's views, see Zimmerman, *Contesting Earth's Future*, pp. 284–89, 298–313.

⁸⁰ Karen Warren, "Ecofeminist Philosophy and Deep Ecology," in Witoszek and Brennen, *Philosophical Dialogues* pp. 255–69.

⁸¹ Arne Naess, "The Ecofeminism versus Deep Ecology Debate," in Witozek and Brennen, p. 273.

⁸² Bender, The Culture of Extinction, pp. 379–382.

⁸³ For (Routley) Sylvan's position, see William Grey, "A Critique of Deep Green Theory," in Katz, et al, *Beneath the Surface* pp. 43–58.

⁸⁴ Val Plumwood, "Nature, Self, and Gender: Feminism, Environmental Philosophy, and the Critique of Rationalism," in Zimmerman, et al. *Environmental Philosophy*, p. 286; Bender, *The Culture of Extinction*, pp. 383–87; see John Rodman, "Four Forms of Ecological Consciousness Reconsidered," in Sessions, *Deep Ecology for the 21st Century*, 121–30.

⁸⁵ Bender, The Culture of Extinction, p. 441.

⁸⁶ Plumwood, Ibid. p. 299–300; Warren, "Ecofeminist Philosophy and Deep Ecology," 259–60.

⁸⁷ David Barnhill's "Relational Holism: Huayan Buddhism and Deep Ecology," in Barnhill and Gottlieb, *Deep Ecology and World Religions*, pp.77–106, is a very well-

developed critique of Plumwood's analysis, which also includes a critique of Deane Curtin; see also David Loy, "Loving the World as Our Own Body: The Nondualist Ethics of Taoism, Buddhism and Deep Ecology," *World Views: Environment, Culture, Religion* 1 (1997): 249–73; see also David Loy, *A Buddhist History of the West* (New York: SUNY Press, 2001).

⁸⁸ Bender, The Culture of Extinction, pp. 418, 445.

⁸⁹ Arne Naess, "Self-Realization: An Ecological Approach to Being in the World," in Sessions, *Deep Ecology for the 21st Century*, pp. 225–39. This article was published in The *Trumpeter* and can be read online in the archives in Volume 4, No 3, 1987.

⁹⁰ Bender, Ibid., pp. 386, 399–415.17; An exchange took place a number of years ago in which the young ecophilosopher Peter Reed took the existentialist position—in opposition to Naess's idea of mutually interdependent Self-realization for all beingsthat humans and Nature are totally separate. Following the existentialism of the Norwegian Peter Zapffe, Reed holds that we should respect and venerate Nature on the basis of its total "otherness." In his reply to Reed, Naess provides an illuminating discussion of what he means by "identifying" with the self-realization of other beings (with their *conatus*, in Spinoza's term). Contrary to the existentialists, we are "not man apart." Although there is the *similarity* of all beings striving for self-realization (with which we can identify) vast differences and their otherness nonetheless remain, and are respected. Plumwood commented on this exchange, rejecting both Reed's and Naess's positions, while conflating Naess's notion of "identification" with "identity." She again argued that the feminist concept of the "relational self" is the only acceptable account. (Peter Reed, "Man Apart" An Alternative to the Self-Realization Approach;" Arne Naess, "'Man Apart' and Deep Ecology: A Reply to Reed;" Val Plumwood, "Self-Realization or Man Apart?: The Reed-Naess Debate," all in Witozek and Brennen, *Philosophical Dialogues*, pp. 181–210).

⁹¹ Bender, Ibid, p. 383.

⁹² Fox, "The Deep Ecology-Ecofeminist Debate"; Hallen, "The Ecofeminism-Deep Ecology Dialogue," pp. 277, 279; see also Patsy Hallen, "Making Peace with Nature: Why Ecology Needs Ecofeminism," The *Trumpeter* 4 (1987): 3–14.

⁹³ Warren, *Ecofeminist Philosophy*, pp. 82–3, 149–73.

⁹⁴ Warren, "Ecofeminist Philosophy and Deep Ecology": 259, 263–67.

⁹⁵ Ibid., 260–62.

⁹⁶ Warwick Fox, *Toward a Transpersonal Ecology* (Boston: Shambhala, 1990).

