

SUSTAINABLE DEVELOPMENT AND THE DOMINATION OF NATURE: SPREADING THE SEED OF THE WESTERN IDEOLOGY OF NATURE

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This article analyzes the role played by legal institutions in the process of globalization. In particular, it focuses on the deep relationship between sustainable development—the driving force of international environmental law—and the spread of free market democracy. The article argues that sustainable development is not merely a reflection of the successful export of Western ideology, but is itself a force of ideological imperialism whereby Western values not shared nor willingly accepted by other nations are imposed upon them through the implementation of the legal principle. Along the way, the article sheds light on a reinvigorated debate regarding the global spread of Western ideology. By describing in detail the way in which Western ideas of nature are not shared by other nations, the article provides strong evidence that, in the context of international environmental law, legal norms are not necessarily expressive of universally-shared principles. Thus, as critics of Western ideological hegemony argue, the spread of Western ideas does indeed result in the eradication of the ideas of nature held by other cultures.

INTRODUCTION

The end of the millennium is witness to an unprecedented spread of free-market democracy. The success of foreign policy,¹ in

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¹ See Joel R. Paul, *The Geopolitical Constitution: Executive Expediency and Executive Agreements*, 86 CAL. L. REV. 671, 749 (1998) (noting that the goals of American foreign policy after World War II are the suppression of communism and the spread of democracy; stating that the spread of democracy is facilitated through promotion of trade and economic

conjunction with the forces of globalization,² has resulted in a virtually unimpeded spread of this Western ideology. One of the hidden ideological premises necessary for the spread of free-market democracy is the concept of nature as a resource, or raw material, separate from human civilization, as well as a willingness to exploit nature in the betterment of human society.³ The spread of free-market democracy and its related ideology of nature, however, raises serious questions about the maintenance and protection of cultural diversity as nations that adopt Western values lose their own. Critics of Western ideological hegemony argue that all cultures are valid and that it is improper and arrogant for Western nations to assume the superiority of their cultural beliefs over the beliefs of others.⁴ Indeed, as far back as 1947, the American Anthropological Society, pointing to the West's tradition of describing cultural inferiority to non-European peoples, cautioned the United Nations that universal principles had the potential of erasing cultural diversity.⁵ Globalization has recently reinvigorated the debate of Western ideological imperialism in contexts ranging from human rights⁶ to copyright.⁷ As global treatment of environmental issues continues to increase, similar concerns must also be considered in the context of environmental protection.

stability); Ronnie L. Podolefsky, *The Illusion of Suffrage: Female Voting Rights and the Women's Poll Tax Repeal Movement After the Nineteenth Amendment*, 73 NOTRE DAME L. REV. 839, 885 n.204 (1998) (stating that the focus of American foreign policy is to promote democracy); Kenneth A. Durst, Note, *From Containment to Cooperation: Collective Action and the Wassenaar Arrangement*, 19 CARDOZO L. REV. 1079, 1079-81 (1997) (arguing that now that U.S. foreign policy has succeeded in stemming the spread of communism, economy has become of equal concern); John D. Griffin, Comment, *The Chinese Student Protection Act and "Enhanced Consideration" for PRC Nationals: Legitimizing Foreign Policy While Averting False Positives in Asylum Law*, 66 U. COLO. L. REV. 1105, 1118 (1995) (noting that the goal of American foreign policy is the spread of democratic capitalism).

² See generally Alex Y. Seita, *Globalization and the Convergence of Values*, 30 CORNELL INT'L L.J. 429 (1997).

³ For a general analysis of the institutional basis for this ideology, see *infra* Section I. This ideology will be referred to throughout the text as the ideology of "separation and domination."

⁴ Members of the school of critics are generally referred to as cultural relativists. Cultural relativism is the belief that all cultures are valid on their own terms, and the claim that Western values are shared universally is a thinly disguised ethnocentrism. See Isabelle R. Gunning, *Arrogant Perception, World-Travelling and Multicultural Feminism: The Case of Female Genital Surgeries*, 23 COLUM. HUM. RTS. L. REV. 189, 190-91 (1992).

⁵ See Dianne Otto, *Rethinking the "Universality" of Human Rights Law*, 29 COLUM. HUM. RTS. L. REV. 1, 7 (1997).

⁶ See *id.* at 1; see generally Jerome J. Shestack, *Globalization of Human Rights Law*, 21 FORDHAM INT'L L.J. 558 (1997).

⁷ See generally Neil Weinstock Netanel, *Asserting Copyright's Democratic Principles in the Global Arena*, 51 VAND. L. REV. 217 (1998).

This article will consider both the way in which international legal norms provide for the spread of the Western ideology of separation and domination, as well as the impact the spread of this ideology will have on international environmental protection. The article argues that the ideology of separation and domination is a particularly Western ideology, rooted in the institution of free-market democracy and not shared by other nations. It then considers the deep connection between the successful spread of free-market democracy and the rise of the driving norm of international environmental law—the principle of sustainable development.⁸ The article argues that sustainable development is not simply a reflection of the successful export of Western ideology, but is itself a force of ideological imperialism whereby Western values not shared or willfully accepted by other nations are unconsciously imposed upon them through the language and implementation of the principle.

Having recognized the power of globalization, in conjunction with the norm of sustainable development, to spread the Western environmental ideology, the article then will examine the potential consequences of the spread of this particular Western notion of nature. First, the article will consider whether the spread of Western culture and the resulting loss of cultural diversity are themselves harmful acts. Second, it will argue that, even if the loss of cultural diversity resulting from the spread of Western ideas of nature is defensible, the ideology of nature underlying sustainable development and free-market democracy will cause significant long-term harm to the environment.

The first section of the article will examine the ideology of nature developed by the institutions of modern Western capitalism and democracy—that is, the idea of nature as separate from man, subject to man's domination, and valued as a resource for the betterment of man's society. After a brief comparison of this ideology with other ideologies of nature developed in non-Western societies, the second section will turn to sustainable development. It will consider the link between the spread of this ideology of nature and the rise of the norm of sustainable development, and will also analyze the way in which the implementation of sustainable development further enables the spread of the Western ideology of nature associated with free-market capitalism. Together, the second section concludes, these

⁸ For a general introduction to the principle of sustainable development and its central role in international environmental law, see *infra* Section III.

forces will continue to increase the influence of this Western ideology on responses to international environmental problems.

The third section of the article will consider the validity of the spread of the ideology of separation and domination. First, it will explain the recently revitalized argument against ideological hegemony that has arisen in the wake of globalization, and will examine the spread of the Western idea of nature within this context. The section will then suggest a separate reason for reconsidering its spread, concluding that the spread of the ideology of separation and domination associated with free-market democracy and sustainable development ultimately will result in significant environmental degradation.

I. THE IDEOLOGY OF FREE-MARKET DEMOCRACY: SEPARATION, DOMINATION, AND NATURE AS A RESOURCE

A. *Introduction, Limitations, and a Brief Roadmap*

In his book, *A Scientist in the City*, James Trefil considers the city as a part of nature.⁹ While man is clearly one of the dominant species in the city ecosystem, the city is also host to a great number of species that live, eat, and reproduce alongside the city's human inhabitants. The concept of the city as an ecosystem breaches the commonly held conception of the relation between man and nature. Simply put, one of the dominant metaphors in Western culture conceives of man and nature as separate from and in opposition to one another.¹⁰ Examples

⁹ See generally JAMES TREFIL, *A SCIENTIST IN THE CITY* (1994). Trefil explains his purpose in the first chapter of the book:

What is a city?

There are many answers you can give to this question, most of them equally "right." Cities are large collections of people, they are hubs of commerce and industry, they form the nodes of national and international transportation networks. Each of these points of view adds something to our understanding of our great urban areas.

What I want to do in this book is suggest another point of view—another way to look at cities—that can add another dimension to this understanding. This other point of view is that of the natural scientist, who sees the various parts of cities as examples of the laws of nature in operation, and the whole as a system that can be described in much the same way as other systems in nature.

Id. at 3–4.

¹⁰ See generally MAX OELSCHLAEGER, *THE IDEA OF WILDERNESS: FROM PREHISTORY TO THE AGE OF ECOLOGY* (1991) (noting that virtually all of human history can be conceived of as the struggle of man to overcome hostile nature).

of this ideology are as prevalent in the law¹¹ as they are in our folklore.¹² Perhaps the most stark example of this division is the notion of the American Frontier. The idea of the Frontier is generally conceived of as a line between the ongoing press of human culture and wilderness.

