

# Leo Marx

## *The idea of nature in America*

The idea of nature is – or, rather, was – one of the fundamental American ideas. In its time it served – as the ideas of freedom, democracy, or progress did in theirs – to define the meaning of America. For some three centuries, in fact, from the founding of Jamestown in 1607 to the closing of the Western frontier in 1890, the encounter of white settlers with what they perceived as wilderness – unaltered nature – was *the* defining American experience.

By the end of that era, however, the wilderness had come to seem a thing of the past, and the land of farms and villages was rapidly becoming a land of factories and cities. By 1920, half the population lived in cities, and as the

natural world became a less immediate presence, images of the pristine landscape – chief icon of American nature – lost their power to express the nation’s vision of itself.

Then, in the 1970s, with the onset of the ecological ‘crisis,’ the refurbished, matter-of-fact word *environment* took over a large part of the niche in public discourse hitherto occupied by the word *nature*. Before the end of the century, the marked loss of status and currency suffered by the idea of nature had become a hot subject in academic and intellectual circles. Reputable scholars and journalists published essays and books about the ‘death’ – or the ‘end’ – of nature; the University of California recruited a dozen humanities professors to participate in a semester-long research seminar designed to “reinvent nature”;<sup>1</sup> and the association of European specialists in American studies chose, as the aim of its turn-of-the-century conference, to reassess the changing role played by the idea of nature in America.<sup>2</sup>

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1 The essays they produced are reprinted in *Uncommon Ground: Toward Reinventing Nature*, ed. William Cronon (W. W. Norton: New York, 1995).

2 This essay derives from a paper presented at the conference of the European Association

What are we to make of the purported demise of nature? Can it be that the venerable idea is no longer meaningful? If that seems improbable on its face, it is because *nature* is our oldest, most nearly universal name for the material world, and despite the alarming extent of the transformation – and devastation – we humans have visited on it, that world is still very much with us. But why, then, is the general idea of nature – nature in all its meanings – falling into disuse? What other reasons might there be for the seeming end of nature? With these questions in mind, I want to reconsider the idea's changing role in American thought.

But, first, these preliminary caveats. I do not mean to suggest that the imminent disappearance of nature – if that is what we are witnessing – is a peculiarly American development. But in view of the crucial role played by the idea over the course of American history, a reassessment of critical stages of that history may prove to be revealing. I say 'stages' because limitations of space – the subject calls for a long treatise rather than an essay – make it necessary to focus on a few significant points along the historical trajectory traced by the idea of nature in American thought.

But it also should be said that the word *nature* is a notorious semantic and metaphysical trap. As used in ordinary discourse nowadays, it is an inherently ambiguous word. We cannot always tell whether references to *nature* are meant to include or exclude people. Besides, the word also carries the sense of *essence*: of the ultimate, irreducible character or

quality of something, as for example, 'the nature of femininity' or, for that matter, 'the nature of nature.' When this meaning is in play, the word tacitly imputes an idealist or essentialist – hence ahistorical – character to the particular subject at hand, whether it be femaleness or nature itself. The word's multiple meanings testify to its age: its roots go back (by way of Latin and Old French) to the concept of origination – of being born. As Raymond Williams famously noted, *nature* is probably the most complex word in the English language.<sup>3</sup> And when, moreover, the idea of nature is yoked with the ideologically freighted concept of American nationhood, as in the historian Perry Miller's sly allusion to America as *Nature's Nation*, the ambiguity is compounded by chauvinism.<sup>4</sup>

Contemplating the nature of nature in America has led many scholars, of whom the historian Frederick Jackson Turner is the exemplar, to adopt the contested idiom of 'American exceptionalism.'<sup>5</sup> And not without good reason. However wary of chauvinism one might be, it would be foolish to deny that when Europeans first encountered American nature, it truly was, and to some extent still is, exceptional – perhaps not unique

3 Raymond Williams, *Keywords* (New York: Oxford University Press, 1983), 219.

4 Miller first used the phrase in his 1953 essay, "Nature and the National Ego," in *Errand into the Wilderness* (Cambridge, Mass.: Harvard University Press, 1967), 209. Elizabeth W. Miller and Kenneth Murdock later used it as the title of a posthumous collection of Miller's essays, *Nature's Nation* (Cambridge, Mass.: Harvard University Press, 1967).

5 In his seminal 1893 essay, "The Significance of the Frontier in American History," Turner argued that American nature, in the form of free land, in effect *determined* the "peculiarity of American institutions."

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for American Studies, in Graz, Austria, April 14 – 17, 2000. See Hans Bak and Walter W. Holbling, eds., "*Nature's Nation*" Revisited: *American Concepts of Nature from Wonder to Ecological Crisis* (Amsterdam: VU Press, 2003).

but, like Australia, a continent even less developed at the time of contact, surely exceptional. It was exceptional in its immensity, its spectacular beauty, its variety of habitats, its promise of wealth, its accessibility to settlers from overseas, and, above all, in the scarcity of its indigenous population. Hence the remarkable extent of its underdevelopment – its wildness – as depicted in myriad representations of the initial landfall of European explorers on the Atlantic seaboard of North America. In that stock image, the newly discovered terrain appears to be untouched by civilization, a cultural void populated by godless savages, and not easy to distinguish from a state of nature.