⁹⁷ See Andrew McLaughlin, "The Heart of Deep Ecology;" and my introduction (pp. 6–7) in Sessions, *Deep Ecology for the 21 Century*; Sessions, "Deep Ecology," in Zimmerman, *Environmental Philosophy* 2nd ed. (1998): 172–173 (of which Warren is a co-editor!).

⁹⁸ Charlene Spretnak, "Ecofeminism: Our Roots and Flowering," in Irene Diamond and Gloria Orenstein, eds., *Reweaving the World: The Emergence of Ecofeminism* (San Francisco: Sierra Club Books, 1990). For Spretnak's critique of postmodernism, see Charlene Spretnak, *The Resurgence of the Real* (Reading: Addison-Wesley, 1997.

⁹⁹ For a discussion of Santayana's speech, "The Genteel Tradition in American Philosophy," see George Sessions, "Ecocentrism and the Anthropocentric Detour," in Sessions, *Deep Ecology for the 21st Century*, pp. 166–67.

¹⁰⁰ Bertrand Russell, *A History of Western Philosophy* (New York: Simon and Schuster, 1945) pp. 494, 788–89, 827–28; Kenneth Blackwell, *The Spinozistic Ethics of Bertrand Russell* (London: Allen and Unwin, 1985).

¹⁰¹ For discussions of Zamyatin, Orwell, and Huxley, see Wayland Drew, "Killing Wilderness," and Del Ivan Janik, "Environmental Consciousness in Modern Literature," both in Sessions, *Deep Ecology for the 21st Century*, pp. 104–20.

¹⁰² Zimmerman, Contesting Earth's Future, p. 359.

¹⁰³ The Teilhardian quote appears in George Sessions, "Deep Ecology and the New Age," in Sessions, *Deep Ecology for the 21st Century*, pp. 290–310, which consists of a comprehensive critique of the anti-ecological, technotopian thinking of the New Age movement; for ecological critiques of Haraway, see Bill McCormick, "The Island of Dr. Haraway," *Environmental Ethics* 22 (2000): 409–18; Bill McCormick, "An Ecology of Bad Ideas," *Wild Earth* 12 (2002): 70–72.

¹⁰⁴ Buell, From Apocalypse to Way of Life, pp. 211–46.

¹⁰⁵ See the review by Ned Hettinger of Keekok Lee, *The Natural and the Artefactual* (Lanham Md.: Lexington Books, 1999) *Environmental Ethics* 23 (2001): 437–40; Bill Joy, "Why the Future Doesn't Need Us," *Wired* (April, 2000): 238–246; see also Buell, Ibid., pp. 153–54; Sadruddin Aga Kahn, "Keeping to Our World," *Resurgence* 215 (2002): 20–21.

¹⁰⁶ Peter van Wyck, *Primitives in the Wilderness: Deep Ecology and the Missing Subject* (Albany: SUNY Press, 1997) pp. 103–35.

¹⁰⁷ For Zimmerman's early ecological interpretation of Heidegger, see his 1976 paper "Technological Culture and the End of Philosophy," quoted extensively in Sessions, "Spinoza and Jeffers on Man in Nature," *Inquiry* 20 (1977): 487–89; for his rejection of Heidegger, see Michael Zimmerman," Rethinking the Heidegger-Deep Ecology Relationship," *Environmental Ethics* 15 (1993): 195–224.

¹⁰⁸ Zimmerman, *Contesting Earth's Future*, p. 353. Teilhard's statement appears in Sessions, "New Age and Deep Ecology": p. 293. For an in depth discussion of Ken Wilber's work see Gus DiZerega's article "A Critique of Ken Wilber's Account of Deep Ecology and Nature Religions" in The *Trumpeter* archives Volume 13, No 2, 1996.

¹⁰⁹ See Gary Nabham and Stephen Trimble, *The Geography of Hope: Why Children Need Wild Places* (Boston: Beacon Press, 1994); Peter Kahn and Stephen Kellert (eds.) *Children and Nature* (Boston, MIT Press, 2002).

¹¹⁰ Jerry Mander, *In the Absence of the Sacred: The Failure of Technology and the Survival of the Indian Nations* (San Francisco: Sierra Club Books, 1991) pp. 85–6; for the corporate colonization of the young, see the PBS video *Affluenza* and Frontline's *The Merchants of Cool*.

¹¹¹ Chris Cuomo, "Review of Noel Sturgeon, *Ecofeminist Natures*," *Environmental Ethics* 21 (1999: 431.