Although the idea of man and nature as separate is widely accepted, it is by no means the only way to conceive of the man/nature relationship. Anthropologists have identified a number of different metaphors for our understanding of nature. These include: (1) nature as a limited resource on which humans rely; (2) nature as balanced and interdependent; and (3) the model of nature versus society, characterized by the market's devaluation of nature, the separation from nature that leads to failure to appreciate it, and the American idealization of the environmentalism of primitive peoples.¹³ This section of the article will analyze the relationship between free-market democracy and the metaphor of nature as separate from society and devalued by it. It argues that this particular metaphor of nature and free-market democracy are deeply linked.

A brief outline of the analysis will be helpful. A variety of historical factors have come to shape Western conceptions of man and nature as separate. These factors interact in a complex dynamic, and any attempt to treat them separately will fail to perceive, to a degree, the synergy created by their interaction. However, it is possible, and for purposes of exposition, necessary, to disentangle some of the more important sources of our understanding of environment from this mix. The section will start by describing the way in which early influences on Western culture,¹⁴ particularly the Judeo-Christian tra-

¹¹ A number of environmental statutes adopt this perspective. See, e.g., National Environmental Policy Act, 42 U.S.C. § 4331 (1995) (recognizing the profound impact of man's activity on the natural environment).

¹² Children's stories and other myths provide a variety of images capturing this division. For example, men go into the wilderness to slay dragons, children are hunted by cunning wolves, and ugly frogs are transformed into handsome princes. In all of these images, nature is portrayed as ugly, scary, or threatening, as compared to the beauty and safety of man's world. Moreover, man's role is frequently cast as the slayer or dominator of nature.

¹³ See WILLET KEMPTON, ET AL., ENVIRONMENTAL VALUES IN AMERICAN CULTURE 39–40 (1995).

¹⁴ A number of texts have taken as their task the treatment of the concept of environment in society. See generally CLARENCE J. GLACKEN, TRACES ON THE RHODIAN SHORE: NATURE AND CULTURE IN WESTERN THOUGHT FROM ANCIENT TIMES TO THE END OF THE EIGHTEENTH CENTURY (1967); WILLIAM LEISS, THE DOMINATION OF NATURE (1972); CAROLYN MERCHANT, THE DEATH OF NATURE: WOMEN, ECOLOGY AND THE SCIENTIFIC REVOLUTION (1980); RODERICK NASH, WILDERNESS AND THE AMERICAN MIND (rev. ed.

dition and early philosophy, planted the seeds of this duality—separating man from nature and making man both superior to and dominant over nature. The next part will consider the manner in which economic and scientific forces co-opted this conception—turning nature into an object devoid of any intrinsic value, existing solely to be explored and exploited by man. The section then will consider how the conceptions of nature associated with the new scientific and economic ideology were adopted by democratic institutions.

Of course, it is not the purpose of this section to argue that the ideology of separation and domination is simply and completely traceable to only economic and scientific forces that in turn have influenced political goal-setting. Thus, the last portion of this section turns to the recent movements of European Romanticism and American Transcendentalism in an attempt to demonstrate how other factors, although not “driving” the ideology of separation and domination, have influenced it. The section considers Romanticism and Transcendentalism in part as responses to the objectification of nature that resulted from scientific and economic influences. It describes not only how these movements provided a new basis for re-instilling in nature a subjective value, but, at the same time, indirectly exacerbated and modified the ideology of separation.

B. *Early Influences: The Seeds of Separation and Domination*

Of the many forces that have influenced people's understanding of their relation to nature, perhaps the most significant early influence is the conception of nature contained within the Judeo-Christian tradition. The most explicit exposition of the Judeo-Christian idea of man and nature can be found in the stories of Creation, where man is created separate from the natural world and given dominion over it by God. According to Genesis: “In the beginning, God created the heavens and the earth. And the earth was without form, and void; and darkness *was* upon the face of the deep. And the Spirit of God was moving upon the face of the waters.”¹⁵ On the third day, the waters were confined and land and vegetation were created. On the fifth day, He created the creatures of the sea and the birds. On

1973); OELSCHLAEGER, *supra* note 10; JOHN PASSMORE, *MAN'S RESPONSIBILITY FOR NATURE: ECOLOGICAL PROBLEMS AND WESTERN TRADITIONS* (1974).

¹⁵ *Genesis* 1:1–1:2 (King James).

the sixth day, God created animals and, finally, man.¹⁶ In the Judeo-Christian tradition, nature is the result of an orderly, hierarchical succession, where man is created separate from the land, seas, flora, and fauna. As the last of God's creations, man was given dominion over the rest of it. There is little equivocation regarding the extent of this dominion over the rest of the world:

And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth. So God created man in his *own* image, in the image of God created he him; male and female created he them. And God blessed them, and God said unto them, Be fruitful and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth. And God said, Behold, I have given you every herb bearing seed, which *is* upon the face of all the earth, and every tree, in the which *is* the fruit of a tree yielding seed, to you it shall be for meat. And to every beast of the earth, and to every fowl of the air, and to everything that creepeth upon the earth, wherein *there* is life, I *have given* every green herb for meat: and it was so.¹⁷

Not just is humankind created separately from the animal and plant kingdoms, but more importantly, humankind is separated from others by being created in God's image.¹⁸ Moreover, humankind is given total dominion over the natural world; humankind is created to rule and subdue it.¹⁹ The Judeo-Christian tradition thus has set a founda-

¹⁶ See *id.* at 1:5–1:27.

¹⁷ *Id.* at 1:26–1:30.

¹⁸ See Lynn White, Jr., *The Historical Roots of Our Ecologic Crisis*, SCIENCE, Mar. 10, 1967, at 1203, reprinted in WESTERN MAN AND ENVIRONMENTAL ETHICS 18–30 (Ian G. Barbour ed., Addison-Wesley 1973) (noting the fact that man made in God's image creates a radical split between man and nature).

¹⁹ The second creation myth of the Bible further supports the conception of domination. In the myth of the fall from the Garden of Eden, Adam is created from dust, followed by plants and woman. See *Genesis* 2:4–2:23. Adam is created to tend to the Garden as a caretaker. See *id.* at 2:15. "The vocabulary of the myth is that of a peasant farmer; the plants are domesticated and the gardener of Eden tends them . . . he is a caretaker, not a farmer." GLACKEN, *supra* note 14, at 153 (internal citation omitted). In other words, in this Edenic paradise, work is not necessary, and man and nature live in a harmonious relationship. However, when Eve partakes of sin, Adam and Eve are expelled from the Garden into a

tion for modern people to conceive of themselves as separate from and superior to nature.²⁰ It places people in a separate sphere from the rest of the world's creations and provides an explicit basis for people to dominate this other world.

A similar view of nature is also found in early Western philosophy.²¹ The Greek tradition also substantiates the man/nature dichotomy and dominion themes. The image of environment as resulting from the intelligent, planned, and well-thought-out acts of a creator are strong in Greek thought.²² Much Greek thought also suggests that man has been given a dominant and special place in this well-planned world.²³ Indeed, one myth told by the Sophist Protagoras to his audi-

world of disorder in nature, and man will now have to toil in nature in order to survive. See *Genesis* 3:17 ("Cursed is the ground for thy sake; in sorrow shall thou eat of all the days of thy life"). Man's role is thus changed from caretaker of an abundant nature to a role of toil, where nature no longer provides for him. Instead, he must craft and control nature for his survival.

²⁰ Many scholars also point to the fact that man named the animals as further support for the understanding that man was superior to nature. See *Genesis* 2:19. ("And out of the ground the Lord God formed every beast of the field and every fowl of the air; and brought them unto Adam to see what he would call them: And whatsoever Adam called every living creature, that was the name thereof.").

²¹ It is, of course, folly to reduce the sources of this ideology to just Western philosophy and religion. As noted by Glacken, even many of the ideas associated with the Greek and Judeo-Christian tradition have various complex antecedents. For example,

The conception of the earth as an orderly harmonious whole, fashioned either for man himself or, less anthropocentrically, for the sake of all life, must be a very ancient one; probably we must seek its ultimate origin in earlier beliefs in the direct personal intervention of the gods in human affairs or in the personification of natural processes in the naming of gods of the crops, and in the old myth of the earth-mother so widespread in the ancient Mediterranean world. There are hints that this conception was established long before the Greeks.

GLACKEN, *supra* note 14, at 36. It is important, however, to note the sense of separation and domination contained in both the philosophical and religious traditions due to their particularly strong role in the development of Western culture.

²² In Plato's *Timaeus*, for example, the earth-creator, based on earlier mythological themes of God as needleworker, potter, and weaver, is analogized to an artisan who brings the world into a state of order, creating the universe of fire and earth and later inserting air and water between them. See *id.* at 44-45. Aristotle, while not necessarily a believer in an artisan deity, also argues that nature can be understood by analogizing its creation to the making of machines by man. ARISTOTLE, *PARTS OF ANIMALS* 55-59 (The Loeb Classical Library ed., William Heinemann Ltd. 1945).