In the beginning, then, Europeans formed their impressions of American nature in a geographical context: it was a place, a terrain, a landscape. But they invariably accommodated their immediate impressions of American places to their imported – typically religious – preconceptions about the nature of nature and the character of indigenous peoples. Thus all of the significant American ideas of nature are hybrids, conceived in Europe and inflected by New World experience. And each ideology that served as a rationale for one or another colonial system of power contained such a hybrid Euro-American conception of nature and of the colonists' relations with it.

A revealing example is the Pilgrim leader William Bradford's well-known description of the forbidding Cape Cod shoreline as seen from the deck of the *Mayflower* in 1620. He depicts it as "a hidious and desolate wildernes, full of wild beasts and wild men." Here the bias inherent in the Christian idea of nature as fallen – as Satan's domain – effectively erases the humanity of the indigenous

Americans. To Bradford they are more like wild beasts than white men.

The concept of satanic nature provided a useful foil for the sacred mission of the Puritan colonists.<sup>6</sup> In 1645, for example, John Winthrop, lieutenant governor of the Massachusetts Bay Colony, used it as an ideological weapon to defend his theocratic authority. His enemies had charged him with infringing on their liberty, and in his uncompromising response in the General Court he develops the distinction between two kinds of liberty: natural and civil. Natural liberty, "common to man with beasts and other creatures," is the liberty, he argues, we enjoy in a state of nature, namely, to do evil as well as good; civil liberty, on the other hand, is moral, hence available only to the truly regenerate, only to Christians redeemed from sin by the reception of divine grace.<sup>7</sup> According to Calvinist doctrine, only those rescued from the state of nature may enjoy the God-given liberty to do what is good, just, and honest. Here, on the coast of a vast, unexplored continent, the idea of an ostensibly separate realm of wild nature – a separateness underscored by the contrast with the tamed state of nature in Europe – was a valuable rhetorical asset for the colony's leaders. Allusions to wild nature served to reinforce the doctrinal barrier between themselves, the elect, and the unregenerate, whom they consigned to the realm of natural lawlessness.

In the lexicon of Protestant Christianity in America, the essential character of

6 William Bradford, *History of Plimoth Plantation*, in Perry Miller and Thomas Johnson, eds., *The Puritans* (New York: American Book Company, 1938), 100–101.

7 John Winthrop, "Speech to the General Court, July 3, 1625," in Miller and Johnson, eds., *The Puritans*, 206.

primal nature was conveyed by epithets like ‘howling desert’ and ‘hideous wilderness,’ and by the malign names – savage, cannibal, slave – assigned to indigenous peoples. In Winthrop’s argument, accordingly, the unarguable existence of a separate (unredeemed) state of nature helps to justify his a priori condemnation of the unregenerate, who constitute a potential threat of lawlessness, anarchy, and misrule. Their geographical location underscored the theological argument: the only escape from natural unregeneracy open to them was the reception of divine grace.

By the time Thomas Jefferson wrote his draft of the Declaration of Independence, the theological notion of a dual nature – part profane, part sacred – was being supplanted by the unitary character of Newtonian science and Deism. Here, the initial identification of American nature with the landscape expanded to embrace the natural processes, or laws, operating behind its visible surface. Because the newly discovered celestial machinery obeys physical laws accessible to human reason, Newtonian physics had the effect of bringing humanity and nature closer together. Besides, the mathematical clarity and precision of the new physics made the old images of a dark, disorderly nature repugnant. Alexander Pope summed up the change in the prevailing worldview in the couplet engraved on Newton’s tomb in Westminster Abbey:

Nature and nature’s laws lay hid in night.  
God said, “Let Newton be!” and all was light.

By 1776 it made sense for a rhetorician as gifted as Jefferson to extend the hypothetical reach of nature’s laws – or, to be more precise, of principles analogous to them – to the unruly sphere of politics.

To justify the colonists’ acts of treason and armed rebellion, he had merely to describe them as the means – indeed, the only possible means – of claiming the independent status to which they were entitled by “the Laws of Nature and of Nature’s God.” Nature, as our free-thinking president conceived of it, was not so much the work of God as God was a constituent feature of Nature. By invoking a secularized idea of nature on behalf of a quintessentially political cause, Jefferson helped to narrow the gulf separating humanity and nature.