¹¹² Ned Hettinger and Bill Throop, "Refocusing Ecocentrism: Deemphasizing Stability and Defending Wildness," *Environmental Ethics* 21 (1999): 3–21.

¹¹³ Jack Turner, *The Abstract Wild* (Tucson: University of Arizona Press, 1996).

¹¹⁴ Gary Snyder, *The Practice of the Wild* (San Francisco: North Point Press, 1990).

¹¹⁵ Turner, *The Abstract Wild*, pp. 82, 108.

¹¹⁶ Ibid. pp. 81, 84, 107–111.

¹¹⁷ Ibid., pp. xiv, 82.

¹¹⁸ Ibid., pp. xvi, 91–92. Turner's interpretation of Thoreau should be contrasted with that given by the ecologist, Daniel Botkin. Botkin argues that Thoreau would have acquiesced in the almost total humanization of the Earth, as long as a few swamps were left near towns and cities where he could experience wild Nature. Thoreau would have liked Manhattan's Central Park. It is clear that Botkin doesn't have the faintest idea what Thoreau meant by "in wildness is the preservation of the world." Botkin has the distinction of providing the most distorted recent account of deep ecology in print. He claims to position himself somewhere between the "wise use" and deep ecology movements, but Snyder is correct in characterizing Botkin and Cronon as "the high end of the wise use movement." (Daniel Botkin, *No Man's Garden: Thoreau and a New Vision for Civilization and Nature* (Washington, D. C: Island Press, 2001).

¹¹⁹ Charles Mann, "1492" Atlantic Monthly (March, 2002): 41-53.

¹²⁰ Bill McKibben, *The End of Nature* (New York, Anchor Books, 1989); Steven Vogel, "Environmental Philosophy After the End of Nature," *Environmental Ethics* 24 (2002): 21–39.

¹²¹ Karl Popper, *Objective Knowledge: An Evolutionary Approach* (London: Oxford University Press, 1972).

¹²² Hettinger and Throop, "Refocusing Ecocentrism," 17–18.

¹²³ Ibid., p. 18.

¹²⁴ Turner, *The Abstract Wild*, pp. 108–125; for discussions of conservation biology and the Wildlands Project, see Reed Noss and Allen Cooperrider, *Saving Nature's Legacy: Protecting and Restoring Biodiversity* (Washington, D. C.: Island Press, 1994); Edward Grumbine (ed.) *Environmental Policy and Biodiversity* (Washington, D. C.: Island Press, 1994); Dave Foreman, *Rewilding North America* (Washington D. C.: Island Press, 2004).

¹²⁵ Jack Turner, "The Wild and Its New Enemies," in Ted Kerasote (ed.) *Return of the Wild: The Future of our Natural Lands* (New York: Pew Wilderness Center, 2001).

¹²⁶ E. O. Wilson, *The Future of Life* (New York, Knopf, 2002) pp. 154–71; Paul Ehrlich, *Extinction: The Causes and Consequences of the Disappearance of Species* (New York: Random House, 1981); for the studies on "hot spot" inadequacy, see Ehrlich and Ehrlich, *One With Nineveh*, pp. 52–3.

¹²⁷ Fred Pearce, "Review of E. O. Wilson, *The Future of Life*," *The Ecologist* 32 (2002): 40; for social/ecological critiques of corporate capitalism's plans for globalization, see Richard Barnet and John Cavanaugh, *Global Dreams: Imperial Corporations and the New World Order* (New York: Simon and Schuster, 1994); David Korten, *When Corporations Rule the World* (Bloomfield, CT: Kumarian Press, 1995); see also "A Better World Is Possible!: Alternatives to Economic Globalization," a report of the International Forum on Globalization (2002) at www.ifg.org.

¹²⁸ Arne Naess, "Ecosophy, Population, and Free Nature," The *Trumpeter* 5 (1988).