²³ Xenophon, for example, in remarking on a conversation of Socrates', noted that it was Socrates' belief that nature is ordered for the benefit of man. Socrates observed that there is light for everyday tasks but dark which is needed for rest. The seasons and earth were created so as to provide man with a continuous supply of food. Fire was created as a defense against cold and dark. Animals, too, were produced for the sake of man, who gains

ence is very similar to the organized process in which man was given dominion over nature found in Judaism and Christianity. According to that story:

[T]he gods created living creatures out of earth and fire and ordered Epimetheus and Prometheus to distribute to them their proper qualities. Such qualities were distributed by Epimetheus to each animal according to specific needs. First, animals were given their own niche and domain in order to prevent extinction. For example, the birds were given the ability to fly and thus the domain of the sky, while other animals were given the earth to burrow in. The animals were then given the means of protecting themselves against the elements and then different sources of food. Once Epimetheus had distributed all his qualities to the animals, Prometheus distributed his qualities to man. Prometheus stole the mechanical arts of Hephaestus and Athena, and fire and gave them to man. Man, thus, was endowed with the arts of creation and production. These arts in turn separated man from the animals.²⁴

While many other competing myths existed, foundational secular thought presents a vision of environment strikingly similar to the Judeo-Christian tradition: that nature was the subject of an orderly and divine creation and that nature was separate from and dominated by man.

Thus, the stage had been set. Many of the major sources of Western culture had created a division between man and nature with man in a position of dominance. This basic ideology was co-opted in the modern era. The influence of science and economics, as well as the rise of a new environmental philosophy, resulted in the conceptual divorce of people from nature, as well as the treatment of nature as an object to be exploited in the service of people. The manner in which this occurred is the subject of the next section.

more advantages from the animals than from the fruits of the earth. XENOPHON, *MEMORABILIA AND OECONOMICUS* 297–307 (O.J. Todd trans., Harvard Univ. Press 1923). Aristotle, in *Politics*, expressed his belief that “[a]fter the birth of animals, plants exist for their sake, and that the other animals exist for the sake of man, the tame for use and food, the wild, if not all, at least the great part of them, for food, and for the provision of clothing and various instruments.” ARISTOTLE, *POLITICS* 65 (B. Jowett trans., The Modern Library ed. 1943).

²⁴ GLACKEN, *supra* note 14, at 41.

C. *The Modern Era: Science, Economics, and the New Natural Philosophy*

1. The Influence of Science: Quantification, Objectification, and Dominance of Nature

One major characteristic of the modern era²⁵ is its embrace of science and the scientific method. The rise of science as a cultural force marked a revolution in humankind's understanding of environment.²⁶ It also served to deepen the rift between people and nature and to strengthen the image of people's total domination of nature.

Both the image of the scientist as well as the "language" of science deeply impacted the way in which humankind related to the

²⁵ It is difficult to pinpoint the time of the beginning of the modern era and to identify the innumerable factors which characterize it. Clearly, it has roots in Enlightenment thought, particularly the rise of science, and also shares a strong relationship with the rise of industry and a change from feudalism to mercantilism and, ultimately, to capitalism. While this portion of the article is ostensibly organized along chronological lines, it is not the purpose of the article to suggest one force's primacy in the rise of the modern viewpoint. Rather, it is only a complex interaction of these various forces that gave rise to the modern period. One example considers the interaction of the forces of science, economics, and industry on the rise of the modern city of Manchester, England:

[I]n the late eighteenth century the surplus capital accumulated from years of trade with the Orient and the New World financed the development of a new mode of production: the factory system. The organizing skills perfected over two centuries by English merchants, and the rational use of capital to stimulate as well as satisfy demand, were extended with sudden vigor to revolutionize the apparatus of manufacturing. In 1765 James Hargreaves invented the spinning jenny. During the 1770s Richard Arkwright introduced the water frame for spinning thread. Then in 1785 Edmund Cartwright's power loom completed the transformation of the textile industry to machine production. Along with James Watts' new steam engine, these innovations signaled the end of one long era of human history and the beginning of another. And the driving motive behind the technological development was the pure and simple desire to increase productivity and wealth.

DONALD WORSTER, *NATURE'S ECONOMY: A HISTORY OF ECOLOGICAL IDEAS* 12 (2d ed. 1994).

²⁶ In particular, the scientific revolution marks a change in the metaphor of environment as organism to environment as machine. See generally LEWIS MUMFORD, *THE MYTH OF THE MACHINE: THE PENTAGON OF POWER* (1964). It has been argued that the metaphor of environment as machine has also played a substantial role in allowing man to dominate nature. Carolyn Merchant argues that the machine metaphor changes the idea of nature from a living, active organism to inert matter-in-motion activated by God. This view conceives of nature like a clock, each piece on its own a lifeless part of the full mechanism, acting only when being acted upon. God, in turn, wound the clock, giving motion to these inert pieces. Once nature could be seen as passive and dead, Merchant argues, it was easier to conceive of its manipulation. MERCHANT, *supra* note 14, at 195.

natural environment.²⁷ The scientist became an observer of the natural world and devalued subjective experience in comparison to quantification. The scientist understood the physical world not as a set of sensations resulting from human cognition, but rather as objectively existing data. Indeed, the language of cognitive experience of the physical world, concepts such as "sweet," "smooth," and "heavy," became completely irrelevant to the scientific language of mathematics and physical equations.²⁸ Manipulation of nature also became easier as the world became quantifiable. Scientists did not need to participate in the natural world to manipulate it. Rather, manipulation of physical nature was replaced by manipulation of equations as experience gave way to theory. Under the influence of science, humankind was thus removed from any interaction with nature.²⁹ Instead, scientific man became an observer and manipulator of nature, which had become an object of people's manipulation.

The power of science fundamentally to alter people's perceptions and the utopian vision that resulted from it further entrenched the new scientific view of nature. Nowhere was the belief in the transformational power of science greater than in the work of Francis Bacon. Bacon embraced the transformative possibilities of science with un-

²⁷ For a view of the impact of the forces of modernism on concepts of environment, see generally DONALD WORSTER, *THE WEALTH OF NATURE: ENVIRONMENTAL HISTORY AND THE ECOLOGICAL IMAGINATION* 210–19 (1993) [hereinafter *WEALTH OF NATURE*].

²⁸ OELSCHLAEGER, *supra* note 10, at 78. Oelschlaeger captures the essence of these changes through a description of Galileo:

Galileo led the way into the scientific age in part through his use of the telescope. . . . Although he did not invent the telescope, he was the first to employ it in scientific inquiry. . . . Through the telescope Galileo confirmed the Copernican hypothesis. What he lost was the sweeping field of view of naked eye astronomy, the relation of the Milky Way to the starry sky, and the movement of wandering stars across the ecliptic plane. And perhaps, in his intense concentration, he lost also the sounds and smells of the night and the awareness of himself as a conscious man beholding a grand and mysterious stellar spectacle. Galileo was standing no longer within nature, but outside it. He became a scientific observer apart from nature, for it had been replaced with a theoretical object of inquiry. . . . [Galileo's] world of nature is explicitly not a world of concrete experience. . . . [C]haracteristics capable of mensuration and quantification, and thus arithmetical manipulation, are primary and thus real qualities; felt qualitative experiences are secondary and subjective.

Id.