But for that purpose, the idiom of the natural sublime was even more effective. Nine years later, in *Notes on Virginia*, Jefferson invoked the sublime to account for the unsurpassed beauty of one of American nature’s most cherished creations – Virginia’s Natural Bridge. An ardent practitioner of the neoclassical aesthetic, Jefferson credits the beauty of the Bridge to its symmetrical form, or, as it were, to the strikingly close approximation of its form to ostensibly natural principles of order and proportion. He begins his description of the bridge with a detailed analysis of its exact dimensions, as if reported by a detached observer writing in the third person. But then, partway through, he abruptly puts himself into the scene, climbs the parapet, and, shifting to the second person, describes how “you” inescapably would react if you too found yourself standing on the narrow ledge looking “over into the abyss”:

You involuntarily fall on your hands and feet, creep to the parapet and peep over it . . . . If the view from the top be painful and intolerable, that from below is delightful in an equal extreme. It is impossible for the emotions arising from the sublime to be felt beyond what they are here; so beautiful an arch, so elevated, so light, and

springing as it were up to heaven! The rapture of the spectator is really indescribable!<sup>8</sup>

As this passionate Wordsworthian apostrophe suggests – it was written about fifteen years before the preface to the *Lyrical Ballads* – Jefferson already was prepared to enlist in the Romantic movement. But even after the triumph of Romanticism, the separateness of nature remained a largely unchallenged if unstated premise of public discourse. Since no authoritative biological counterpart to the Newtonian laws of nature had yet been formulated, supernatural explanations of the origin of life were not yet vulnerable to the challenge of scientific materialism. By the same token, pantheism retained its status as a Christian heresy, and dutiful communicants were advised to be wary of the feeling of oneness with nature.

In 1836, four years after resigning his pastorate in the Second (Unitarian) Church of Boston, Ralph Waldo Emerson anonymously published the essay *Nature*, which came to be known as the manifesto of Transcendentalism, a New England variant of European Romanticism. The essay begins as a lament for the loss of humanity's direct relations with nature. "Why," Emerson asks, "should not we also enjoy an original relation to the universe?"

Like his title, the question rests on the assumption that nature was – and should once again become – a primary locus of meaning and value for Americans. What followed was Emerson's first and only attempt to formulate a systematic theory of nature, and in it he probably came as close as he ever would to repudiating the

orthodox theological assumption that humanity and nature belong to separate realms of being. To illustrate the potential effect of being in "the presence of nature," Emerson describes an epiphany that is patently irreconcilable with the idea of nature's separateness. One gloomy afternoon, while crossing the town common, he was suddenly – unaccountably – overwhelmed by a sense of immanence, or, as he puts it, of "being part or parcel of God." It was a largely secularized variant of the Protestant conversion experience, and it suggests the possibility, as Emerson puts it, of an "occult relation" – or state of oneness – with nonhuman nature. The balance of *Nature* may be read as an effort to devise a reasoned explanation, or justification, for this transformative experience.

Emerson's account of the epiphany reveals his ambivalence about the relative validity of religious and scientific conceptions of nature. On the one hand it expresses his growing skepticism, on both theological and scientific grounds, about the received idea of a separate nature. As a Unitarian, to be sure, he already had repudiated most supernatural aspects of Christian doctrine, including the divinity of Jesus. A few years before writing *Nature*, he had resigned his pastorate on the grounds that he no longer could in good conscience perform the – to him, excessively literal – sacrament of the Lord's Supper. At that time, moreover, he was studiously keeping abreast of the latest advances in geology and zoology, which provided empirical evidence in support of various emerging theories of evolution. When *Nature* was reissued in 1849, in fact, he appended a new verse epigraph depicting humanity's origin:

A subtle chain of countless rings  
The next unto the farthest brings;

8 Thomas Jefferson, *Notes on the State of Virginia*, ed. William Peden (Chapel Hill: University of North Carolina Press, 1955), 55.

The eye reads omens where it goes,  
And speaks all languages the rose;  
And, striving to be man, the worm  
Mounts through all the spires of form.<sup>9</sup>

But though Emerson, like many of his contemporaries, was receptive to evolutionary thinking long before the publication of Darwin's *Origin of Species*, he was not prepared – for reasons he never quite made explicit – to abandon the idea of nature's separateness. That traditional assumption is built into the conceptual structure of *Nature*. In defining his key terms, he postulates a universe made up of all that exists except for one thing: the human soul. All being, he asserts, “is composed of Nature and the Soul,” and he goes on to specify that “all that is *separate* from us, all which Philosophy distinguishes as the NOT ME, both nature and art, all other men and my own body, must be ranked under this name, NATURE.”<sup>10</sup> Though he tacitly repudiated the major tenets of the Christian faith, and though he was prepared to embrace the theory of evolution, he continued to define nature as a discrete entity, eternally separated from human beings and their immortal souls.

But the theory of evolution, as definitively set forth by Darwin in 1859, made the age-old belief in nature's separateness scientifically untenable once and for all.<sup>11</sup> On that score the logical import of evolutionary biology is clear and conclusive. If *Homo sapiens* evolved through

a process of natural selection, if our species is inextricably embedded in a global web of biophysical processes, then there can be no such thing – on the planet Earth at least – as a separate domain of nature.