- ¹³¹ Donald Worster, "The Shaky Ground of Sustainability," in Sessions, *Deep Ecology for the 21st Century*, p. 425; Worster discusses the controversy over whether the North American continent was "totally dominated" by indigenous people in "The Wilderness of History," in Butler, *Wild Earth*, pp. 221–29; see also his critique of Luc Ferry's *The New Ecological Order* in Donald Worster "The Rights of Nature: Has Deep Ecology Gone Too Far?" *Foreign Affairs* 74 (1995): 111–115.
- ¹³² Arne Naess, "The Shallow and the Deep, Long-Range Ecology Movements," in Sessions, *Deep Ecology for the 21st Century*, pp. 151–155.
- ¹³³ Bender, *The Culture of Extinction*, pp. 417–422.
- ¹³⁴ Ibid., pp. 422–424, 435.
- ¹³⁵ See Arne Naess, "Politics and the Ecological Crisis," and Arne Naess, "The Deep Ecology Eight Points Revisited," in Sessions, *Deep Ecology for the 21st Century*, pp. 445, and 219 respectively; to underscore the point that everything is *not* politics, in the original 1973 paper ("The Shallow and the Deep, Long-Range Ecology Movements") Naess claimed that "philosophy is the most general forum of debate on fundamentals . . . and political philosophy is one of its subsections."
- ¹³⁶ See Arne Naess, "Deepness of Questions and the Deep Ecology Movement," Arne Naess, "The Deep Ecological Movement," and Stephen Bodian, "Simple in Means, Rich in Ends," all in Sessions, *Deep Ecology for the 21st Century*. For further discussion of deep questioning; for Naess's deep ecology approach, see Harold Glasser, "Naess's Deep Ecology Approach and Environmental Policy;" Harold Glasser, "Demystifying the Critiques of Deep Ecology," in Zimmerman, *Environmental Philosophy*, 3rd ed., pp. 204–217.
- ¹³⁷ Arne Naess, "Politics and the Ecological Crisis," Naess, "The Third World, Deep Ecology, and Wilderness," and Naess, "Deep Ecology for the 22nd Century."
- ¹³⁸ Naess, "The Ecofeminist versus Deep Ecology Debate," in Witozek and Brennen, *Philosophical Dialogues*, p. 270.
- ¹³⁹ Katz, et al. *Beneath the Surface*, pp. ix, xxii; for a critique of their characterization of deep ecology philosophy, see Andrew McLaughlin, "Keeping Deep Ecologists Together," paper read at the American Philosophical Association (Society for Philosophy and Technology) meeting, December 28, 2000.
- ¹⁴⁰ Zimmerman, *Contesting Earth's Future*, pp. 57–90.
- 141 Bill Devall and George Sessions, $Deep\ Ecology$ (Utah: Gibbs Smith, 1985) pp. $161{-}177.$
- ¹⁴² In her somewhat unusual "Deep Ecology" encyclopedia entry, Australian ecofeminist Freya Matthews claims that deep ecology switched over to being an activist movement when Naess replaced his 1973 analysis with the 1984 Eight Points. This article does not show a deep grasp of the history of the movement; see Matthews, "Deep Ecology," in Dale Jamieson (ed.) *A Companion to Environmental Philosophy* (Oxford: Blackwell, 2003) pp. 218–32. Joanna Griffiths, "Naess at Ninety," *Resurgence* 217, March/April 2003, 44–45.

¹²⁹ Arne Naess, "The Third World, Wilderness and Deep Ecology," in Sessions, *Deep Ecology for the 21st Century*, pp. 397–407.

¹³⁰ Niles Eldredge, *Life in the Balance*, pp. 157–165, 183–191.

¹⁴³ Bron Taylor, "Deep Ecology and Its Social Philosophy: A Critique," in Katz, et al *Beneath the Surface*. pp. 269–99.

¹⁴⁴ See, for example, Naess, "Politics and the Ecological Crisis."

¹⁴⁵ Arne Naess, "Comments on Guha," in Witozek and Brennen, *Philosophical Dialogues*, p. 331.

¹⁴⁶ Sadruddin Aga Khan, "Keeping to Our World," Resurgence 215 (2002): 20–21.

¹⁴⁷ Al Gore, *Earth in the Balance* (Boston: Houghton Mifflin, 1992).

¹⁴⁸ *Newsweek*, July 17, 2006.

¹⁴⁹ Andrew Kimbrell, "Biodemocracy," in *Resurgence* 214 (2002): 47–48; Lee-Anne Broadhead and Sean Howard, "The Heart of Darkness," *Resurgence* 221 (2003): 22–24.

¹⁵⁰ Paul Shepard, "Ecology and Man: A Viewpoint." In Sessions, *Deep Ecology for the 21st Century*, p. 140.