²⁹ The idea of separation finds its ultimate manifestation in the philosophy of René Descartes. Cartesian dualism separated mind from matter. From this point of view "all human relations to nature are mere epiphenomena." This new philosophy thus contributed to and reflected the new understanding of people and nature that was developing at the time.

qualified optimism. Its use, he suggested, would enable man to build a new Atlantis, where, through a program of scientific study, poverty, sickness, and the rest of the world's ills would be vanquished.³⁰

The scientific program on which the New Atlantis was built was not to be impeded, particularly in its transformation and domination of the environment. Like many of his contemporaries, Bacon "saw humans in the state of nature as savage and barbaric. Civilized humans-in-the-modern-age would employ the power of science to re-make the wilderness, the world with which humans-in-the-archaic-age had empathetically identified themselves."³¹ This led Bacon to envision nothing less than the total transformation of nature in the cause of science. Bacon's language reveals his perspective: "The new man of science must not think that the 'inquisition of nature is in any part interdicted or forbidden.' Nature must be 'bound into service' and made a 'slave,' put 'in constraint' and 'molded' by the mechanical arts."³²

To achieve these goals, the scientists of Bacon's Bensalem³³ were transformed from nature's servants, whose goal it was to assist nature, to nature's exploiters, having the power and mission to change and transform nature. "Bacon's hero was a man of 'Active Science,' busy studying how he might remake nature and improve the human estate. Instead of humility, Bacon was for self-assertiveness: 'the enlargement of the bounds of Human Empire, to the effecting of all things possible.'"³⁴ Bacon's scientists used caves "for all coagulations, indurations, refrigerations, and conservations of bodies . . . [and] the producing also of new artificial metals."³⁵ They, by their art, turned fresh water into salt water³⁶ and used the energy of wind and water.³⁷ They built great houses where they imitated and demonstrated meteors, snow, hail, rain, and thunder.³⁸ In their gardens they "[practiced] likewise all conclusions of grafting and inoculating. . . . And [they] make (by art) in the same orchards and gardens trees and flowers to come ear-

³⁰ See generally FRANCIS BACON, *New Atlantis*, in FRANCIS BACON: ESSAYS, ADVANCEMENT OF LEARNING, NEW ATLANTIS AND OTHER PIECES (Richard Foster Jones ed., 1937) [hereinafter NEW ATLANTIS].

³¹ OELSCHLAEGER, *supra* note 10, at 81–82.

³² Merchant, *supra* note 14, at 169.

³³ See NEW ATLANTIS, *supra* note 30, at 458.

³⁴ WORSTER, *supra* note 25, at 30.

³⁵ NEW ATLANTIS, *supra* note 30, at 480–81 (internal citations omitted).

³⁶ See *id.* at 481.

³⁷ See *id.* at 481–82.

³⁸ See *id.* at 482.

lier or later than their seasons, and to come up and bear more speedily than by their natural course they do.”³⁹ The scientist of Bacon’s New Atlantis no longer assisted nature, but manipulated it and made nature better than it could make itself.⁴⁰

Such a vision abandoned the prevailing ideology of the time, completely rejecting both the prehistoric ideal of life in harmony with nature and the classical ideal of nature as a bountiful world sustaining humankind.⁴¹ Up to the modern era, people had conceived of themselves as dependent on nature.⁴² Now people’s belief in science led them to conceive of nature as an object to be overcome in the “enlargement of the bounds of Human Empire.”⁴³ Nature had become the symbol of savagery while science had become the redeemer of human civilization, a new means to return to the state of grace.⁴⁴ While Bacon was later to qualify his argument that scientific inquiry alone could lead to a new Utopia,⁴⁵ the idea of human society being bettered through the unimpeded application of science to nature was to become a dominant theme of modernism.⁴⁶

2. The Impact of Economics: Changing Nature’s Value

The economics of Western modernism developed, in part, as a response to the new relationships of the industrial revolution. The

³⁹ *Id.* at 482–83 (internal citations omitted).

⁴⁰ See NEW ATLANTIS, *supra* note 30, at 483.

⁴¹ See OELSCHLAEGGER, *supra* note 10, at 81.

⁴² In conjunction with the image of dependence came an ethical concern not to harm humankind’s provider. The pre-Baconian natural philosophy was thus limited to helping nature. Bacon needed to overcome this limitation. The idea of the New Atlantis can, in this light, be perceived as an attempt by Bacon to advocate for the removal of ethical structures against manipulation of nature. See Merchant, *supra* note 14, at 184–85.

⁴³ WORSTER, *supra* note 25, at 30.

⁴⁴ The power of the image of a return to a state of grace was substantial. Bacon played strongly on the story of the fall from the Garden of Eden, as well as on images of gender domination in advocating for the new society. For an analysis of Bacon’s use of gender, see Merchant, *supra* note 14, at 164–80. See generally LEISS, *supra* note 14 (noting that Bacon connected his scientific advocacy with the myth of the fall from the Garden of Eden, implying the use of science as a way of returning to the prelapsarian state).

⁴⁵ Bacon’s rising concern with the ability of science alone to direct the course of human culture led him to later suggest the need for two schools of thought: one for the invention of knowledge (science), and one for the cultivation of knowledge (modern day humanities). See LOREN EISLEY, *THE MAN WHO SAW THROUGH TIME* 63 (1961).

⁴⁶ The power of Bacon’s vision has been immense. Indeed, it is possible to argue that Bacon’s ideas have become so important to the future understanding of society’s relationship with nature that everything from his time on can be seen as variations of a Baconian theme. See LEISS, *supra* note 14, at 71.

industrial revolution brought with it significant changes to the economic and social structures of society.

Small shops were replaced by large units of production and animals and men by machines. The cities grew and the average size of the farm was enlarged. The increased productivity of agriculture simultaneously provided labor for the factories and food for the nonagricultural workers. . . .⁴⁷ [L]and, labor and capital began to be traded in the market as custom and tradition gave way to the market economy.⁴⁸ As these structures began to change, new theories became necessary to describe the new economic relations they were creating.

In *The Wealth of Nations*, Adam Smith conceived of the economic theory that captured these new relations.⁴⁹ The ideas set forth in his book became the basis for modern capitalism. The capitalist system, in particular its inherent goal of unlimited wealth creation,⁵⁰ reinforced the images of progress existing in Bacon's vision of scientific study. Together, these forces provided a substantial basis for a world view that conceived of civilization in a role of active domination of nature, and nature as existing solely for the benefit of people.

Smith's idea of constant economic growth was based on a particular view of human nature. Happiness, Smith believed, was based on an individual's ability to enjoy the necessities, conveniences, and amuse-

⁴⁷ The rise of industry and the related migration of workers from farms to factories most certainly influenced the division of man from nature as well. The movement of man into cities marked the first time in which the vast majority of the population did not live lives of subsistence on farms dispersed among nature. This physical separation reflected and influenced the developing concept of separation. Take for example, the relation between New York City and New Jersey (the "Garden State" for New York); the two were separated not just by an imagined border but by a river, as many American cities also were. Cities were not just physically distinguished from nature but also became associated with the attributes of the new scientific and economic ideals, a place separate and distinct from the barbaric characteristics associated with primitive life in nature. To be civilized was to live by the new ideals. For example, civilized man was, among other things, rational and not governed by his instincts. For a further discussion of the idea of nature as a place to escape the city, see *infra* Section I.C.3.

⁴⁸ HARRY LANDRETH, *HISTORY OF ECONOMIC THEORY: SCOPE, METHOD AND CONTENT* (1976).

⁴⁹ See generally ADAM SMITH, *THE WEALTH OF NATIONS* (Edwin Cannan ed., Random House 1994) (1776) [hereinafter *WEALTH OF NATIONS*].

⁵⁰ See *WEALTH OF NATURE*, *supra* note 27, at 210 (noting that, while all throughout earlier history there were people who lived by a materialist standard, it is not until the modern age that an entire culture can be found where material wealth creation is the dominant system of values).

ments of life.⁵¹ However, due to the division of labor, the ability of an individual to provide all of these things for himself or herself had become seriously limited.⁵² It was only through the accumulation of wealth, which in turn could be exchanged for other people's labor,⁵³ that a human being would be able to increase his or her happiness.

Smith believed that a system which increased the wealth of the nation would serve the wage earner by increasing the demand for labor.⁵⁴ The continued increase in demand for labor would, in turn, increase wages:

The demand for those who live by wages, therefore, necessarily increases with the increase of the revenue and stock of every country, and cannot possibly increase without it. The increase of revenue and stock is the increase of national wealth. The demand for those who live by wages, therefore, naturally increases with the increase of national wealth, and cannot possibly increase without it.

It is not the actual greatness of national wealth, but its continual increase, which occasions a rise in the wages of labour. It is not, accordingly, in the richest countries, but in the most thriving, or in those which are growing rich the fastest, that the wages of labour are highest.⁵⁵

⁵¹ See WEALTH OF NATIONS, *supra* note 49, at 33.

⁵² See *id.*

⁵³ Smith measured actual wealth in terms of one's ability to command labor. Money, he noted, changes in value, as do precious metals, whereas equal labor always means equal sacrifice to the laborer. Thus,

The value of any commodity . . . to the person who possesses it, and who means not to use or consume it himself, but to exchange it for other commodities, is equal to the quantity of labour which it enables him to purchase or command. Labour, therefore, is the real measure of the exchangeable value of all commodities.

Id.

⁵⁴ Like Bacon, Smith too embraced modernism with a utopian vision. He envisioned "a world where the engine of economic growth drove society relentlessly forward in a ceaseless expansion of the production-consumption cycle. Poverty—and the dreadful horrors, as he imagined them, that accompany a subsistence economy—were to be overcome by the Laws of Accumulation and Population." OELSCHLAEGER, *supra* note 10, at 92.