But the logic of science is one thing, and ancient habits of mind are another. Despite the passage of some 145 years since Darwin's theory first caught the world's attention, and despite the confirmation it has received, first and last, from an international consensus of scientists, its import has yet to be incorporated in prevailing assumptions about the nature of nature. To this day, the ‘nature’ commonly invoked in our public and private discourse – even by those of us who claim to ‘believe in’ evolution – seems to be a discrete, almost wholly independent entity ‘out there’ somewhere. In ordinary usage the word rarely conveys a sense of humanity's ties with other living things. As the historian of science, Lynn White, Jr., noted in his influential 1967 essay, “The Historical Roots of our Ecological Crisis,” “Despite Darwin, we are not, in our hearts, part of the natural process.”<sup>12</sup>

But that is putting it mildly. As everyone knows, the publication of the *Origin of Species* aroused intense public hostility, especially among churchmen and religious believers. There was no way, after all, to disguise the simple truth: Darwin's theory flatly contradicts the Biblical account of the creation. Besides, people of all persuasions, many nonbelievers among them, were – still are – revolted by the notion that we are kin to

9 Ralph Waldo Emerson, *Nature, Addresses, and Lectures* (Boston: Houghton Mifflin, 1884), I, 8.

10 *Ibid.*, 10 – 11. Emphasis added.

11 In *Origin of Species*, though Darwin's theory of evolution by natural selection remained incomplete until the publication of the *Descent of Man* in 1871.

12 Lynn White, Jr., “The Historical Roots of our Ecological Crisis,” in Paul Shepherd, ed., *The Subversive Science; Essays Toward an Ecology of Man* (Boston: Houghton Mifflin, 1969), 369. See also Leo Marx, “American Institutions and Ecological Ideals,” *Science* 170 (November 27, 1970): 945 – 952.

the higher primates. It makes them feel, as the saying goes, 'tainted by bestiality.' So does the idea that humanity reached the pinnacle of the food chain by winning a long, murderous struggle, "red" – in the poet Tennyson's phrase – "in tooth and claw."<sup>13</sup> But the repugnance aroused by evolutionary theory did not surprise its wisest proponents. Years before he published the *Origin*, for example, Darwin had begun to fear that it would raise the specter of atheism. He clearly understood – and empathized with – the widespread impulse to deny, or gloss over, the disturbing implications of his theory. But he urged readers of the *Origin* to resist the impulse. "Nothing is easier," he warned,

than to admit in words the truth of the universal struggle for life, or more difficult – at least I have found it so – than constantly to bear this conclusion in mind. Yet unless it be thoroughly engrained in the mind, the whole economy of nature . . . will be dimly seen or quite misunderstood.<sup>14</sup>

But the perceived antireligious import of Darwinism was not the only reason for its failure to win acceptance in America. Equally if not more important was the largely unremarked yet fundamental conflict between the evolutionary view of humanity's embeddedness in natural processes and the nation's chief geopolitical project: the settlement and economic development of the continental landmass. As Tocqueville observed, most European settlers were "insensible" to the beauty and wonder of the wilderness. "Their eyes," he wrote, "are fixed on another sight: [their] . . . own

13 "In Memoriam" (1850), which he had begun writing in 1833.

14 Charles Darwin, *On the Origin of Species* (New York: Mentor, 1958), 74.

march across these wilds, draining swamps, turning the course of rivers, peopling solitudes, and subduing nature."<sup>15</sup> That westward march, aimed at transforming the continent's natural resources into marketable wealth as rapidly as possible, was executed under the aegis of such slogans as 'Manifest Destiny,' the 'Conquest of Nature,' and, above all, 'Progress.'

The belief in 'progress,' a shorthand label for a grand narrative of history, was post-Civil War America's most popular secular creed. It held that our history is, or is rapidly becoming, a record of the steady, cumulative, continuous expansion of knowledge of – and power over – nature, a power destined to effect an overall improvement in the conditions of life. On this view, nature has a critical role in the unfolding of material progress – but a role largely defined by human purposes. Because it is an indispensable source of our knowledge and our raw materials, nature is most productively conceived as wholly Other – an unequivocally independent, separate, hence exploitable entity. The combined authority of the progressive ethos and the Christian faith accounts for much of nineteenth-century America's aversion to the Darwinian view of nature and, by the same token, the popularity of Social Darwinism. Though seemingly an offshoot of evolutionary biology, Social Darwinism was in fact a perversion of the new science. It turned on the idea of "the survival of the fittest," a catchphrase given worldwide currency by Herbert Spencer, the most influential popularizer of evolutionary theory. It was Spencer who did most to transform the idea of biological evolution into a