⁵⁵ WEALTH OF NATIONS, *supra* note 49, at 79 (internal citation omitted).

Unlimited growth—both material and demographic—was the ethical justification for capitalism,⁵⁶ and the reason why Smith believed it preferable to all other forms of human economy. Adam Smith almost single-handedly built, to use Sahlin's terminology, that modern "shrine to the unattainable: Infinite Needs."⁵⁷

Contained within Smith's economic ideology is a view of nature as valued solely by its ability to satisfy human needs. According to Smith, "[t]he word value, it is to be observed, has two different meanings, and sometimes expresses the utility of some particular object, and sometimes the power of purchasing other goods which the possession of that object conveys. The one may be called 'value in use;' the other, 'value in exchange.'"⁵⁸ One of Smith's most influential predecessors, John Locke, declared that "the intrinsic natural worth of anything consists in its fitness to supply the necessities or serve the conveniences of human life."⁵⁹ In other words, intrinsic worth plays no role in valuing an object. Only instrumental worth—value based on how an object served human need—was valid.⁶⁰ Smith agreed with this idea. He found value only in an object's utility to people, either through its use or exchange.

The forces of science and economics together played significant roles in the transformation of the idea of nature. Any vestige of human dependence on nature was completely destroyed by these influences. Nature existed as an object, separate from human civilization, understood numerically and given value only through its usefulness to humankind. Moreover, these forces together recast social goals in a cloak of progressivism that forced nature into a role submissive to human civilization. Human culture would be bettered only through a system of continuous scientific inquiry and unending economic growth, which together required the domination of nature.

⁵⁶ One author has argued that it was not until the New Deal that unfettered material growth overcame other, more visionary conceptions of government's role in the marketplace and became the goal of political institutions. In *THE DEMOCRATIC IMAGINATION IN AMERICA: CONVERSATIONS WITH OUR PAST* (1985), Russell L. Hanson analyzes the rise of the New Deal vision. See *supra* notes 61–70 and accompanying text.

⁵⁷ OELSCHLAEGER, *supra* note 10, at 92.

⁵⁸ *WEALTH OF NATIONS*, *supra* note 49, at 31 (internal emphasis omitted).

⁵⁹ OELSCHLAEGER, *supra* note 10, at 92.

⁶⁰ See *WEALTH OF NATURE*, *supra* note 27, at 215–16.

3. The New Deal: Adopting the Philosophy of Unlimited Consumption

With the rise of the New Deal, the ideology of capitalism became inextricably intertwined with the modern democratic state. As one author has observed, it was not until the New Deal that unfettered material growth overcame other, more visionary conceptions of government's role in the marketplace and became the goal of political institutions.⁶¹

The Great Depression brought with it a crisis in the relationship between democracy and capitalism. Simply put, the Great Depression was seen as obvious proof of the fact that the government's existing policy of regulation did not curb the excesses of capitalism. The New Deal was just one of a number of competing ideas of democracy, each of which had its own message regarding government's role in the marketplace, that arose as a response to this crisis. Three of these ideals, the New Deal, Socialism, and the so-called Depression Demagogues, favored more fundamental restrictions on capitalism, while only the Republicans resisted attempts to democratize capitalism. They argued that such government activity violated the spirit of liberty embodied in the Constitution.⁶²

The replacement of a value-oriented view of democracy with the amoral concept of consumerism began with the triumph of the New Deal over these more visionary images of the role of government in society.⁶³ The New Dealers believed that the Depression resulted from underconsumption.⁶⁴ Goods were needed by many, but only the wealthy could afford to buy them.⁶⁵ Thus, the problem was that modern capitalism, left unchecked, "was incapable of solving the 'distribution problem,' i.e., the problem of allocating a just share of the social product to labor."⁶⁶ Thus, the role of government was to control distribution and ultimately to re-establish the equilibrium of production

⁶¹ See generally HANSON, *supra* note 56.

⁶² See *id.* at 257-58.

⁶³ The triumph of the New Deal had many causes, not the least of which were a lack of organization and the ineffective performance of the spokesmen for these other conceptions of democracy, along with other historical factors that made it difficult to mount a sustained attack on the democratic consumerism of the New Deal. See *id.* at 258.

⁶⁴ Indeed, it is possible to argue that, with the rise of the industrial revolution and the technological advances of the time, society's production problem had been satisfied. See *id.* at 270.

⁶⁵ See *id.* at 269.

⁶⁶ See HANSON, *supra* note 56, at 270.

and consumption.⁶⁷ Government would accomplish the just distribution of the social product by incorporating all power groups, including groups like labor, which had previously been absent from the process, into the policy discussion.⁶⁸ The inclusion of groups with competing interests required the development of a common ground for all groups to pursue. The common ground became uninterrupted consumption.⁶⁹

The New Deal thus served to fuse democracy with the ideals of capitalism. Unlike its more visionary competitors, the New Deal succeeded in amorlizing government. "It advanced no ideal of society to which the United States might return, or toward which it might move. Instead, it offered the secular 'ideal' of continuous and widespread consumption as the basic desideratum of social life."⁷⁰ As democracy embraced the capitalist vision, so too did it embrace the ideology of nature contained within it. As government began to measure its success in terms of its ability to continue to increase human consumption, the ideology of nature as resource, separate from, devalued, and dominated by human civilization became the ideology of democracy.

4. Romanticism and Transcendentalism: The Basis for a Competing Ideology of Preservation and Entrenching Separation

As a new concept of human civilization, organized on the ideology of science and economics, emerged, there was little place in modern civilization for nature except as an object to be explored and exploited for human benefit. In part as a response to the new prevailing status of nature, a competing philosophy of nature arose.⁷¹ European

⁶⁷ See *id.* at 273, 278.

⁶⁸ See *id.* at 280–81.

⁶⁹ See *id.* at 281.

⁷⁰ *Id.* at 258. For a detailed analysis of the way in which this change in government was realized, see *id.* at chapter 8.

⁷¹ See HENRY DAVID THOREAU, *WALDEN* 149–50 (Random House 1937) (1854). Thoreau decried how the valuation of nature solely as something to be used by man has alienated man from his spiritual connection to the land:

Ancient poetry and mythology suggest, at least, that husbandry was once a sacred art; but it is pursued with irreverent haste and heedlessness by us, our object being to have large farms and large crops merely. We have no festival, nor procession, nor ceremony, not excepting our Cattle-shows and so-called Thanksgiving, by which the farmer expresses a sense of the sacredness of his calling. . . . By avarice and selfishness, and a groveling habit from which none of us is free, of regarding the soil as property, or the means of acquiring property chiefly, the landscape is deformed, husbandry is degraded with us, and the farmer leads the meanest of lives. He knows Nature but as a robber.

Romanticism and American Transcendentalism⁷² found in nature an intrinsic value based primarily on religious concerns. While the idea of nature contained in these movements fueled the rise of modern environmentalism,⁷³ such an idea continues to play a less significant role in modern Western society than the idea of nature arising from democratic capitalism. Indeed, much of the Romantic and Transcendentalist philosophies actually exacerbated the already developed ideological separation of people and nature.

At the root of these new movements was a change in the association of God and nature that, ironically, arose in part as a response to new scientific discoveries:

Id. Thoreau also recognized the role of science in the process of devaluing nature:

The true man of science will know nature better by his finer organization; he will smell, taste, see, hear, feel, better than other men. His will be a deeper and finer experience. We do not learn by inference and deduction and the application of mathematics to philosophy but by direct intercourse and sympathy. It is with science as with ethics—we cannot know truth by contrivance and method; the Baconian is as false as any other.

HENRY DAVID THOREAU, *The Natural History of Massachusetts*, in *THE WRITINGS OF HENRY DAVID THOREAU* 131, 131 (Houghton Mifflin 1906).

⁷² "Romanticism" resists definition, but in general it implies an enthusiasm for the strange, remote, solitary, and mysterious." NASH, *supra* note 14, at 47. Transcendentalism has at its core a belief that man's soul gives him the ability to transcend the material world by using intuition and imagination to penetrate spiritual truths. *See id.* at 85. While these two schools of thought are very different, they share many of the core characteristics to be described below.