15 Alexis de Tocqueville, *Democracy in America*, ed. Phillips Bradley (New York: Alfred A. Knopf, 1946), II, 74.

full-fledged rationale – Social Darwinism – for the ruthless practices of ‘free market’ capitalism, as exemplified by the robber baron generation of American businessmen.<sup>16</sup>

The massive incursion of white settlers into the Western wilderness enacted the American belief in nation-building progress. In the popular culture, the successive stages of that great migration were represented by an imaginary boundary – a *moving* boundary – separating the built environment of the East from the expanse of undeveloped, ostensibly unowned – or, as it was called, ‘free’ – land of the West. Never mind that the land already was inhabited; the westward movement of the boundary represented the serial imposition of a beneficent Civilization on an unruly Nature, including its ‘savage’ inhabitants. The boundary’s westward movement was a gauge of national progress, and in tacit recognition of its ideological significance, it was given a proper name – *the frontier* – and accorded iconic status as an actual line – usually a broken or dotted line – imprinted on maps and documented by demographic data regularly collected, revised, and published in official reports of the United States Census. Eventually the word and the icon were compressed into a single term, ‘the frontier line,’ visual marker of the ‘conquest of nature.’ *Conquest* was an accurate name for it. After comparing America’s treatment of nature with that of

other nations over the ages, one historian concluded that “the story of ... [the United States] as regards the use of forests, grasslands, wildlife and water sources is the most violent and most destructive in the long history of civilization.”<sup>17</sup>

It is not surprising that a people busily plundering that Western cornucopia had little use for Darwinism. The ravaging of the West was not easily reconciled with the view that human life is inextricably enmeshed in natural processes. What made the conventional idea of a separate nature especially popular, under the circumstances, was its hospitality to either of the reigning – and contradictory – conceptions of the national terrain. Most Americans, it would seem, regarded that terrain as a hostile wilderness, a state of nature tolerable only insofar as it could be subjected to human domination. At the same time, however, a vocal minority took the opposite view. A cohort of gifted artists and intellectuals, many of them adherents of European Romanticism, regarded Nature as the embodiment of ultimate meaning and value. Landscapes embodying that Romantic conviction were represented in the paintings of Thomas Cole, Frederic Church, and the other members of the Hudson River School; in the writings of Emerson, Thoreau, and a host of other poets, essayists, novelists, and philosophers; and in the work of conservation activists like John Muir, Gifford Pinchot, and Teddy Roosevelt. In the press and the popular arts of mid-century America, a sentimental, quasi-religious cult of Nature helped to vent the pathos aroused by the spectacle of ravaged forests, slaughtered bison, and ‘vanishing Americans.’

17 Fairfield Osborn, *Our Plundered Planet* (Boston: Little Brown, 1948), 175.

16 Richard Hofstadter, *Social Darwinism in American Thought, 1800 – 1915* (Philadelphia: University of Pennsylvania Press, 1944); Ronald L. Numbers, *Darwinism Comes to America* (Cambridge, Mass.: Harvard University Press, 1998); Leo Marx, “The Domination of Nature and the Redefinition of Progress,” in Leo Marx and Bruce Mazlish, eds., *Progress: Fact or Illusion?* (Ann Arbor: University of Michigan Press, 1996), 201 – 218.

The ambiguity inherent in the idea of nature is central to the apocalyptic outcome of *Moby-Dick*, Herman Melville's epic account of America's violent assault on the natural world. Melville was so impressed by the irrational ferocity of the assault, in fact, that he instructs his narrator, Ishmael, to seek out its origin and its consequences. The inquiry rests on two assumptions: first, that the relations between American society and nonhuman nature are typified by whaling, a technologically sophisticated, for-profit industry devoted to killing whales; and, second, that the psychic roots of the enterprise are exemplified by Captain Ahab's obsession with wreaking revenge on a particular sperm whale whose distinguishing feature is his preternatural whiteness. (The sperm whale, not coincidentally, is the largest living embodiment of nature on the face of the earth.) What is it about the whiteness of this whale, Ishmael asks, that provokes Ahab's ungovernable hatred? Melville devotes an entire chapter to the inquiry – a chapter without which, Ishmael insists, the whole story would be pointless.

After an exhaustive analysis of every meaning of whiteness he can think of, it occurs to Ishmael that the uncanny effect of the color – or is it the absence of color? – is not attributable to any one of its meanings, but rather to its affinity, like that of material nature itself, with myriad, often antithetical meanings – or, in a word, to its ambiguity. At times, he observes, whiteness evokes disease, terror, death; and at others, “the sweet tinges of sunset skies and woods, and the gilded velvets of butterflies, and the butterfly cheeks of young girls.” But then, Ishmael recalls, the beauty of natural objects is no more inherent in their physical properties than their color is; actually, he realizes that their seeming

beauty is the product of “subtle deceits” of light and color, and that in fact “all deified nature paints like a harlot, whose allurements cover nothing but the charnel-house within.” All of which leads him to conclude that Ahab's obsession is in large measure attributable to the maddening blankness – the essential illusoriness – of nature, its capacity to provoke yet endlessly resist his rage for meaning. In the end, the mad captain's anger overwhelms his reason, and the tragic outcome, as Ishmael interprets it, reveals the incalculable cost – and futility – of the human effort to grasp the ultimate meaning of nature.