⁷³ *See generally* ROBERT C. PAELKE, *ENVIRONMENTALISM AND THE FUTURE OF PROGRESSIVE POLITICS* (1989) (relating a portion of modern environmentalism to the work of Thoreau and other transcendentalists). In advocating for the preservation of the Hetch Hetchy Valley of Yosemite, John Muir, founder of the Sierra Club, calls on transcendental values in analogizing the Valley to a temple:

It appears, therefore, that Hetch Hetchy Valley, far from being a plain, common, rock-bound meadow, as many who have not seen it seem to suppose, is a grand landscape garden, one of nature's rarest and most precious mountain temples. As in Yosemite, the sublime rocks of its walls seem to glow with life, whether leaning back in repose or standing erect in thoughtful attitudes, giving welcome to storms and calms alike, their brows in the sky, their feet set in the groves and gay flowery meadows. . . . Everybody needs beauty as well as bread, places to play in and pray in, where nature may heal and cheer and give strength to body and soul alike. . . . Nevertheless, like anything else worthwhile, from the very beginning, however well guarded, they have always been subject to attack by despoiling gainseekers and mischief-makers of every degree from Satan to Senators, eagerly trying to make everything immediately and selfishly commercial.

JOHN MUIR, *THE YOSEMITE* 255–60 (1912).

The change in attitude began with the breakthroughs of European astronomy and physics that marked the beginning of the Enlightenment. As scientists revealed a universe that was at once vast, complex, and harmonious, they strengthened the belief that this majestic and marvelous creation had a divine source. . . . The upshot was a striking change in the concept of wild nature. Mountains, for example, had generally been regarded in the early seventeenth century as warts, pimples, blisters, and other ugly deformities on the earth's surface. . . . But by the end of the century . . . [writers began to use] elaborate theological and geographical arguments to raise the possibility that mountains might be the handiwork of God if not His very image. From the feeling that uncivilized regions bespoke God's influence rather than Satan's, it was just a step to perceiving a beauty and grandeur in wild scenery comparable to that of God.⁷⁴

This new idea of nature also gave rise to an important new wilderness aesthetic—the idea of the sublime. “As an aesthetic category, the sublime dispelled the notion that beauty in nature was seen only in the comfortable, fruitful, and well-ordered. Vast, chaotic scenery could also please.”⁷⁵ Thus, in a short time, the idea of wilderness was greatly transformed in American thought. “By the mid-eighteenth century, wilderness was associated with the beauty and Godliness that previously had defined it by their absence. Men found it increasingly possible to praise, even to worship, what they had formerly detested.”⁷⁶ This new image of nature stood in direct opposition to the view of nature as object. Instead, through its view of nature as the work of God, it reinstilled nature with an intrinsic moral value, while at the same time advocating nature's aesthetic value to man.⁷⁷ Thus,

⁷⁴ NASH, *supra* note 14, at 45 (internal citation omitted).

⁷⁵ *Id.* For examples of treatment of the sublime at this time, see generally EDMUND BURKE, *PHILOSOPHICAL ENQUIRY INTO THE ORIGIN OF OUR IDEAS OF THE SUBLIME AND BEAUTIFUL* (James T. Boulton ed., 1958) (1757); IMMANUEL KANT, *OBSERVATIONS ON THE FEELING OF THE BEAUTIFUL AND THE SUBLIME* (Berkeley 1960) (1763).

⁷⁶ NASH, *supra* note 14, at 45.

⁷⁷ See *id.* at 46. One well-known example of this aesthetic is the work of the Hudson River School of Painting of late nineteenth century America. Take, for example, a poem by one of the founders of the Hudson River School, Thomas Cole, regarding his art:

Friends of my heart, lovers of nature's works,
Let me transport you to those wild, blue mountains
That rear their summits near the Hudson's wave.
Though not the loftiest that begirt the land,

the new philosophy provided a strong basis for arguments to preserve nature in its unadulterated state.

These same factors, however, while providing ample support for an argument against nature's exploitation, also added substantially to the conception of people and nature as separate. In particular, the underlying idea that nature was God's creation gave rise to a conception of nature as any place untouched by humankind. The new wilderness ethic placed high value on the purity of nature. The idea that God could be "found" in nature gave special prominence to those areas of nature that had not yet been touched by people. To these new schools of thought, "[s]piritual truths emerged most forcefully from the uninhabited landscape, whereas in cities or rural countryside man's works were superimposed on those of God."⁷⁸ Wilderness, specifically because it was untouched by the correcting hand of human culture, most clearly showed the perfection of God's work.⁷⁹ Thus, of all the characteristics of natural areas, purity became the most significant. As nature's value depended on its purity, anywhere the hand of man was found, nature was compromised. Nature in this way became identified as the place where human society was not; nature became, as one author has called it, "the world of original things."⁸⁰

They yet sublimely rise, and on their heights
Your souls may have the sweet foretaste of heaven,
And traverse wide the boundless

LOUIS LEGRAND NOBLE, *THE LIFE AND WORKS OF THOMAS COLE* 39 (Harvard Univ. Press 1964) (1853).

⁷⁸ NASH, *supra* note 14, at 46.

⁷⁹ Thoreau reflects this understanding in one of his most famous passages recounting his climb of Mount Ktaadn:

Perhaps I most fully realized that this was primeval, untamed, and forever untameable Nature, or whatever else men call it, while coming down. . . . And yet we have not seen pure Nature, unless we have seen her thus vast and drear and inhuman. . . . Nature was here something savage and awful, though beautiful. . . . This was that Earth of which we have heard, made out of Chaos and Old Nights. Here was no man's garden, but the unhandselled globe. It was not lawn, nor pasture, nor mead, nor woodland, nor lea, nor arable, nor waste-land. It was the fresh and natural surface of the planet Earth, as it was made for ever and ever. . . . It was Matter, vast, terrific—not his Mother Earth that we have heard of, not for him to tread on, or be buried in.

HENRY DAVID THOREAU, *MAINE WOODS* 93–95 (Harper & Row 1987) (1864).

⁸⁰ Richard White, "Are You an Environmentalist or Do You Work for a Living?": *Work and Nature*, in *UNCOMMON GROUND: TOWARD REINVENTING NATURE* 171, 173 (William Cronon ed., 1995).

This idea of nature as a pure place of God separate from human civilization, in conjunction with a loss of fear of nature that developed as humans became more insulated from nature's risks, also manifested itself in a new role for nature as an escape from civilization. For many living on comfortable farms or in cities, wilderness became a "novelty which posed an exciting, temporary alternative to civilization."⁸¹ Similarly, the loss of fear also instigated a reevaluation of the image of the savage—from barbarian to an example of an innocent, purer human condition. Take, for example, a New Hampshire lawyer of the time named Estwick Evans. Evans, searching for the virtues of the savage life, spent the winter and spring of 1818 walking through the wilderness of the American West. His book recounts his reasons for undertaking the journey.

I wished to acquire the simplicity, native feelings, and virtues of savage life; to divest myself of the factitious habits, and prejudices and imperfections of civilization . . . and to find, amidst the solitude and grandeur of the western wilds, more correct views of human nature, and the true interest, of man.⁸²

Wilderness thus became the antithesis of modern capitalist civilization.

Science and economics came together in a complex interaction, based significantly on the utopian embrace of the new forces of modernism, to significantly alter the idea of wilderness. Romanticism and the American Transcendentalist movement can be viewed in part as responses to the influence of this scientific and economic understanding of nature. While these philosophies succeeded in providing a competing value structure for nature and thus a basis for the protection of wilderness, they, at the same time, laid a foundation for a complete disassociation of man and nature. The result has been the creation of a dominant metaphor of nature, most closely associated with economic and scientific sources, and a competing ideology of nature more closely connected to religion, art, and an escape from "civilization." While other very recent influences have affected our

⁸¹ NASH, *supra* note 14, at 57.

⁸² Estwick Evans, *A Pedestrious Tour of Four Thousand Miles, Through the Western States and Territories, During the Winter and Spring of 1818*, in *EARLY WESTERN TRAVELS 1748–1846*, at 102 (Reuben Gold Thwaites ed., Arthur H. Clark Co. 1904) (1819).

current understanding of nature,⁸³ these forces continue to play the dominant roles in modern Western society's conception of nature.

II. SUSTAINABLE DEVELOPMENT AS A SOURCE OF WESTERN IDEOLOGICAL IMPERIALISM

The success of the spread of the Western ideology of nature is manifest nowhere more clearly than in the rise of the norm of Sustainable Development. The idea of Sustainable Development was introduced to the international environmental debate in the early 1980s. Sustainable Development first appeared in the *World Conservation Strategy* of the International Union for the Conservation of Nature,⁸⁴ followed shortly thereafter by the book, *Building a Sustainable Society*.⁸⁵ By 1987, Sustainable Development had become a principal of international environmental law, taking its place as the centerpiece of a report prepared by the World Commission on Environment and Development entitled: *Our Common Future*.⁸⁶ Its adoption in 1992 as the main principal of the Rio Declaration on Environment and Development of the United Nations Conference on Environment and Development⁸⁷ has made it the "driving force" of international efforts to solve global environmental problems.⁸⁸

The principal of Sustainable Development is built on the ideological separation of people and nature underlying free-market democracy. Although there is no single, agreed-upon definition of Sustainable Development,⁸⁹ virtually all definitions conceive of the principal in terms of a tension between the goals of economic development and environmental protection, with a preference for the

⁸³ See *supra* note 13 and accompanying text.

⁸⁴ See generally INTERNATIONAL UNION FOR THE CONSERVATION OF NATURE, *WORLD CONSERVATION STRATEGY* (1980).

⁸⁵ See generally LESTER R. BROWN, *BUILDING A SUSTAINABLE SOCIETY* (1981).

⁸⁶ See generally WORLD COMM'N ON ENV'T & DEV., *OUR COMMON FUTURE* (1987). The report is also referred to as the Brundtland Commission Report, named after Norwegian Prime Minister Gro Brundtland, who chaired the Commission.

⁸⁷ See United Nations Conference on Environment & Development: Rio Declaration on Environment & Development, U.N.C.E.D. Doc. A/Conf. 151/5/Rev.1 (1992), *reprinted* in 31 I.L.M. 874.

⁸⁸ See LAKSHMAN D. GURUSWAMY, ET AL., *INTERNATIONAL ENVIRONMENTAL LAW AND WORLD ORDER* 316 (1994).

⁸⁹ See Marc Pallemerts, *International Environmental Law in the Age of Sustainable Development: A Critical Assessment of the UNCED Process*, 15 J.L. & COM. 623, 630 (1996); Andrew Hurrell & Benedict Kingsbury, *The International Politics of the Environment: An Introduction*, in *INTERNATIONAL POLITICS OF THE ENVIRONMENT: ACTORS, INTERESTS, AND INSTITUTIONS* 42-43 (1992).

goals of growth. The language of the principal itself, as defined by the Brundtland Commission, is instructive: "Development involves a progressive transformation of economy and society."⁹⁰ The principal equates human quality of life with economic growth,⁹¹ and recognizes that "[m]eeting essential needs depends in part on achieving full growth potential."⁹² Development thus reflects the idea of progressive material wealth creation as the basis for promoting human well-being. Sustainability, on the other hand, is a recognition that the goals of economic growth are in tension with nature. As the Brundtland Commission explains, consumption standards everywhere must have regard for long-term sustainability.⁹³ In other words, Sustainable Development recognizes that the goals of unlimited consumption encroach upon nature and must be constrained. Thus, Sustainable Development is built on an understanding of human civilization as bettered through economic growth. Nature, on the other hand, stands outside of the human world and is encroached upon by it.

Sustainable Development values nature only as a resource useful to man. The Brundtland Commission Report defines Sustainable Development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."⁹⁴ The goal of protecting nature is not based on any intrinsic value of nature but on a belief that the resources for development should be available to everyone, including future generations. Thus, the Brundtland Commission explains "[a] society may in many ways compromise its ability to meet the essential needs of its people in the future—by overexploiting resources, for example."⁹⁵ Indeed, nature itself has been converted to a good within the principal. Virtually echoing the words of Adam Smith, the Commission observes "[s]o-called free goods like air and water are also resources. The raw materials and energy of production processes are only partly converted to useful products. The rest comes out as waste."⁹⁶ Nature is thus a resource to the proponents of Sustainable Development, valued only to the extent that it is useful to people.

⁹⁰ WORLD COMM'N ON ENV'T & DEV., *supra* note 86, at 43.

⁹¹ *See id.* (stating that the satisfaction of human needs is the major objective of development).

⁹² *Id.* at 44.

⁹³ *See id.*

⁹⁴ *Id.* at 43.

⁹⁵ WORLD COMM'N ON ENV'T & DEV., *supra* note 85, at 44.

⁹⁶ *Id.* at 46.

Sustainable Development is not only a manifestation of the spread of the popular Western ideology of nature underlying free-market democracy, but also has become a source of the ideology's spread. The idea of Sustainable Development forces a reconsideration of one's understanding of humankind's relation to nature. To simply be understood, the concept requires one to think in terms of human civilization as separate from and in opposition to nature, and of nature as a resource to be dominated for the benefit of human civilization. Take, for example, the individual whose understanding of nature is based in Buddhist or Hindu culture. Understanding the idea of Sustainable Development will force that individual to recognize, at the least, a different conception of the relationship of nature and people. Obviously, recognizing another conception does not, on its own, require actively adopting it. However, Sustainable Development is not simply an idea to examine at arms-length as an observer. Rather, it is a legal norm that must be implemented, and thus requires an individual not just to recognize its principles, but to think within them.

Indeed, the mechanisms for implementation of Sustainable Development themselves reveal the power of the Western influence. One author has given the new basis for environmental protection a name—ecocracy.⁹⁷ Ecocracy is based on the use of “[c]apital, bureaucracy and science—the venerable trinity of Western modernization . . . to prevent the worst through better engineering, integrated planning and more sophisticated models.”⁹⁸ It reduces ecology to a set of managerial strategies aimed at efficient use of resources and risk management.⁹⁹

Such a model provides a framework for conceiving of environmental problems that marginalizes any competing environmental discourse. The implementation of Sustainable Development:

treats [environmental protection] as a technical problem . . . [thus avoiding] the fundamental debate that is needed on public morality—like how society should live, or what, how much and in what way it should produce and consume. . . . Instead, Western aspirations are implicitly taken for granted, not only in the West but worldwide, and societies which choose not to put all their energy into production and de-

⁹⁷ See Wolfgang Sachs, *Environment and Development: The Story of a Dangerous Liaison*, 21 *THE ECOLOGIST*, Nov./Dec. 1991, at 257.

⁹⁸ *Id.*

⁹⁹ See *id.*

liberately accept a lower throughput of commodities become unthinkable. What falls by the wayside are efforts to elucidate the much broader range of futures open to societies which limit their levels of material output in order to cherish whatever ideals emerge from their heritages.¹⁰⁰

Sustainable Development is not just a reflection of Western ideology, but a force for defining environmental problems in Western terms. The ecocratic discourse that has developed around the principle of Sustainable Development serves to further marginalize any conception of environment that does not fit the Western framework. Its implementation assumes the ability of science to develop technologies to limit environmental damage while ensuring continued material growth. Such a scheme has no place for other conceptions of the human/nature relationship. The result of its implementation will be a discrediting of any other ways of thinking about nature.

The norm of Sustainable Development provides a means for the spread of Western ideology to other nations which may not share Western ideas. Sustainable Development is built on a Western ideology of nature, and both the language and implementation of the principal will force people to think of the human/nature relationship in these terms, while, at the same time, marginalizing alternative views of nature. In this way, the principal of Sustainable Development becomes a means for changing cultural values at a primarily subconscious level through the use of language, ultimately replacing the ideologies of nature held by other cultures with a particular Western notion of nature connected to free-market democracy.

The rise of Sustainable Development also reflects generally the success of the exportation of Western ideology. Simply put, Sustainable Development is both a reflection of the desire for free-market democracy and a means for exporting it. The continued implementation of Sustainable Development, along with the continued success of the various other factors that result in the export of Western ideology, suggests that the Western ideology of nature increasingly will continue to supplant the vision of nature held in other nations. The continued spread of the ideology of separation and domination leads to questions regarding the propriety of such activity. This will be the subject of the next section.

¹⁰⁰ *Id.*

III. CONSIDERING THE SPREAD OF THE IDEOLOGY OF SEPARATION AND DOMINATION

There are at least two separate matters that must be considered in judging the propriety of the spread of the ideology of separation and domination. The first concerns whether the spread of any ideology to the detriment of others is proper. The second concerns whether the ideology being exported is likely to promote the goals of environmental protection.

A. Arguments of Western Ideological Hegemony

As far back as 1947, the American Anthropological Society, pointing to the West's tradition of ascribing cultural inferiority to non-European peoples, cautioned the United Nations on the potential for universal principles to erase cultural diversity.¹⁰¹ The rise and dominance of the norm of Sustainable Development suggests that we must give similar consideration to these concerns as they relate to the spread of environmental ideology.

Those in favor of the spread of Western ideals argue that critics of ideological hegemony are wrong on two different fronts. First, they suggest that many Western values are universally shared and thus it is improper to conceive of the problem as one of the "spread" of ideology.¹⁰² Second, they argue that cultures are neither static nor absolute, thus characterizing the change embodied by the acceptance of free-market democracy as a "natural" phenomenon.¹⁰³

This article has already demonstrated that the ideology of nature associated with free-market democracy is not universally shared.

¹⁰¹ See Otto, *supra* note 5, at 19.