The year 1970 is when the ecological ‘crisis’ caught up with the idea of nature. Public anxiety about the devastation of the natural world had grown steadily in the aftermath of Hiroshima and the onset of the nuclear arms race. But it was not until 1970, the year of the first Earth Day, that the threat to the human habitat attracted nationwide attention. And it was in 1970 that the emerging environmental movement first displayed its political power. In was then that President Nixon proposed, and Congress enacted, the National Environmental Policy Act, the Clean Air Act, and the act establishing the Environmental Protection Agency. A large cohort of scientists and engineers was recruited to work on the problems involved in the accelerating rate of air and water pollution, climate change, and species extinction. At about that time, it became evident that the word *environment* was supplanting the word *nature* in American public discourse.

This was no coincidence. Natural scientists had long recognized the ambiguity and instability inherent in ordinary language, especially in words, like *nature*, used to describe the biophysical world. For centuries, after all, ‘Nature’

conceived as a separate entity had served as an all-purpose metaphysical Other. It had been depicted as the creation of God and the habitation of Satan, as harmonious and chaotic, beneficent and hostile, as something to be revered and something to be conquered. Over its history, indeed, the word *nature* had been encrusted with a rich deposit of meaning and metaphor, and practicing scientists often found themselves looking for ways to avoid, or circumvent, the imprecision and ambiguity.

In a revealing passage of the *Origin*, for example, Darwin feels compelled to defend himself for having alluded to natural selection as “a ruling power or Deity.” It is difficult, he explains, “to avoid personifying the word Nature,” and besides, “everyone knows what is meant and is implied by such metaphoric expressions.” But Darwin is not apologizing. An accomplished writer of English prose, he appreciates the beauty and power of figurative language, and he is not about to dispense with it. Nonetheless, as if to prove that he knows what the word *nature* actually means in scientific practice, he grudgingly offers this stripped-down, or positivist, definition: “I mean by Nature,” he writes, “only the aggregate action and product of many natural laws, and by laws the sequence of events as ascertained by us.”<sup>18</sup>

Darwin’s recourse to this bloodless, ungraspable, if scientifically unobjectionable definition of nature was prophetic. It prefigured the partial eclipse of *nature* by *environment* in our time. The signal merits of *environment*, as compared with *nature*, are its unequivocal materiality, and what might be called its ideological neutrality or objectivity. It refers to the entire biophysical surround – or *environ* – we inhabit; it implies no distinc-

tion between human and other forms of life; it encompasses all that is built and (so to speak) unbuilt, the artificial and the natural, within the terrain we inhabit. Besides, as the related verb, *to environ*, indicates, most environments palpably are products of human effort. It is not difficult to understand, then, why this matter-of-fact word proved to be more acceptable than *nature* to people coping with the practical problems created by the degradation of ‘nature.’ But there is a troubling irony here. What recently has proven to be a serious shortcoming of the idea of a separate nature – its hospitality to a virtually limitless range of moral, religious, and metaphysical meaning – had for centuries been the reason for its immense appeal as a subject of art and literature, theology and philosophy, or, indeed, virtually all modes of thought and expression.

But to return to the final decades of the twentieth century when, as I noted at the outset, the loss of status and currency suffered by the idea of nature became obvious. In those years the work of avant-garde artists and intellectuals was filled with predictions of nature’s imminent demise. In an influential 1984 essay, Fredric Jameson, a prominent theorist of postmodernism, argued that the disappearance of nature was a necessary precondition for the emergence of the postmodern mentality. “Postmodernism is what you have,” he asserted, “when the modernization process is complete and nature is gone for good.”<sup>19</sup> With characteristic postmodern tendentiousness, Jameson assumes that nature is a cultural construction – a mere product of ‘discourse’ – and emphatically *not* an actu-

19 Fredric Jameson, *Postmodernism, or the Cultural Logic of Late Capitalism* (Durham, N.C.: Duke University Press, 1991), ix.

18 Darwin, *Origin of Species*, 88.

al topographical or biophysical entity. From his idealist perspective, the dominant American idea of nature – nature primarily conceived as a terrain or other biophysical actuality – is meaningless. In Jameson’s view, that usage, with its implicit claim to unmediated knowledge of the material world, is epistemologically naive. Nature in that sense, he is saying, is gone for good because it epitomizes the age-old illusion that it is possible to arrive at a direct, wholly reliable relation with material reality.