¹⁰² See, e.g., Netanel, *supra* note 7, at 243 (pointing out that critics of cultural relativism argue that at least human rights transcend cultures); Seita, *supra* note 2, at 471; Cynthia Losure Baraban, Note, *Inspiring Global Professionalism: Challenges and Opportunities for American Lawyers in China*, 73 IND. L.J. 1247, 1263 (1998) (arguing that cultural relativism ignores the unity of traditions). Cf. Reed Boland, *The Environment, Population and Women's Human Rights*, 27 ENVTL. L. 1137, 1160 (1997) (stating that the concept of universal human rights is a Western notion not necessarily shared by other nations).

¹⁰³ See Harold Hongju Koh, *Why Do Nations Obey International Law?*, 106 YALE L.J. 2599, 2650 (1997) (arguing that the cultural relativist debate based on the "claim that non-liberal states somehow do not participate in a zone of law denies the universalism of international law"); Shestack, *supra* note 6, at 567-68 (stating that "cultural relativists tend to look at cultures from a static, romanticized perspective. . . . But as anthropologists acknowledge, culture is flexible. . . . To recognize values held by a given people at a given time in no way implies that these values are a constant or static factor in the lives of current or succeeding generations of the same group.").

Moreover, arguments that cultures are dynamic miss an important factor much more relevant to the current spread of free-market democracy than to the spread of other ideologies that has occurred throughout history. That is, technological progress—particularly the increase in information-sharing technologies—has made it possible to spread an ideology more broadly and deeply than before. As a result, an ideology such as free-market democracy that, since the fall of the Soviet Union, has few competitors, will likely be able to replace the ideologies of a much greater number of nations. Thus, the spread of free-market democracy has the ability to severely limit the diversity of ideas of nature that exist in the world. In this regard, politics is well-served to take a lesson from ecology. In ecology, diversity plays a significant role in a species' ability to adapt to a changing world. One can only surmise that the loss of cultural diversity, and with it the loss of different ways of conceiving of the environment, will seriously hamper the ability of the world to develop the most effective responses to environmental problems.

However, even if cultures are dynamic, there is at least one other major reason for mitigating the spread of the particular ideology of separation and domination. Simply put, the ideology of separation and domination will likely plant the seed for large-scale environmental destruction.

B. Separation and Domination as the Basis of Environmental Harm

The idea that Western ideology will come to be universalized through international legal principles is of particular concern due to the harm such an ideology may cause to nature. The particular ideology of environment being exported through the principle of Sustainable Development, while only one portion of the complex mix of conceptions that comprise the Western understanding of nature, is likely the most destructive of all the components of the Western ideology. Unlike other conceptions of nature, which stress interdependence,¹⁰⁴ the ideas of separation and domination play a significant role in the exportation of nature. Their role is based primarily on psychic

¹⁰⁴ See generally KEMPTON, *supra* note 13 (explaining the various metaphors that comprise the Western understanding of nature). What is perhaps most unfortunate about the exportation of the ideology of separation and domination is that it is taking place at a time when Western attitudes toward nature are being significantly reshaped by the ideology of ecology.

freedom to harm that results from conceiving of nature as separate from and an object to be dominated by human civilization.

In his now famous article, *The Historical Roots of Our Ecological Crisis*, Lynn White, Jr. examines the responsibility of the Judeo-Christian tradition for what he argued was the impending ecological crisis in the West. White's condemnation of the Judeo-Christian tradition was based on its effect on humans' understanding of their relationship to their environment. According to White, the way people conceive of nature affects how they treat it.¹⁰⁵ "What people do about their ecology depends on what they think about themselves in relation to things around them. Human ecology is deeply conditioned by beliefs about our nature and destiny."¹⁰⁶

The source of the West's exploitative attitude toward nature, White argued, could be found in the triumph of Christianity over pagan religions.¹⁰⁷ "Christianity," he argued, "in absolute contrast to ancient paganism and Asia's religions (except, perhaps, Zoroastrianism), not only established a dualism of man and nature, but also insisted that it is God's will that man exploit nature for his proper ends."¹⁰⁸ By removing the relationship between people and nature, White argued, Christianity created an indifference toward nature that allowed for its exploitation.¹⁰⁹ The idea of people as separate from nature, in other words, provides the psychic freedom to harm nature. With this separation came a lack of empathy and, without any feeling of empathy, a heightened willingness to do harm.

White finds empirical proof for his theory in an example of a change in Northern European farm technology in the seventh century:

Early plows, drawn by two oxen, did not normally turn the sod but merely scratched it. Thus, cross-plowing was needed and fields tended to be squarish. . . . By the latter part of the 7th century after Christ, however, following obscure beginnings, certain northern peasants were using an entirely new kind of plow, equipped with a vertical knife to cut the line of the furrow, a horizontal share to slice under the sod, and a moldboard to turn it over. The friction of this plow with the

¹⁰⁵ This concern continues to play a significant role in current debate over environmental law and policy. See generally *infra* note 114 and accompanying text.

¹⁰⁶ White, *supra* note 18, at 24.

¹⁰⁷ See *id.*

¹⁰⁸ *Id.* at 25.

¹⁰⁹ See *id.*

soil was so great that it normally required not two but eight oxen. It attacked the land with such violence that cross-plowing was not needed, and fields tended to be shaped in long strips.¹¹⁰

The willingness to attack nature, according to White, was a phenomenon found only in northern Europe at the time. The ideas of indifference and domination contained within the Christian tradition thus provided the psychic basis for the development of technology that attacked nature.

White's sole focus on Christianity has been criticized on a number of fronts,¹¹¹ including the failure to consider mediating concepts of people's relation to nature found within the Judeo-Christian tradition itself.¹¹² Moreover, while White's argument points to the Judeo-Christian tradition as one basis for exploitation, as this article notes, the forces of modernism have significantly altered the Judeo-Christian ideology of separation and domination.¹¹³ Although the idea of separation and domination is now fueled by the belief in the idea of scientific progress dominating nature and nature as a resource for economic growth, the idea of the harm caused by this ideology continues to resonate in modern environmental policy discussions.¹¹⁴ However, regardless of its source, the ideology of separation and domination clearly plays a role in the process of environmental degradation. Sim-

¹¹⁰ *Id.* at 23.

¹¹¹ See generally PASSMORE, *supra* note 14.

¹¹² White, for example, does not consider the tempering ideology of stewardship found within the Christian tradition. The idea of stewardship suggests that since nature is God's creation, it must be treated wisely and carefully. For a detailed discussion of the idea of stewardship, see generally FRANCIS A. SCHAEFFER, *POLLUTION AND THE DEATH OF MAN: THE CHRISTIAN VIEW OF ECOLOGY* (1973). It is thus difficult to argue that Christianity sent an unambiguous message regarding the relation of man to nature.

¹¹³ See *supra* Section I.

¹¹⁴ One of the major components of an argument for a biocentric view of nature continues to be the psychic effect such a view will have on man's willingness to exploit his environment. See PAUL W. TAYLOR, *RESPECT FOR NATURE: A THEORY OF ENVIRONMENTAL ETHICS* 29 (1986), reprinted in part in RICHARD L. REVESZ, *FOUNDATIONS OF ENVIRONMENTAL LAW AND POLICY* (1997). Taylor argues:

The attitude we think it appropriate to take toward living things depends on how we conceive of them and of our relationship to them. What moral significance the natural world has for us depends on the way we look at the whole system of nature and our role in it. With regard to the attitude of respect for nature, the belief-system that renders it intelligible and on which it depends for its justifiability is the biocentric outlook.

ply put, whatever its form, the ideology of separation and domination provides the psychic freedom and lack of empathy necessary to the exploitation of nature.¹¹⁵

Sustainable Development thus exports a particularly harmful ideology of nature. In particular, it forces people to think of nature as separate from human civilization and as an object valued solely by its utility to people. While the immediate benefits of Sustainable Development are readily ascertained, it is likely to have long-term costs that severely limit the environmental protection it was intended to create.

CONCLUSION

In the age of globalization, the concerns voiced by the American Society of Anthropology more than fifty years ago are more relevant than ever.¹¹⁶ Yet at a time when ideology can be exported at an extremely fast rate, Western nations seem to have made little effort to consider the propriety and impact of the spread of their ideas. Perhaps the Western nations believe that the history of the last decade has validated their belief in the superiority of their own ideas. Whatever its basis, however, the spread of the Western notion of separation and domination of nature can and will have impacts on long-term environmental protection. What first may look like a win for the West may ultimately be a loss for nature.

¹¹⁵ See *id.*

¹¹⁶ See generally Otto, *supra* note 5.