In *The Death of Nature* (1989), Carolyn Merchant laments the demise of a widely accepted idea of nature, but in her view it died some four centuries ago. The authentic, biologically grounded concept of an organic nature actually was supplanted – though perhaps only temporarily – by the mechanistic, male-oriented Newtonian-Cartesian philosophy that accompanied the seventeenth-century Scientific Revolution. The basic model for that philosophy was the machine, and it has

permeated and reconstructed human consciousness so totally that today we scarcely question its validity. Nature, society, and the human body are composed of interchangeable atomized parts that can be repaired or replaced from outside. The ‘technological fix’ mends an ecological malfunction . . . . The mechanical view of nature now taught in most Western schools is accepted without question as our everyday, commonsense reality . . . . The removal of animistic, organic assumptions about the cosmos constituted the death of nature.<sup>20</sup>

But Merchant, a committed environmentalist, leaves open the possibility of

20 Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (San Francisco: Harper, 1989), 193.

resurrecting and refining the premodern, organic idea of nature. Perhaps, she implies, the desperation induced by the accelerating ecological crisis will lead mankind to repudiate the mechanical view of nature and reaffirm a humane organicism.<sup>21</sup>

Among the prominent obituaries for the idea of nature, however, the most pertinent to my argument is Bill McKibben’s *The End of Nature* (1989). He contends that nature came to an end, both as a discrete biophysical entity and as a meaningful concept, when the Earth’s atmospheric envelope was penetrated – and its filtering capacities damaged – by greenhouse gases and other manufactured chemicals.<sup>22</sup> By encompassing all of Earth’s space, the expanding technological power of modern industrial societies has rid the planet of unaltered nature. The last remaining patches of pristine wilderness are now wrapped in a layer of man-made atmosphere.

In McKibben’s view, however, the most serious consequences of the degradation of material nature are conceptual. They are at once psychological, moral, and spiritual. What chiefly concerns him is the impoverishment of human thought. “We have killed off nature,” he writes, “that world entirely independent of us which was here before we arrived and which encircles and supported our human society.” It is as if the real meaning and value of the ancient concept of nature only became apparent after technological ‘progress’ had made it obsolete. We “have ended the thing

21 Carolyn Merchant, *Radical Ecology: The Search for a Livable World* (New York: Routledge, 1992).

22 Subsequent observations of ‘global warming’ are widely accepted in the scientific community as evidence of the man-made transformation of Earth’s atmospheric envelope.

that has defined . . . nature for us," he writes, "– its separation from human society."<sup>23</sup>

The importance McKibben assigns to the erasure of nature's separateness distinguishes *The End of Nature* from other laments about the disappearance of nature.<sup>24</sup> To my knowledge, he is the only writer who attaches vital significance to this seldom noted, seemingly banal attribute of the received idea of nature. But exactly why is the independence of nature so important? Although McKibben does not adequately answer this hovering question, he provides a telling clue to its profound significance for him. "We have deprived nature of its independence, and that is fatal to its meaning," he writes. And why is that? Because, he asserts, "nature's independence is its meaning, without it there is nothing but us."<sup>25</sup> It is an astute observation and a poignant confession: without nature there is nothing but us. For McKibben, like many ardent environmentalists, nature is at bottom a theological or metaphysical concept. In his vocabulary, nature refers to the foundational character – the ultimate meaning – of the cosmos. But if the idea of nature is to continue serving as an effective repository of that belief, he is saying, it must not be deprived of its traditional status as a separate, discrete entity. To compromise its independence, as Darwinism inescapably does, and as McKibben movingly testifies, is to expose its devotees to the skeptical in-

23 Bill McKibben, *The End of Nature* (New York: Random House, 1989), 96, 64.

24 Raymond Williams calls attention to the idea of nature's separateness in "The Idea of Nature," *Problems of Materialism and Culture* (London: Verso, 1980), 67–85.

25 McKibben, *The End of Nature*, 58.

fluence of cosmic loneliness or – in a word – atheism.

The tenability of the idea of wilderness, the oldest and most popular American variant of the idea of nature, also was called into question at the end of the century. In a provocative 1995 essay, "The Trouble with Wilderness; or, Getting Back to the Wrong Nature," William Cronon, a prominent environmental historian, precipitated a heated controversy by asserting that the popular notion of a pristine American wilderness, or 'virgin land,' embodies a racist or colonialist falsification of the historical record.<sup>26</sup> Cronon had established the empirical basis for this judgment in *Changes in the Land*, his seminal 1983 study of the transformation of the New England terrain, long before the arrival of Europeans, by the indigenous peoples of North America. But now, with his 1995 essay, he shocked many environmentalists, for whom the idea of the unsullied American wilderness is sacrosanct, with plain talk about its covert meaning. By the time of the alleged European "discovery" of the "new world," he argues, there no longer was anything "natural" about it. Far from "being the one place on earth that stands apart from humanity," he writes, the American wilderness is "entirely the creation of the culture that holds it dear." Actually, the mythic image of a "virgin, uninhabited land" was an ideological weapon in the service of the white European conquest of the Americas, and it was "especially cruel when seen from the perspective of the Indians who had once called that land home."

26 Cronon, ed., *Uncommon Ground*, 69–90. For a comprehensive collection of the arguments, pro and con, including Cronon's essay, see J. Baird Callicott and Michael P. Nelson, eds., *The Great New Wilderness Debate* (Athens: University of Georgia Press, 1998).

And yet Cronon, an ardent environmentalist and outdoorsman, cannot bring himself to repudiate the idea of wilderness. To be sure, he clearly explains what makes it objectionable. “Any way of looking at nature that encourages us to believe that we are separate from nature – as wilderness tends to do – is likely,” he concedes, “to reinforce environmentally irresponsible behavior.” But he also acknowledges that respect for wilderness entails respect for nonhuman forms of life. Like many environmentalists, in fact, he had responded to the prevalence of arrogant anthropocentrism – especially the unfeeling disregard for the well-being of animals – by embracing an ecocentric version of species egalitarianism. Now, seemingly contradicting himself, he concedes that the idea of the “autonomy of nonhuman nature . . . [may be] an indispensable corrective to human arrogance.” He admits that he is torn between his viewpoint as a disinterested scholar and as an environmental activist, or, put differently, between historically informed skepticism about – and reverence for – the contested idea of wilderness. In the end, Cronon fails to resolve his ambivalence. But his failure strongly suggests that the idea of wilderness, like the pre-Darwinian idea of nature as a separate, largely independent entity, is incoherent and irremediably unstable.

In the event, however, Cronon proposes a way to rescue the notion of pristine, unaltered nature. He urges American environmentalists to follow the lead of their patron saints, Henry Thoreau and John Muir, and replace the idea of wilderness with the simpler, less problematic idea of wildness. (After founding the Sierra Club in 1892, Muir had chosen Thoreau’s famous epigram “In Wildness is the preservation of the World” as its official motto.) The chief merit of wild-

ness as a locus of value and meaning, he notes, is that, unlike wilderness, it “can be found anywhere: in the seemingly tame fields and woodlots of Massachusetts, in the cracks of a Manhattan sidewalk, even in the cells of our own body.” Whereas wilderness is a particular kind of place (one that exhibits no signs of human intervention), wildness is an attribute of living organisms that may turn up anywhere; a blue jay or a daisy in a Manhattan park, he contends, is no less wild than its counterpart in the Rocky Mountains. As might be expected, Cronon’s critics were quick to note that there is something tenuous, even quixotic, about his notion that a change of vocabulary could resolve the debate about the value of wilderness. Still, his proposal does call attention to the critical shortcomings that the idea of wilderness shares with the idea of a separate nature. As he warns, and as the devastation of the American wilderness attests, the belief that we humans occupy a realm of being separate from the rest of nature encourages what he all-too-politely refers to as “environmentally irresponsible behavior.”

In recent years several ecologically oriented writers, including Cronon, have endorsed a promising way to salvage the venerable idea of nature.<sup>27</sup> They propose to rehabilitate the compelling distinction, favored by Hegel and Marx, between two fundamentally distinct, historically grounded states of nature, to be called first nature and second nature. In this usage, *first nature* is the biophysical world as it existed before the evolution

27 William Cronon, *Nature’s Metropolis: Chicago and the Great West* (New York: W. W. Norton, 1991), xviiif; Janet Biehl, *Rethinking Ecofeminist Politics* (Boston: South End Press, 1991), 117 – 118.

of *Homo sapiens*, and *second nature* is the artificial – material and cultural – environment that humanity has superimposed upon first nature. On this view, manifestly, nature is all. Unlike the traditional idea of a separate nature, the first nature/second nature distinction is consonant with the received history of nature, and especially with the primacy, in that history, of the process of biological evolution by natural selection and the emergence of life on Earth. During all but the final minutes, as it were, of this historical narrative, first nature was all that existed.

But then, beginning with the emergence of life and – eventually – *Homo sapiens*, second nature took over, and gradually transformed, an increasingly large area of the planet's surface. Biologists have taught us that every organism modifies its habitat in some degree, but the extent of humanity's modification of Earth exceeds that of other species by orders of magnitude. Second nature is in large measure a human artifact, and in recent centuries the rapidly accelerating expansion of humanity's power – and its territorial reach – has had a devastating impact on global ecosystems. The result is a grave crisis in the relations, or putative 'balance,' between first and second nature. One of the singular merits of the first nature/second nature distinction is the clarity it affords us in characterizing the uniqueness – for good and ill – of humanity and its role in the overall history of nature. By dividing the concept of nature along an historical, or evolutionary, fault line, the first nature/second nature concept enables us to do full justice to humanity's unmatched power to create a unique material and cultural environment. At the same time, however, it has the inestimable merit of validating the idea of a single, subdivided yet fundamentally unified realm of nature.